NASA Video Catalog

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April 2003

VIDEO

National Aeronautics and
Space Administration
Langley Research Center
**Scientific and Technical
Information Program Office**

NASA STI Program ... in Profile

Since its founding, NASA has been dedicated to the advancement of aeronautics and space science. The NASA Scientific and Technical Information (STI) Program plays a key part in helping NASA maintain this important role.

The NASA STI Program provides access to the NASA STI Database, the largest collection of aeronautical and space science in the world. The STI Program is also NASA's institutional mechanism for disseminating the results of its research and development activities. These results are published by NASA in the NASA STI Report Series, which includes the following report types:

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- TECHNICAL MEMORANDUM. Scientific and technical findings that are of preliminary or specialized interest, e.g., quick release reports, working papers, and bibliographies that contain minimal annotation. Does not contain extensive analysis.
- CONTRACTOR REPORT. Scientific and technical findings by NASA-sponsored contractors and grantees.
- CONFERENCE PUBLICATION. Collected papers from scientific and technical conferences, symposia, seminars, or other meetings sponsored or co-sponsored by NASA.
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The NASA STI Program is managed by the NASA STI Program Office (STIPO). STIPO is the administrative office at Langley Research Center for the NASA STI Program.

For more information about the NASA STI Program, you can:

- Access the NASA STI Program Home Page at *http://www.sti.nasa.gov*
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  NASA Center for AeroSpace Information
  7121 Standard Drive
  Hanover, MD 21076-1320

Introduction

This issue of the *NASA Video Catalog* cites video productions listed in the NASA STI Database.

The videos listed have been developed by the NASA centers, covering Shuttle mission press conferences; fly-bys of planets; aircraft design, testing and performance; environmental pollution; lunar and planetary exploration; and many other categories related to manned and unmanned space exploration.

Each entry in the publication consists of a standard bibliographic citation accompanied by an abstract. The Table of Contents shows how the entries are arranged by divisions and categories according to the *NASA Scope and Coverage Category Guide*.

For users with specific information, a Title Index is available. A Subject Term Index, based on the *NASA Thesaurus*, is also included.

Guidelines for usage of NASA audio/visual material, ordering information, and order forms are also available.

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Subject Divisions/Categories

Document citations are grouped by division and then by category, according to the NASA Scope and Coverage Category Guide.

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Title Index
Subject Term Index

NASA CASI Price Tables — Effective July 1, 2002

Prices are subject to change without notice

Video Prices (Betacam SP) NTSC

Code	*NASA*	*U.S.**	*International**
B01	$71.50	$85.00	$170.00
B02	$75.50	$90.00	$180.00
B03	$83.50	$100.00	$200.00
B04	$119.50	$145.00	$290.00
B05	$135.50	$165.00	$330.00
B06	$171.50	$210.00	$420.00
B07	$207.50	$255.00	$510.00
B08	$243.50	$300.00	$600.00

Video Prices (Betacam SP) PAL

Code	*NASA*	*U.S.**	*International**
B01	$98.50	$119.00	$238.00
B02	$164.50	$201.00	$402.00
B03	$186.50	$229.00	$458.00
B04	$223.50	$275.00	$550.00
B05	$230.50	$284.00	$568.00
B06	$237.50	$293.00	$586.00
B07	$244.50	$302.00	$604.00
B07	$252.50	$312.00	$624.00

Video Prices (VHS)

Code	*NASA*	*U.S.**	*International**
V01	$19.50	$20.00	$40.00
V02	$23.50	$25.00	$50.00
V03	$31.50	$35.00	$70.00
V04	$39.50	$45.00	$90.00
V05	$47.50	$55.00	$110.00
V06	$55.50	$65.00	$130.00
V07	$63.50	$75.00	$150.00
V08	$71.50	$85.00	$170.00

NASA Prices:

For NASA libraries, NASA employees & NASA contractors registered at NASA CASI.

U.S. Prices:

For users within the U.S.

International Prices:

For users outside the U.S. and International Embassies within the U.S.

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(orders are processed within three (3) business days, then shipped)

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Please Read These Instructions Carefully Before Completing Form

ORDERING INSTRUCTIONS

Customer Name and Address

Please give your name, organization, phone number, fax number, and complete shipping address including number and street.

Videotape Standards

All videos are distributed in the U.S. Standard, NTSC. To receive videos in a broadcast standard outside of the United States (PAL or SECAM), please contact the NASA STI Help Desk by phone at (301) 621-0390 for foreign standards pricing.

Formats

All videos are formatted in VHS and Betacam SP. Other formats available include SVHS, Hi8, and PAL for foreign users. Special handling, however, will result in an increased cost to the requester. Please contact the NASA STI Help Desk by phone at (301) 621-0390 for special format requests.

Videos Requested

Please list each quantity, accession number, title, and playing time requested on a separate line. Please include the full title since many of the videos have similar titles. If you are requesting more than six titles, please use an additional form.

Video Program Allocation

Video titles are purchased separately. You may receive each title on a separate videotape, or you may request that several titles ordered go on a single video cassette, if space allows.

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NASA Scientific and Technical Information Program

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NASA Center for AeroSpace Information
7121 Standard Drive
Hanover, MD 21076-1320 USA
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E-mail: help@sti.nasa.gov

VIDEO ORDER FORM

Requester Name		**Date of Order**
Organization		**Phone Number**
Shipping Address	**Customer ID Number** (required for invoicing)	**Fax Number**
	E-mail Address	

Qty.	Doc. ID No. ✸	Video Title ✸	Playing Time	Format	Standard	Price Code/ Unit Price
1	Required Field 19950022986	Required Field Apollo 11: For All Mankind	34 min.	Beta	PAL	P02
					Video Total	$

SAMPLE

Method of Payment (Only U.S. Currency Accepted)

Processing occurs only after payment is received by CASI as designated below.

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☐ USPS Express (U.S. only) $_____
$13.00, 1-day delivery service to most destinations)

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(U.S. $16.50; International $24.00)

☐ Federal Express (User's Account only)
_____

Total Charges $_____

NASA VIDEO CATALOG

APRIL 2003

01 AERONAUTICS (GENERAL)

Includes general research topics related to manned and unmanned aircraft and the problems of flight within the Earth's atmosphere. Also includes manufacturing, maintenance, and repair of aircraft. For specific topics in aeronautics see categories 02 through 09. For information related to space vehicles see 12 Astronautics.

19940029066 NASA Lewis Research Center, Cleveland, OH, USA
NACA fire crash research
Jan 1, 1992; In English; 39 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12922; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video provides a better understanding of the important factors involved in the start and spread of crash fires, as a necessary first step leading to significant reduction in the crash fire hazards.
CASI
Accidents; Crashes; Fires; Flight Safety

19950004297 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden and transonic research
May 27, 1992; In English; 20th; Anniversary F-8 Digital Fly-By-Wire (DFBW) and Supercritical Wing (SCW) Symposium, 1995; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23629; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video on transonic research is given by Dryden engineer Ed Saltzman as part of the 20th Anniversary F-8 Digital Fly-By-Wire (DFBW) and Supercritical Wing (SCW) Symposium.
DFRC
F-8 Aircraft; Fly by Wire Control; Research; Supercritical Wings; Transonic Flow

19950004337 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
NACA/NASA: X–1 through X–31
Apr 4, 1994; In English; 28 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–94–23649; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents clips (in-flight, ground crew, pilots, etc.) of almost everything from X-1 through X-31.
DFRC
Research Aircraft; Research Projects

02 AERODYNAMICS

Includes aerodynamics of flight vehicles, test bodies, airframe components and combinations, wings, and control surfaces. Also includes aerodynamics of rotors, stators, fans and other elements of turbomachinery. For related information, see also 34 Fluid Mechanics and Heat Transfer.

19940009148 NASA Lewis Research Center, Cleveland, OH, USA
A future view of computational science in aircraft
Aug 1, 1989; In English; 9 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185300; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The accomplishments of LeRC in the field of computational fluid dynamics are presented.
Author (revised)
Aircraft Design; Computational Fluid Dynamics; Research Facilities

19940009159 NASA Langley Research Center, Hampton, VA, USA
HL–20 personnel launch system
Sep 1, 1990; In English; 5 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of lifting body research to include LaRC's full scale engineering research model is presented.
Author (revised)
Launchers; Lifting Bodies; Lifting Reentry Vehicles; Spacecraft Launching; Spacecraft Models

19940014491 NASA, Washington, DC, USA
Airflow research
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is an overview of research being done in laminar flow at Ames Dryden Flight Research Center and Langley Research Center. Airflow research at Ames Dryden has resulted in a special wing covering that will artificially induce laminar flow on the wing surface; this specially adapted wing is shown being tested in different flying conditions. This video also features research done at Langley in producing a chemical covering for wings that will make visible natural laminar flow and turbulent airflow patterns as they occur. Langley researchers explain possible use of this technology in supersonic flight.
CASI
Air Flow; Coatings; Flow Visualization; Laminar Flow; Wings

19940022658 NASA Langley Research Center, Hampton, VA, USA
Leading–edge vortex–system details obtained on F–106B aircraft using a rotating vapor screen and surface techniques
Lamar, John E., NASA Langley Research Center, USA; Brandon, Jay, NASA Langley Research Center, USA; Stacy, Kathryn, NASA Langley Research Center, USA; Johnson, Thomas D., Jr., Lockheed Engineering and Sciences Co., USA; Severance, Kurt, NASA Langley Research Center, USA; Childers, Brooks A., NASA Langley Research Center, USA; Nov 1, 1993; In English; Videotape supplement to NASA-TP-3374: 14 min., color, sound, VHS
Contract(s)/Grant(s): RTOP 505-59-30-03
Report No.(s): NONP–NASA–SUPPL–VT–94–209775; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In this video the following sequences are presented: flight-test operational procedures; animation of post-processing key elements; digitization process of flight video tape; extractor procedure demonstration; reconstructor procedure demonstration; reconstructor used to compare flight results from 1985 with those in 1991; enhancer procedure demonstration; and mapping of oil-flow photograph onto surface geometry for comparison with vapor-screen-determined vortex characteristics.
Author
F-106 Aircraft; Flow Visualization; Leading Edges; Vortices

19950004144 NASA, Washington, DC, USA
Scientific balloons
Dec 1, 1991; In English; 3 min. 38 sec. playing time
Report No.(s): NONP–NASA–VT–94–23149; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video discusses how NASA uses large helium-filled balloons to take payloads up 25 miles to the edge of space to gather data. Balloons provide a cost effective approach to reach these heights.
CASI
Balloon Sounding; High Altitude Balloons

19950013580 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–16XL interview with Marta Bohn–Meyer
Jul 27, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41117; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Marta Bohn-Meyer discusses the cooperative research between Rockwell Industries and NASA research facilities in their effort to optimize and maintain the supersonic laminar flow on the F-16XL aircraft. Research on the airfoil design, chord optimization, introduction of a suction feature to maintain pressure distribution, and CFD, both theoretical and actual phenomena, are discussed. Bohn-Meyer discusses the difference between supersonic and subsonic laminar flow, cross flow, reasons behind using this particular F-16 aircraft for this research, and the future of this ongoing research, including the data base that investigators are building from wind tunnel data and in-flight validation.
DFRC
Aircraft Design; Airfoils; F-16 Aircraft

19970005033 NASA Johnson Space Center, Houston, TX USA
Wind Tunnel Tests of an Inflatable Airplane
Oct. 09, 1996; In English; Videotape: 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005936; No Copyright; Avail: CASI; V03, Videotape-VHS

In this video a wind tunnel investigation of aerodynamic and structural deflection characteristics of an inflatable airplane is shown. The film includes scenarios during wind tunnel tests of an inflatable airplane in the Langley Full Scale Tunnel with the main objective of obtaining load factors prior to wing buckle of 4.5 to 5.0 g. The inflation pressure during the test was indicated to be 7.0 psi.
CASI
Inflatable Structures; Wings; Buckling; Deflection; Aerodynamic Stalling; Aerodynamic Stability; Aerodynamic Loads; Aerodynamic Characteristics

03
AIR TRANSPORTATION AND SAFETY

Includes passenger and cargo air transport operations; aircraft ground operations; flight safety and hazards; and aircraft accidents. Systems and hardware specific to ground operations of aircraft and to airport construction are covered in 09 Research and Support Facilities (Air). Air traffic control is covered in 04 Aircraft Communications and Navigation. For related information see also 16 Space Transportation and Safety; and 85 Technology Utilization and Surface Transportation.

19940010863 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 6
Jan 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190234; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The videotape is comprised of clips regarding aircraft safety and development through NASA research at its various centers.
CASI
Aircraft Safety; NASA Programs; Research and Development; Research Facilities

19940010953 NASA, Washington, DC, USA
Life saving satellites
Aug 1, 1985; In English; 6 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190414; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Details of COSPAS/SARSAT, the international search and rescue project, are covered.
CASI
COSPAS; Rescue Operations; SARSAT

19940027297 NASA Lewis Research Center, Cleveland, OH, USA
WHIPICE
Jan 1, 1992; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9949; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video documents efforts by NASA Lewis Research Center researchers to improve ice protection for aircraft. A new system of deicing aircraft by allowing a thin sheet of ice to develop, then breaking it into particles, is being examined, particularly to determine the extent of shed ice ingestion by jet engines that results. The process is documented by a high speed imaging system that scans the breakup and flow of the ice particles at 1000 frames per second. This data is then digitized and analyzed using a computer program called WHIPICE, which analyzes grey scale images of the ice particles. Detailed description of the operation of this computer program is provided.
CASI
Aircraft Hazards; Aircraft Icing; Applications Programs (Computers); Deicing; Ice Prevention

19940029057 NASA, Washington, DC, USA
Airline safety and economy
Jan 1, 1993; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12939; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video documents efforts at NASA Langley Research Center to improve safety and economy in aircraft. Featured are the cockpit weather information needs computer system, which relays real time weather information to the pilot, and efforts to improve techniques to detect structural flaws and corrosion, such as the thermal bond inspection system.
CASI
Aircraft Maintenance; Aircraft Safety; Aviation Meteorology; Flight Management Systems; Flight Safety; Inspection

19940029243 NASA Lewis Research Center, Cleveland, OH, USA
Crash impact survival in light planes
Jan 1, 1994; In English; 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12927; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the effects on aircraft and passengers of light plane crashes. The explanation is provided through the use of simulated light planes and dummies.
CASI
Aircraft Accidents; Civil Aviation; Crashes; General Aviation Aircraft; Light Aircraft; Passengers

19950004136 NASA, Washington, DC, USA
The High Speed Research Program
Jun 1, 1993; In English; 1 min. 11 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23140; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video highlights the endeavors of NASA and the USA manufacturers to provide technology that will make air travel to Pacific countries more efficient. This video was shown at the 1993 Paris Airshow.
CASI
Air Transportation; High Speed; Supersonic Transports

19950004325 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
The crash of Flight 232
May 24, 1991; In English; 1 hr. 19 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23627; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Captain Al Haynes of United Airlines gives a presentation about the DC-10 he captained that crash landed in Sioux City, Iowa in 1989.
DFRC
Aircraft Accidents; Crash Landing; DC 10 Aircraft

04
AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes all modes of communication with and between aircraft; air navigation systems (satellite and ground based); and air traffic control. For related information see also 06 Avionics and Aircraft Instrumentation; 17 Space Communications; Spacecraft Communications, Command and Tracking, and 32 Communications and Radar.

19950011932 NASA Ames Research Center, Moffett Field, CA, USA
VSTOL Systems Research Aircraft (VSRA) Harrier
Dec 1, 1994; In English; 9 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–37002; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
NASA's Ames Research Center has developed and is testing a new integrated flight and propulsion control system that will help pilots land aircraft in adverse weather conditions and in small confined ares (such as, on a small ship or flight deck). The system is being tested in the V/STOL (Vertical/Short Takeoff and Landing) Systems research Aircraft (VSRA), which is a modified version of the U.S. Marine Corps's AV-8B Harrier jet fighter, which can take off and land vertically. The new automated flight control system features both head-up and panel-mounted computer displays and also automatically integrates control of the aircraft's thrust and thrust vector control, thereby reducing the pilot's workload and help stabilize the aircraft for landing. Visiting pilots will be encouraged to test the new system and provide formal evaluation flights data and feedback. An actual flight test and the display panel of control system are shown in this video.
CASI
Automatic Control; Flight Control; Harrier Aircraft; Head-Up Displays; Research Aircraft; Thrust Vector Control; V/STOL Aircraft; Vertical Landing; Vertical Takeoff

05
AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes all stages of design of aircraft and aircraft structures and systems. Also includes aircraft testing, performance, and evaluation, and aircraft and flight simulation technology. For related information, see also 18 Spacecraft Design, Testing and Performance and 39 Structural Mechanics. For land transportation vehicles, see 85 Technology Utilization and Surface Transportation.

19940009133 NASA Ames Research Center, Moffett Field, CA, USA
Airborne Arctic stratospheric expedition: Ozone
Dec 1, 1988; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185319; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the rollout of the ER-2 and DC-8 at Ames, takeoffs and landings, and operations aboard the DC-8 and ER-2 in Puntas Arenas, Chile. Animation of the north polar regions showing the ozone hole is also included.
Author (revised)
Arctic Regions; Expeditions; Ozone Depletion; Stratosphere

19940010848 NASA, Washington, DC, USA
Mission adaptive wing
Oct 1, 1986; In English; 3 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190245; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document looks at an aircraft wing that can change shape in flights from a flat to curved surface according to the necessary flight mode.
CASI
Mission Adaptive Wings; Wing Camber; Wing Profiles

19940010850 NASA, Washington, DC, USA
National Aero–Space Plane
Jul 1, 1990; In English; 3 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190247; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document presents updated model photography of 'old' NASP design.
CASI
Aircraft Models; National Aerospace Plane Program; Photography

19940010851 NASA, Washington, DC, USA
National Aero–Space Plane resource reel
Aug 1, 1991; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190248; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This document presents a series of takes and sequences of model photography of the 1991 NASP design.
CASI
Aircraft Models; National Aerospace Plane Program; Photography

19940010854 NASA, Washington, DC, USA
X–29: Experiment in flight
Jan 1, 1991; In English; 2 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190251; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document examines the goals and accomplishments of the forward sweep-winged X-29.
CASI
Flight Tests; Swept Forward Wings; X-29 Aircraft

19940010855 NASA, Washington, DC, USA
XV–15: Tiltrotor
Jan 1, 1991; In English; 2 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190252; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document explains the technology of the XV-15 aircraft that takes off and lands like a helicopter and flies like a jet.
CASI
Tilt Rotor Aircraft; Tilt Rotor Research Aircraft Program; Tilting Rotors; XV-15 Aircraft

19940010923 NASA, Washington, DC, USA
Better way to fly
Feb 1, 1988; In English; 3 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190244; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document shows the advanced cockpit making piloting more efficient and flying safer.
CASI
Cockpits; Flight Control; Flight Instruments

19940014489 NASA, Washington, DC, USA
X–29: Research aircraft
Jan 1, 1991; In English; 2 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198217; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A preliminary look at the Ames Dryden Flight Research Center in the context of the X-29 aircraft is provided. The uses of the X-29's 30 deg forward swept wing are examined. The video highlights the historical development of the forward swept wing, and its unique blend of speed, agility, and slow flight potential. The central optimization of the wing, the forward canard, and the rear flaps by an onboard flight computer is also described.
CASI
Airborne/Spaceborne Computers; Flight Control; Histories; Research Aircraft; Swept Forward Wings; X-29 Aircraft

19940029059 NASA, Washington, DC, USA
Perseus: Global watcher
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12941; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video documents efforts of NASA Dryden Flight Research Center to develop and utilize ultra-light, remotely piloted gliders to study Earth's atmosphere. The advantage of these vehicles is that they are inexpensive, and can fly at altitudes twice that of commercial airlines.
CASI
Aircraft Design; Earth Atmosphere; Environmental Monitoring; Gliders; Light Aircraft; Remote Control

19940029284 NASA Lewis Research Center, Cleveland, OH, USA
STOVL
Jan 1, 1990; In English; 4 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13535; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video examines research and applications of the STOVL aircraft.
CASI
Lift Augmentation; Powered Lift Aircraft; STOVL Aircraft

19950004299 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–18 HARV presentation for industry
May 1, 1993; In English; 20 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23631; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video provides a look at some work done by Dryden's F-18 High Alpha Research Vehicle (HARV) in cooperation with the USA Navy and industry.
DFRC
Angle of Attack; F-18 Aircraft; Research Aircraft

19950004303 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Research excitation system flight testing
Mar 30, 1992; In English; 2 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23635; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Excitation system research at Dryden with an F-16XL aircraft is presented.
DFRC
Excitation; F-16 Aircraft; Flight Tests; Research Aircraft

19950004304 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
NASA and the SR–71: Back to the future
Sep 9, 1991; In English; 4 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23636; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Presented is a musical video salute to NASA's delivery of three SR-71 aircraft for use in flight research.
DFRC
Flight Tests; SR-71 Aircraft

19950004328 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
HL–10 dedication ceremony
Apr 3, 1990; In English; 30 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23640; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The dedication of NASA's HL-10 lifting body, being put on display at NASA Dryden Flight Research Center, is shown.
DFRC
HL-10 Reentry Vehicle; Lifting Bodies

19950004329 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–104 resource tape
Oct 9, 1992; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23641; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video presents raw, unedited material of Dryden's F-104 aircraft.
DFRC
F-104 Aircraft; Research Aircraft

19950004330 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–15 835 (HIDEC) resource tape
Feb 1, 1993; In English; 1 hr. 29 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23642; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video presents raw, unedited material of Dryden's F-15 Highly Integrated Digital Electronic Control (HIDEC) aircraft.
DFRC
F-15 Aircraft; Flight Control; Research Aircraft

19950004331 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–16XL resource tape
Jan 28, 1993; In English; 1 hr. 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23643; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video presents raw, unedited material of Dryden's F-16XL aircraft.
DFRC
F-16 Aircraft; Research Aircraft

19950004332 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–18 high alpha research vehicle resource tape
Aug 11, 1992; In English; 1 hr. 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23644; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video presents raw, unedited material of Dryden's F-18 High Alpha Research Vehicle (HARV) aircraft.
DFRC
F-18 Aircraft; Research Vehicles

19950004333 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
X–31 resource tape
Aug 23, 1993; In English; 1 hr. 33 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23645; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video presents raw, unedited material of Dryden's X-31 aircraft.
DFRC
Research Aircraft; X-31 Aircraft

19950004339 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
X–31 tailless testing
Sep 9, 1994; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23651; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video addresses the NASA Dryden and X-31 International Test Organization (ITO) testbed provided for the Pentagon's 'tailless' and quasi-tailless vehicle configuration testing.
DFRC
Aircraft Configurations; Test Ranges; X-31 Aircraft

19950010567 NASA, Washington, DC, USA
Revitalizing general aviation
Jul 20, 1994; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–35013; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video contains a short feature of NASA and the FAA joint effort to incorporate new technology into the design of general aviation aircraft.
CASI
Aerospace Technology Transfer; General Aviation Aircraft; Technology Utilization

19950013578 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–15 resource tape
Jan 1, 1994; In English; 9 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41114; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An F-15 fighter aircraft is portrayed in resource video. A flight test is shown with take-off, touch and go landings, some flight maneuvers, and pilot to control tower communication with references to drag vectors.
CASI
Aircraft Landing; Aircraft Maneuvers; Aircraft Performance; F-15 Aircraft; Flight Tests; Takeoff; Touchdown

19950013739 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Acoustic climb to cruise test
Nov 27, 1991; In English; 9 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41116; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Flight test film footage of three different aircraft testing the acoustical noise levels during take-off, climb, maneuvers, and touch and go landings are described. These sound tests were conducted on two fighter aircraft and one cargo aircraft. Results from mobile test vehicle are shown.
DFRC
Acoustics; Aircraft Noise; Climbing Flight; Flight Tests; Noise Intensity

20000033438 NASA Dryden Flight Research Center, Edwards, CA USA
Hyper–X Model Testing with Animation
Mar. 21, 1996; In English; Videotape: 6 min. 25 sec. playing time, in color, with partial sound
Report No.(s): NONP–NASA–VT–2000043976; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the Hyper-X program modeling at NASA Langley Research Center. The Hyper-X craft is shown on top of a Pegasus booster in a 20" Mach 6 Wind Tunnel. Visualization data runs are performed in the wind tunnel. Also seen is a brief interview with Vincent Rausch the Hyper-X Program Manager. Animation includes the flight model of the Hyper-X vehicle.
CASI
Hypersonic Flight; X-43 Vehicle; Pegasus Air-Launched Booster; Air Launching

07
AIRCRAFT PROPULSION AND POWER

Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors; and onboard auxiliary power plants for aircraft. For related information see also 20 Spacecraft Propulsion and Power, 28 Propellants and Fuels, and 44 Energy Production and Conversion.

19940009135 NASA Ames Research Center, Moffett Field, CA, USA
Rotor stator CGI
Apr 1, 1988; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video contains computer graphics of numerous kinds of flow within jet engines. Analyses include pressure contours (shock waves), fluid pressures, etc. The video also contains dramatic views of jet engine manufacturing.
Author (revised)
Computer Graphics; Computerized Simulation; Flow Distribution; Jet Engines; Numerical Flow Visualization; Rotor Stator Interactions; Rotors; Stators

19940009150 NASA Lewis Research Center, Cleveland, OH, USA
Futurepath 2
Apr 1, 1989; In English; 28 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185301; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This covers advanced turboprop tests, the diesel engine as an aircraft propulsion system in helicopters, and the development of the Stirling engine as a space power system.
Author
Aircraft Engines; Diesel Engines; Spacecraft Power Supplies; Stirling Engines; Turboprop Engines

19940010865 NASA Lewis Research Center, Cleveland, OH, USA
Futurepath 1
Apr 1, 1988; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190236; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape presents material concerning Advanced Turboprop programs. Additionally, material covering the development of power systems for Freedom is shown.
CASI
Space Station Freedom; Space Station Power Supplies; Turboprop Engines

19940010871 NASA, Washington, DC, USA
Back to propellers
Jun 1, 1987; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190242; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape shows the unique propfan design. The propfan is designed to achieve the speeds and altitudes of jets while only using half the normal amount of fuel.
CASI
Civil Aviation; NASA Programs; Prop-Fan Technology; Propeller Fans; Research and Development

08
AIRCRAFT STABILITY AND CONTROL

Includes flight dynamics, aircraft handling qualities; piloting; flight controls; and autopilots. For related information, see also 05 Aircraft Design, Testing and Performance and 06 Avionics and Aircraft Instrumentation.

19940010806 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 STA training (Hauck)
May 1, 1988; In English; 3 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190353; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows astronaut Rick Hauck at the Shuttle Training Aircraft (STA), CU's of the heads-up display, and air-to-air exercises.
CASI
Astronaut Training; Head-Up Displays; Training Aircraft

19950004305 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Radio controlled for research
Jul 1, 1994; In English; 3 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23637; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents how Dryden engineers use radio-controlled aircraft

such as the 1/8-scale model F-18 High Alpha Research Vehicle (HARV) featured to conduct flight research.
DFRC
Aircraft Models; Flight Tests; Radio Control; Research Aircraft; Scale Models

19950004336 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
F–15 Propulsion Controlled Aircraft (PCA)
Jul 1, 1993; In English; 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23648; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation is a news release highlighting the F-15 Highly Integrated Digital Electronic Controls (HIDEC) Propulsion Controlled Aircraft (PCA) software through June 1993 at Dryden.
DFRC
Aircraft Control; Computer Programs; F-15 Aircraft; Flight Control

20000010606 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Claude Nicollier
Sep. 09, 1999; In English; Videotape: 43 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213443; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Claude Nicollier is seen. The interview addresses many different questions including why Nicollier became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X-Ray Astrophysics Facility, and a brief touch on Nicollier's responsibility during any of the given four space walks scheduled for this mission.
CASI
Hubble Space Telescope; Maintenance; Replacing; Computers; Gyroscopes; Transistors; X Ray Astrophysics Facility

09
RESEARCH AND SUPPORT FACILITIES (AIR)

Includes airports, runways, hangars, and aircraft repair and overhaul facilities; wind tunnels, water tunnels, and shock tubes; flight simulators; and aircraft engine test stands. Also includes airport ground equipment and systems. For airport ground operations see 03 Air Transportation and Safety. For astronautical facilities see 14 Ground Support Systems and Facilities (Space).

19940010852 NASA, Washington, DC, USA
Rotorcraft research
Jun 1, 1986; In English; 2 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190249; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document describes wind tunnel testing and computer modeling done on the rotorcraft prior to building the final aircraft.
CASI
Computerized Simulation; Rotary Wing Aircraft; Wind Tunnel Tests

19940014480 NASA Marshall Space Flight Center, Huntsville, AL, USA
Technology test bed
Aug 1, 1988; In English; 1 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198201; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details the renewed use of the massive rocket propulsion test stand at Marshall Space Flight Center, first used to test Saturn 5 rockets during the Apollo Program. The test stand can incorporate over 600 sensors during test firings of the Space Shuttle's main engines, which will result in increased safety and reliability, and reduced production costs.
CASI
Engine Tests; Performance Tests; Propulsion System Performance; Saturn 5 Launch Vehicles; Space Shuttle Main Engine; Spacecraft Propulsion; Test Firing; Test Stands

19940014490 NASA, Washington, DC, USA
The world's largest wind tunnel
Oct 1, 1987; In English; 2 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198218; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
NASA's National Full Scale Aerodynamics Complex, which houses two of the world's largest wind tunnels and has been used for testing experimental aircraft since 1944, is presented. This video highlights the structure and instrumentation of the 40 x 80 foot and 80 x 120 foot wind tunnels and documents their use in testing full scale aircraft, NASA's Space Shuttle and the XV-15 Tiltrotor aircraft.
CASI
Aerodynamics; Research Aircraft; Research Facilities; Wind Tunnel Tests; Wind Tunnels

19940029064 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
High Heat Flux Facility
Jan 1, 1993; In English; 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12962; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of the High Heat Flux Facility being built at Stennis Space Center in conjunction with Wright-Patterson Air Force Base. This facility will simulate flight heat conditions and will be used to test engine and materials for the National Aerospace Plane.
CASI
Flight Conditions; Heat Flux; National Aerospace Plane Program; Test Facilities

19940029245 NASA Lewis Research Center, Cleveland, OH, USA
Icing research tunnel
Jan 1, 1990; In English; 7 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13534; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives the history of the Icing Research Tunnel at LeRC and how it is used today to understand and protect against icing.
CASI
Aircraft Icing; Ice Prevention; Wind Tunnels

19950004135 NASA Langley Research Center, Hampton, VA, USA
Langley overview
Feb 10, 1993; In English; 6 min. 31 sec. playing time
Report No.(s): NONP–NASA–VT–94–23139; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents a brief history of the Langley Research Center.
LaRC
Histories; NASA Programs; Research Facilities

19950004140 NASA, Washington, DC, USA
The model builders
Dec 1, 1991; In English; 2 min. 52 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23144; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explores the world of modeling at the NASA Johnson Space Center. Artisans create models, large and small, to help scientists and engineers make final design modifications before building more costly prototypes.
CASI
Scale Models; Spacecraft Design; Spacecraft Models

19950004298 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden overview for schools
Feb 28, 1992; In English; 6 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23630; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video provides educators an overview of Dryden for students from late elementary through high school.
DFRC
Education; General Overviews; NASA Programs; Research Facilities

19950004302 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden tour tape, 1994
Feb 1, 1994; In English; 19 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23634; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video provides an overview of NASA's Dryden Flight Research Center. This is the program shown to visitors during the tour at Dryden.
DFRC
General Overviews; NASA Programs; Research Facilities

19950004326 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Building the Integrated Test Facility: A foundation for the future
Oct 1, 1992; In English; 14 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A look at the construction and resources of Dryden's Integrated Test Facility is given.
DFRC
NASA Programs; Test Facilities

19950004334 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
The Western Aeronautical Test Range
Aug 1, 1988; In English; 32 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23646; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
An overview of the Western Aeronautical Test Range (WATR) and its connection to NASA Dryden is presented.
DFRC
Test Facilities; Test Ranges

19950004335 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden overview for schools
Feb 3, 1994; In English; 6 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23647; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation gives a narrated, quick look at the Dryden Flight Research Center and the Center's various projects. The presentation is directed toward a 6th-grade audience and emphasizes staying in school to learn the vital skills needed to succeed today.
DFRC
Education; Research Facilities

12
ASTRONAUTICS (GENERAL)

Includes general research topics related to space flight and manned and unmanned space vehicles, platforms or objects launched into, or assembled in, outer space; and related components and equipment. Also includes manufacturing and maintenance of such vehicles or platforms. For specific topics in astronautics see categories 13 through 20. For extraterrestrial exploration, see 91 Lunar and Planetary Science and Exploration.

19940009158 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 mission highlights resource tape
Mar 1, 1990; In English; 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185306; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Important visual events including launch, Syncom 4 deployment, LDEF retrieval, onboard crew activities, and landing are presented. Air-to-ground transmission between the crew and Mission Control is also included.
Author (revised)
Long Duration Exposure Facility; Orbital Rendezvous; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Launching; Spacecraft Recovery; Syncom 4 Satellite

19940009167 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–28 crew presentation clip
Sep 1, 1989; In English; 23 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185313; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This Department of Defense space shuttle mission is shown during launch and landing. The video tape also includes scenes of the following: the crew working on the otolith Tilt Translation Reinterpretation Experiment, various views of the Earth, the crew during mealtime, and preparations for reentry.
Author (revised)
Defense Program; Space Transportation System Flights; Spacecraft Launching

19940010835 NASA Goddard Space Flight Center, Greenbelt, MD, USA
GAS highlights, 1988
Feb 1, 1989; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190398; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The videotape shows highlights of GSFC's involvement in the Get Away Special program during the 1988 calendar year.
CASI
Get Away Specials (STS); NASA Programs; Space Shuttles; Spaceborne Experiments

19940010996 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 crew participation in meetings
Aug 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190316; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the crew attending and participating in a Payloads Operation Working Group (POWG) meeting, a Flight Rules meeting, and a Flight Operation Review (FOR) meeting.
CASI
Flight Operations; Flight Rules; Mission Planning; Space Transportation System Flights; Spacecrews

19940010998 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mars rover sample return mission
Sep 1, 1988; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190318; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape was created by NASA JSC's Missions Planning Division to depict a future unmanned Mars mission.
CASI
Mars Sample Return Missions; Mission Planning; NASA Space Programs

19940011027 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts number 2
Sep 1, 1988; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190226; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The story of Alan Shepard's May 1961 suborbital flight is presented. This is a re-release of 'The Flight of Freedom 7'.
CASI
Mercury Spacecraft; Suborbital Flight

19940011028 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts number 3
Sep 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190227; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

John Glenn's flight into space is reviewed. This is a re-release of 'The Flight of Friendship 7'.
CASI
Astronauts; Friendship 7; Mercury Ma-6 Flight

19940014506 NASA, Washington, DC, USA
Apollo 11: 20th anniversary
Jul 1, 1989; In English; 3 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198211; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Apollo 11 Mission which culminated in the first manned lunar landing on July 20, 1969 is recounted. Historical footage of preparation, takeoff, stage separation, the Eagle Lunar Lander, and the moon walk accompany astronauts Michael Collins, Buzz Aldrin, and Neal Armstrong giving their recollections of the mission are shown.
CASI
Astronauts; Histories; Lunar Landing

19940014508 NASA, Washington, DC, USA
Space exploration initiative
Jul 1, 1990; In English; 3 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198213; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of President Bush's Space Exploration Initiative (SEI) and it's three main components, Space Station Freedom, a Permanent Lunar Base, and a Manned Mission to Mars is provided. Computer simulations of the Space Station Freedom and Permanent Lunar Base are shown, and an animated sequence describes a Mars mission where heavy lift vehicle will bring components of a Mars Spacecraft into orbit, where it will be put together by astronauts using a robotic arm. The Mars spacecraft is shown orbiting Mars and discharging a lander to the surface, carrying human explorers. The video also details the SEI's Outreach Program, designed to garner interest in and ideas for Space Exploration.
CASI
Lunar Bases; Manned Mars Missions; Space Exploration; Space Station Freedom

19940027314 NASA, Washington, DC, USA
Apollo 11 highlights
Jan 1, 1969; In English; 26 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9963; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video recounts the Apollo 11 Mission which took ten years of preparation and the work of over a half a million people, culminating in the first manned lunar landing on July 20, 1969. Historical footage is accompanied by a narrated account of the mission. The footage includes preparation for launch, takeoff, stage separation, docking in space the Eagle Lunar Lander, shots of the Earth and Moon from space, Michael Collins orbiting the Moon in the Columbia Orbiter, Edwin Aldrin and Neil Armstrong walking on the Moon, setting up a Solar Wind experiment, collecting lunar samples, shots aboard the U.S.S. Hornet, retrieval of the astronauts after splashdown, and the parade given in honor of the astronauts.
CASI
Apollo 11 Flight; Lunar Exploration; Lunar Landing; Moon

19940029060 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Apollo 11: The Goddard connection
Jul 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12943; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The history of NASA Goddard Space Flight Center's involvement in the Apollo 11 Mission to the Moon is recounted. Goddard maintained the Manned Space Flight Network, composed of ground tracking stations, and tracking stations aboard ships and airplanes, which maintained communications between the orbiter and Earth.
CASI
Apollo Project; Histories; Manned Space Flight Network; Moon; Spacecraft Communication; Spacecraft Tracking

19940029068 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Ulysses: A solar odyssey
Jul 23, 1990; In English; 11 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12948; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is a film to film transfer of a Media Four production by Charles Finance about the Ulysses Mission to the Sun. The prelaunch production uses graphics, animation, and live footage to describe how Ulysses will use the gravity of Jupiter to lift it out of the ecliptic plane into polar orbit around the Sun.
CASI
Orbital Maneuvers; Polar Orbits; Solar Orbits; Space Exploration; Sun; Ulysses Mission

19940029070 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts number 3, part 2
Sep 1, 1988; In English; 28 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12950; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video reviews John Glenn's flight into space. It is a re-release of 'The Flight of Friendship 7'.
CASI
Astronauts; Friendship 7; Mercury Ma-6 Flight

19940029071 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 14
May 10, 1988; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12951; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video looks at the Apollo 15 mission to the Appenine Mountains.
CASI
Apollo Project; Apollo 15 Flight; Lunar Exploration

19940029072 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 15
May 13, 1988; In English; 27 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12952; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video covers the Apollo 16 mission to the Decartes region.
CASI
Apollo Project; Apollo 16 Flight

19940031004 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Magellan to Venus
Jul 1, 1990; In English; 3 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15918; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents cell animation of the Magellan approach to Venus, orbit insertion, and mapping sequence.
CASI
Magellan Spacecraft (NASA); Space Exploration; Venus (Planet)

19940031005 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Planetary Rover Program
Jul 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15919; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation explains the Planetary Rover Program and shows testing in the Arroyo near JPL.
CASI
NASA Space Programs; Roving Vehicles

19950004107 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 9 no. 3005
Feb 1, 1988; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23170; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presentation gives a historic look at the Pioneer, Mariner, and Voyager missions.
LeRC
Mariner Program; NASA Space Programs; Pioneer Project; Space Exploration; Voyager Project

19950004108 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Rendezvous with Comet Halley no. 3072
Dec 1, 1989; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23171; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This presentation introduces the Challenger Center and the rendezvous with Comet Halley in the 2061 scenario.
LeRC
Education; Halley'S Comet

19950004109 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Return to the Moon no. 4005
Dec 1, 1989; In English; 8 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23172; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This presentation introduces the Challenger Center and the 'return to Moon' scenario.
LeRC
Education; Lunar Programs

19950004306 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
LLRV/Apollo 11 25th anniversary
Jul 1, 1994; In English; 2 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23638; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video salutes the 25th anniversary of the Apollo 11's landing on the moon and Dryden's contribution with the Lunar Landing Research Vehicle (LLRV) program.
DFRC
Apollo 11 Flight; General Overviews; Lunar Landing; Lunar Landing Modules

19950004317 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–60 post flight press conference
Jan 1, 1994; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23617; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950004318 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–62 post flight press conference
Jan 1, 1994; In English; 21 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23618; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950004319 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–61 post flight press conference
Jan 1, 1994; In English; 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23619; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950004320 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–65 post flight presentation
Jan 1, 1994; In English; 44 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23620; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching

19950004321 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–59 post flight presentation
May 1, 1994; In English; 40 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23621; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains footage selected by the astronauts, as well as their comments on their respective flights. It also contains launch, onboard crew activities, and landing.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950012153 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–68 mission highlights resource tape
Dec 22, 1994; In English; 58 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–38127; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
VJSC1440 contains important visual events including Space Radar Laboratory-2, Get Away Special canisters, Commercial Protein Crystal Growth, Biological Research in Canisters, Cosmic Radiation Effects and Activation Monitor, Military Applications of Ship Tracks, other onboard activities, earth views, and landing. Also includes Air-to-ground transmission between the crew and Mission control.
Author
Cosmic Rays; Earth Observations (From Space); Ground-Air-Ground Communication; Payloads; Protein Crystal Growth; Radiation Effects; Ships; Tracking Radar

19950012625 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Skylab: The first 40 days
Jan 1, 1973; In English; 22 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39136; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video records the launch of unmanned Skylab-1 on May 14, 1973 and the major problems resulting from the loss of the meteoroid heat shield. Also shown is the fabrication of materials and the equipment used in the repair operation, followed by the installation of the parasol after the launch and docking of the manned SL-2 with the SL-1 workshop. The onboard sequences of daily work routines and some of the experiments are included.
JSC
Earth Resources Survey Program; Skylab Program; Skylab 1; Skylab 2; Spaceborne Experiments; Spacecraft Docking; Spacecraft Launching

19950012643 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Legacy of Gemini
Jan 1, 1967; In English; 28 min. running time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
In the perspective of a single composite mission, this documentary illustrates the major accomplishments of the Gemini two man space flights and

the significance of these flights to the Apollo Program. This film includes outstanding photography of the Earth and man in space.
JSC
Apollo Project; Earth Observations (From Space); Gemini Flights; Manned Space Flight; Spaceborne Photography

19950012644 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Skylab: The second manned mission. A scientific harvest
Jan 1, 1974; In English; 36 min. 30 sec. playing time, in black and white, no sound
Report No.(s): NONP–NASA–VT–95–39132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This black and white video presentation covers the Skylab launch activities and docking with unmanned SL-1 workshop. Included are observations of student experiments (the Minchmog minnows and Arabella, the spider), observations of student experiments, exercise routines, and the enabling of the Earth Resources Experiments Package. Also shown is planet Earth documentation, manned operation of the Apollo Telescope Mount for observations of the Sun and beyond, outside EVA activity, testing of the Astronaut Maneuvering Unit, experiments to explore industrial uses of space, and the Skylab living routine.
JSC
Apollo Telescope Mount; Earth Observations (From Space); Earth Resources Program; Manned Maneuvering Units; Manned Space Flight; Skylab 1; Space Technology Experiments; Spaceborne Experiments

19950012645 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Time of Apollo
Jan 1, 1975; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39133; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In the year 1961, President John F. Kennedy set forth the task that...'This nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely tio Earth'. The decade is over and the task has been accomplished. Project Apollo has been achieved. This video documentary is a tribute to the historical accomplishments of the Apollo program.
JSC
Apollo Flights; Apollo Project; Lunar Exploration; Lunar Landing; Moon

19950013579 NASA, Washington, DC, USA
Challenger's night flight
Aug 1, 1983; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–41115; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS Mission 8 and its night flight (both launch and landing) are highlighted in this color video. The 5-member crew is introduced and their special assignments for this flight are discussed, along with their continuous weightlessness experiments performed during the flight. The first black astronaut, Guion S. Blufords, Jr., is introduced and file footage of an STS Mission orbiting the earth is shown.
CASI
Astronauts; Challenger (Orbiter); Launching; Night Flights (Aircraft); Spaceborne Experiments; Spacecraft Landing

19950019004 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 12: Pinpoint for science
Sep 30, 1991; In English; 28 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–46065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video, using historical film footage, photography, and computer animation, describes the launch, flight, lunar landing and exploration, and return flight of Apollo 12, one of the manned lunar missions. The astronauts were Charles Conrad, Richard Gordon, and Allen Bean. Thirty-six seconds into the November 14, 1969 launch, the spacecraft was hit by lightning from the thunderstorm surrounding the launch site. In spite of this mishap, the vehicle and astronauts were not harmed and continued with their mission. The Yankee Clipper (command module) docked with the Intrepid (lunar module) and upon reaching the Moon, the Intrepid disconnected during lunar orbit and descended to the Moon's surface to a landing area previously marked by the Surveyor satellite. After lunar surface exploration, soil sample collection, satellite maintenance, and setting up various lunar surface monitoring equipment (a seismometer and two atmospheric monitors), the Intrepid launched back into lunar orbit, docked with the Yankee Clipper, and returned to Earth. There are both B/W and color photography and film footage, which includes the earth launch, lunar orbit, descent and ascent of Intrepid on the Moon, return flight, atmospheric reentry, and recovery on the Earth, and ground to air and space communication is shown.
CASI
Apollo 12 Flight; Command Modules; Histories; Liftoff (Launching); Lunar Exploration; Lunar Landing; Lunar Module; Lunar Orbits; Lunar Soil; Lunar Surface; Manned Spacecraft; Moon

19950022986 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 11: For all mankind
Jan 1, 1969; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–51757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Historical film footage of Apollo 11 is shown. The pre-flight, launch, module docking, lunar orbit, lunar landing, ascent, and return-to-Earth flight is shown. There are lunar surface shots, Moon views, Earth views from Earth orbit, Earth views from the Moon, and footage of actual moon walk by astronauts. Mission control and space to ground control communication is heard.
CASI
Apollo 11 Flight; Earth Observations (From Space); Histories; Lunar Exploration; Lunar Landing; Lunar Orbits; Lunar Surface; Manned Spacecraft; Moon

19950026746 NASA, Washington, DC, USA
Shuttle to Space Station. Heart assist implant. Hubble update. X–30 mock–up
Aug 1, 1992; In English; 15 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–63907; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Shuttle to Space Station, Heart Assist Implant, Hubble Update, and X-30 Mockup are the four parts that are discussed in this video. The first part, Shuttle to Space Station, is focussed on the construction and function of the Space Station Freedom. While part two, Heart Assist Implant, discusses a newly developed electromechanical device that helps to reduce heart attack by using electric shocks. Interviews with the co-inventor and patients are also included. Brief introduction to Hubble Telescope, problem behind its poor image quality (mirror aberration), and the plan to correct this problem are the three issues that are discussed in part three, Hubble Update. The last part, part four, reviews the X-30 Mockup designed by the staff and students of Mississippi State University.
CASI
Cardiovascular System; Heart Diseases; Hubble Space Telescope; Space Station Freedom; X-30 Vehicle

19990032587 NASA Johnson Space Center, Houston, TX USA
1998 Mars Missions Science Briefing
Nov. 13, 1998; In English; Videotape: 58 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999037064; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

NASA executives gathered together for an interview to discuss the 1998 Mars Mission. A simulated overview of the Lander Mission is presented. Also presented are views of pre-launch activities, countdown, and launch of the spacecraft, burnouts of the first, second, and third engines, and the probe separating from the spacecraft. During this mission the Lander performs in situ investigations that address the science theme "Volatiles and Climate History" on Mars. The purpose of this mission is to study the following: climate; life; water; carbon dioxide; and dust particles.
CASI
Mars (Planet); Mars Atmosphere; Mars Environment; Mars Sample Return Missions; Mars Polar Lander

19990036756 NASA, Washington, DC USA
Space 2000 Symposium
Mar. 24, 1999; In English; Sponsored by American Univ., USA; Videotape: 7 hours 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999053774; No Copyright; Avail: CASI; B07, Videotape-Beta; V07, Videotape-VHS

The purpose of the Space 2000 Symposium is to present the creativity and achievements of key figures of the 20th century. It offers a retrospective discussion on space exploration. It considers the future of the enterprise, and the legacy that will be left for future generations. The symposium includes panel discussions, smaller session meetings with some panelists, exhibits, and displays. The first session entitled ”From Science Fiction to Science Facts” commences after a brief overview of the symposium. The panel discussions include talks on space exploration over many decades, and the missions of the millennium to search for life on Mars. The second session, ”Risks and Rewards of Human Space Exploration,” focuses on the training and health risks that astronauts face on their exploratory mission to space. Session three, ”Messages and Messengers Informing and Inspire Space Exploration and the Public,” focuses on the use of TV medium by educators and actors to inform and inspire a wide variety of audiences with adventures of space exploration. Session four, ”The Legacy of Carl Sagan,” discusses the influences made by Sagan to scientific research and the general public. In session five, ”Space Exploration for a new Generation,” two student speakers and the NASA Administrator Daniel S. Goldin address the group. Session six, ”Destiny or Delusion? -- Humankind’s Place in the Cosmos,” ends the symposium with issues of space exploration and some thought provoking questions. Some of these issues and questions are: what will be the societal implications if we discover the origin of the universe, stars, or life; what will be the impact if scientists find clear evidence of life outside the domains of the Earth; should there be limits to what humans can or should learn; and what visionary steps should space-faring people take now for future generations.
CASI
Conferences; Mars Exploration; Mars (Planet); Mars Sample Return Missions; Mars Surveyor 98 Program; Extraterrestrial Life; Exobiology

19990116371 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Welcome to Outer Space
Aug. 26, 1999; In English; Videotape: 19 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999202512; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video gives a brief history of the Jet Propulsion Laboratory, current missions and what the future may hold. Scenes includes various planets in the solar system, robotic exploration of space, discussions on the Hubble Space Telescope, the source of life, and solar winds. This video was narrated by Jodie Foster. Animations include: close-up image of the Moon; close-up images of the surface of Mars; robotic exploration of Mars; the first mapping assignment of Mars; animated views of Jupiter; animated views of Saturn; and views of a Giant Storm on Neptune called the Great Dark Spot.
CASI
Solar System; Space Exploration; Planets; Sun; Solar Wind

20000032783 NASA Johnson Space Center, Houston, TX USA
New Mission Control Center Briefing
May 16, 1995; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039783; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panelists, Chief Center Systems Division John Muratore, and Acting Chief, Control Center Systems Division, Linda Uljon, giving an overview of the new Mission Control Center. Muratore and Uljon talk about the changes and modernization of the new Center. The panelists mention all the new capabilities of the new Center. They emphasize the Distributed real time command and control environment, the reduction in operation costs, and even the change from coaxial cables to fiber optic cables. Uljon also tells us that the new Control Center will experience its first mission after the launch of STS-70 and its first complete mission (both launching and landing) during STS-71.
CASI
Command and Control; Ground Based Control; Flight Control; Ground Operational Support System; Control Systems Design; Systems Integration

20000058146 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Press Briefing
Dec. 08, 1995; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078611; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live coverage of the pre-launch Delta X-Ray Timing Explorer (XTE) press briefing is presented. George Diller, NASA Public Affairs, introduces the panel. The panel consists of Floyd Curington, NASA Launch Manager, Kennedy Space Center; David Mitchell, Launch Vehicle Manager, NASA Goddard Space Flight Center; Dale Schulz, Mission Director, XTE Project Manager Goddard Space Flight Center; Dr. Hale Bradt, XTE Principle Investigator, Massachusetts Institute of Technology (MIT); and Joel Tumbiolo, Launch Weather Officer, Department of the Air Force. The launch of the Delta XTE spacecraft atop the Delta 230 expendable launch vehicle is discussed. Once lofted into orbit, the XTE spacecraft will embark on a two-year mission to carry out an in-depth study of x-ray sources in the universe. Floyd Curington gives the lift-off schedule, fueling, and countdown of the spacecraft. David Mitchell discusses the launch sequence and spacecraft separation. Dale Schulz presents viewcharts of the instrument side of the XTE. Dr. Hale will be studying compact stars such as light dwarfs, neutron stars and quasars. Joel Tumbiolo presents the weather forecast for the December 10, 1995 launch. The press briefing ends with a question and answer period.
CASI
Delta Launch Vehicle; Prelaunch Summaries; X Ray Timing Explorer; X Ray Astronomy

20000059212 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS SOHO Presentation, SAEF 2
Aug. 23, 1995; In English; Videotape: 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078653; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Solar and Heliospheric Observatory (SOHO) Spacecraft located at the Spacecraft Assembly and Encapsulation Facility (SAEF 2) is presented. A representative from the European Space Agency (ESA) SOHO project, and Kenneth Sizemore, Project Manager Goddard Space Flight Center, discuss the objectives of the SOHO mission, which are to provide an understanding of how the sun works and also its interaction with the Earth’s environment. SOHO will be positioned between the sun and the Earth and will give the scientist an unobstructed view of the Sun for two years. SOHO will be positioned along with Atlas IIAS which is an Atlas Centaur launch vehicle featuring two solid rocket boosters. Launch is set for November 1995.
CASI
Atlas Centaur Launch Vehicle; SOHO Mission; Booster Rocket Engines; European Space Agency

20000060800 NASA Kennedy Space Center, Cocoa Beach, FL USA
XTE Science Briefing from KSCNF
Oct. 06, 1995; In English; Videotape: 42 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078608; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a Satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, x-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape presents a pre-launch science briefing to the press by a few of the scientist and managers associated with the XTE satellite. The moderator for the press briefing is Jim Sahli, from the Public Affairs Office at Goddard Space Flight Center (GSFC). He introduces Alan Bunner, of the High Energy Astrophysics at NASA Headquarters; Fred Lamb, from the University of Illinois; Richard Mashotzky, X Ray Scientist at GSFC; Rick Rothschild, Principal Investigator from the University of California at San Diego; and Dale Schultz, the XTE project manager at GSFC. Dr. Bunner explains the electromagnetic spectrum, the placement of x-rays and the importance of the XTE observations to a better understanding of the Universe. Dr. Lamb, explains the difference between white dwarfs, neutron stars and black holes, and the type of observations that the XTE will give to a further understanding of these phenomena. Dr. Mashotzky expands the viewpoint to beyond the galaxy, and explains the interests of scientists who hope to use XTE to further study Quasars and Active Galactic Nuclei. Dr. Rothschild reviews some of the features of XTE, using a

diagram to show the features of interest, such as the X ray Telescopes, and the collecting Proportional Counter Array (PCA.) Mr. Schultz presents a videotape tour of the XTE, in which he shows the scientific instruments and the other features of the satellite. In this tour, the source of each of the instruments is noted. Questions from the members of the press are then fielded. Many of the questions are about the cost of the XTE and any problems that are anticipated in regards to the launch.
CASI
X Ray Timing Explorer; X Ray Astronomy; X Ray Telescopes; X Ray Sources; X Ray Spectra

20000064903 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta WIND Mission Science Briefing
Oct. 31, 1994; In English; Videotape: 12 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078325; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of the question and answer period on the Delta WIND science briefing is presented. See NONP-NASA-VT-2000078324 for live coverage of the WIND science briefing.
CASI
Solar Wind; Space Missions; Earth Magnetosphere; Plasmas (Physics)

20000064904 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta WIND Mission Science Briefing
Oct. 31, 1994; In English; Videotape: 62 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078324; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The science objectives of the WIND mission are to: 1) provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies; 2) Determine the magnetospheric output to interplanetary space in the up-stream region; 3) Investigate basic plasma processes occurring in the near-Earth solar wind; and 4) Provide baseline ecliptic plane observations to be used in heliospheric latitudes from ULYSSES. The WIND science briefing is presented by George Diller, NASA public affairs; Dr. Robert L. Carovillano, Project Scientist for the Global Geospace Science Initiative, NASA Headquarters; Dr. Mario H. Acuna, Project Scientist for the WIND Project, Goddard Space Flight Center (GSFC); Dr. Keith W. Ogilvie, Principle Investigator, Solar Wind Experiment at GSFC; Dr. Jean Louis Bougeret, Principle Investigator, Radio/Plasma Wave Experiment, Paris; and Dr. Eugeny Mazets, Co-Principle Investigator, Russian Gamma Ray Spectrometer Instrument, St. Pertersburg, Russia. Dr. Carovillano presents a cartoon slide of the Solar Terrestrial System and describes the Sun and the Magnetic field of the Earth. Dr. Acuna also presents a cartoon slide describing GEOTAIL, POLAR, WIND, SOHO, ULYSSES and Cluster which are the various tools used to study the complex solar terrestrial system. Dr. Ogilvie explains four particle and wave instruments on WIND. These instruments will be used to study the contributions and characteristics of plasma and plasma waves that occur in the solar wind. Dr. Bougeret explains the European participation in the WIND mission. He also shows a slide presentation of SOHO and the CLUSTER spacecraft. Dr. Mazets explains the main objective of the Transient Gamma Ray Spectrometer (TGRS) aboard the WIND spacecraft, which is to perform high resolution measurements of Gamma Ray Burst spectra and time histories, with emphasis on the search for line features in the energy spectra. The briefing ends with a question and answer period. See NONP-NASA-VT-2000078325 for additional question and answer footage.
CASI
Solar Wind; Space Missions; Plasmas (Physics); Delta Launch Vehicle; Earth Magnetosphere

20010056851 NASA, Washington, DC USA
Looking Back, Looking Forward: Forty Years of US Human Spaceflight, Parts 1 and 2
May 08, 2001; In English; Videotape: 6 hr. 34 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001083803; No Copyright; Avail: CASI; V04, Videotape-VHS

This video shows footage from the symposium 'Looking Back, Looking Forward: Forty Years of US Human Spaceflight' held at the George Washington University on May 8, 2001. John Logsdon, Director of the GWU Space Policy Institute, introduces Daniel Goldin, NASA Administrator, who briefly discusses 'what it has meant to be a spacefaring nation'. A short video gives an overview of the history of spaceflight, including details on the Cold War space race between the US and the Soviet Union, and the first flights in space and to the moon by the US. Charles Murray presents 'Human Space Flight and American Society: The Record So Far' as the keynote speaker. Session 1, 'The Experience of Space Flight', consists of the astronauts Bob Crippen, Charles Walker, Mary Ellen Weber, and T.J. Creamer, who discuss their personal experiences with space flight. Session 2 ('Perspectives on the Past Forty Years of Human Space Flight'), Session 3 ('Perspectives on the Next Forty Years of US Human Spaceflight'), and the presentation 'The International Space Station and the Future of Human Space Flight' can be found on 'Looking Back, Looking Forward: Forty Years of US Human Spaceflight, These are all in Part 1. Part 2 consists of the following presentations: (1) 'The Space Flight Revolution Revisited" by William Sims Bainbridge; (2) 'Mutual Influences: USSR-US Interactions during the Space Race' by Asif Siddiqi; (3) 'Making Human Space Flight as Safe as Possible' by Fred Gregory; and (4) 'What If? Paths Not Taken" by John Logsdon. Session 3, 'Perspectives on the Next Forty Years of Human Spaceflight', consists of Neil de Grasse Tyson presenting 'Humans or Robots? Choosing Paths of the Frontier of Space Exploration', Robert Zubrin presenting 'Human Space Flight: An Element of American Greatness', Lori Zoloth presenting 'The Ethics of Human Space Flight, and James Garvin presenting 'NASA Faces the Future'. The final presentation is 'The International Space Station and the Future of Human Space Flight' by Bill Readdy, Deputy Associate Administrator fo9r Space Flight, NASA, and William Shepherd, Commander of Expedition 1, International Space Station.
CASI
Conferences; Space Flight; Histories; International Space Station; Space Exploration

20010057599 NASA Langley Research Center, Hampton, VA USA
Apollo 10 – 11
2001; In English; Videotape: 57 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001089735; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video gives overviews of the Apollo 10 and Apollo 11 missions to the moon, including footage from the launches and landings of the Command Module Columbia, which is used for both flights. The Apollo 10 crewmembers, Commander Thomas Stafford, Command Module Pilot John Young, and Lunar Module Pilot Eugene Cernan, are seen as they suit-up in preparation for launch and then as they experiment with the microgravity environment on their way to the moon. The moon's surface is seen in detail as the Command Module orbits at an altitude of 69 miles. The Apollo 11 crewmembers, Commander Neil Armstrong, Command Module Pilot Michael Collins, and Lunar Module Pilot Buzz Aldrin, are seen during various training activities, including simulated lunar gravity training, practicing collecting lunar material, and using the moonquake detector. Footage shows the approach and landing of the Lunar Module Eagle on the moon. Armstrong and Aldrin descend to the moon's surface, collect a sample of lunar dust, and erect the American flag. Eagle's liftoff from the moon is seen.
CASI
Spacecraft Launching; Crew Procedures (Inflight); Crew Procedures (Preflight); Astronaut Training; Moon; Lunar Surface; Spacecraft Landing

20010106050 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [On–Orbit Activities]
Jun. 20, 1994; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117304; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage is shown of the crew of Apollo 11 (Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael

Collins) inside the spacecraft as they fly from the Earth to the Moon. A scene shows the entire Earth as seen from Apollo.
CASI
Apollo 11 Flight; Crew Procedures (Inflight); Spacecrews

20010106092 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Recovery
Jun. 17, 1994; In English; Videotape: 1 hr. 28 min. 49 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2001171206; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The Apollo 11 spacecraft is lifted from the ocean after its water landing (not shown) onto the deck of the USS Hornet. The crewmembers, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, are seen going from the spacecraft to the quarantine chambers. They talk to family members over the phone after their arrival at the Ellington Air Force Base. Footage shows the celebration of Armstrong's birthday and the release of the crew from quarantine.
CASI
Command Modules; Spacecrews

20010106094 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Prelaunch Press Conference/EVA Training]
Jun. 16, 1994; In English; Videotape: 1 hr. 22 min. 13 sec. playing time, in color, some with sound
Report No.(s): NONP–NASA–VT–2001169786; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A prelaunch press conference shows the crewmembers of Apollo 11, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, answering questions about their upcoming mission (this section has sound, the rest of the video is without sound). Footage is seen of the crew during training for the extravehicular activity portion of the mission and using the flight simulator.
CASI
Spacecrews; Extravehicular Activity; Lunar Module; Astronaut Training; Prelaunch Summaries

20010106101 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [EVA Training/Washington, D. C. Tour]
Jun. 20, 1994; In English; Videotape: 1 hr. 13. min. 46 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2001173324; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the crew of Apollo 11, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael Collins, during various pre-mission activities. They are seen training for the extravehicular activity on the surface of the Moon, giving speeches in front of the White House, and during a parade in Houston.
CASI
Extravehicular Activity; Astronaut Training; Crew Procedures (Preflight); Apollo 11 Flight

20010106104 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [On–Orbit Lunar Module Checkout]
Jun. 20, 1994; In English; Videotape: 1 hr. 20 min. 30. sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001172114; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage is shown of the crew of Apollo 11 (Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin Jr., and Command Module Pilot Michael Collins) inside the spacecraft as they fly from the Earth to the Moon. The Moon is seen in its entirety and in close detail. Aldrin gives a brief demonstration on how the astronauts eat in space.
CASI
Moon; Spacecrews; Apollo 11 Flight; Crew Procedures (Inflight)

20010106107 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Spacecraft Retrieval and the Crew in the Anti–Contamination Chamber]
Jun. 17, 1994; In English; Videotape: 1 hr. 14 min. 34 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001169770; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the launch of the Apollo 11 spacecraft and the retrieval of the module after reentering Earth's atmosphere and landing in the ocean (reentry and landing scenes not included). President Richard Nixon is seen greeting the crew of Apollo 11 while they are in the anti-contamination chamber.
CASI
Spacecraft Landing; Apollo 11 Flight

20010106111 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Pre–Launch Activities and Launch]
Jun. 16, 1994; In English; Videotape: 1 hr. 32 min. 12 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001168953; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crewmembers of Apollo 11, Commander Neil A. Armstrong, Command Module Pilot Michael Collins, and Lunar Module Pilot Edwin E. Aldrin, Jr., are seen during various stages of preparation for the launch of Apollo 11, including suitup, breakfast, and boarding the spacecraft. They are also seen during mission training, including preparation for extravehicular activity on the surface of the Moon. The launch of Apollo 11 is shown. The ground support crew is also seen as they wait for the spacecraft to approach the Moon.
CASI
Spacecrews; Spacecraft Launching; Crew Procedures (Preflight); Apollo 11 Flight

20010106142 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Mission Control During Spacecraft Recovery]
Jun. 17, 1994; In English; Videotape: 1 hr. 29 min. 30 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2001117305; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows footage of ground control when the Apollo 11 spacecraft is recovered from its water landing.
CASI
Ground Based Control; Apollo 11 Flight

20010106143 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project [Tracking]
Jun. 16, 1994; In English; Videotape: 1 hr. 32 min. 49 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001116971; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows footage of the ground support team tracking Apollo 11's progress on its way to the Moon.
CASI
Ground Support Systems; Apollo 11 Flight

20010115233 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts Project: Earth Views and Crew Activities
Jun. 17, 1994; In English; Videotape: 1 hr. 32 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001185535; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crewmembers of Apollo 11, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins, are seen performing various on-orbit activities, including systems identification and Lunar Module checkout. The Earth is seen from space.
CASI
Checkout; Earth Observations (From Space); Apollo 11 Flight; Crew Procedures (Inflight)

20010116356 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference], Part 1 of 2
Jun. 28, 1994; In English; Videotape: 1 hr. 14. min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181405; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Apollo 11 Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins are seen during this post-mission conference, where they give details about the mission, concentrating on their activities on the Moon. They then answer questions from the audience. The second part of this conference is seen on 'Apollo 11 Facts: Post Flight Press Conference, Part 2 of 2' (internal ID 2001181396).
CASI
Apollo 11 Flight; Postflight Analysis; Moon

20010116507 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Post Flight Press Conference], Part 2 of 2
Jul. 07, 1994; In English; Videotape: 1 hr. 4 min. long, in color, with sound
Report No.(s): NONP–NASA–VT–2001181396; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of 'Apollo 11 Facts: Post Flight Press Conference, Part 1 of 2' (internal ID 2001181405), this video shows Apollo 11 Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins during a post flight press conference, where they describe their experiences on the mission. The astronauts then answer questions from the audience.
CASI
Apollo 11 Flight; Postflight Analysis

20010117030 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts: Ceremony in the Astrodome
Aug. 29, 1994; In English; Videotape: 21 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181397; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the ceremony in the Astrodome to honor the Apollo 11 astronauts, Commander Neil Armstrong, Lunar Module Pilot Edwin Aldrin, Jr., and Command Module Pilot Michael Collins.
CASI
Astronauts; Apollo 11 Flight

20010117032 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts: Recovery
Jan. 01, 2001; In English; Videotape: 1 hr. 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181399; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video shows the water landing of the Apollo 13 spacecraft. A computer animation shows the atmospheric reentry of the Command Module.
CASI
Atmospheric Entry; Water Landing; Apollo 13 Flight; Spacecraft Landing

20010117033 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Onboards
Jun. 20, 1994; In English; Videotape: 1 hr. 2 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2001181400; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the surface of the Moon from orbit and the Earth seen from the Moon. Apollo 11 astronauts Neil Armstrong and Edwin Aldrin, Jr. are seen on the lunar surface as they set up the American flag.
CASI
Lunar Surface; Moon; Apollo 11 Flight

20010117034 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Onboards
Jun. 17, 1994; In English; Videotape: 55 min. 42 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2001181402; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the surface of the Moon as the Lunar Module passes overhead. The astronauts Neil Armstrong and Edwin Aldrin, Jr., are seen as they erect the American flag on lunar surface. Various shots show Earth from the Moon and an Earth sunset from space.
CASI
Astronauts; Lunar Module; Lunar Surface; Moon; Apollo 11 Flight

20010117035 NASA Johnson Space Center, Houston, TX USA
Node Resource Tape
Jan. 01, 2001; In English; Videotape: 31 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181403; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows footage from the construction of the International Space Station's Node 1 at Marshall Space Flight Center. The Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, inspects the Node.
CASI
Construction; Connectors

20010117036 NASA Johnson Space Center, Houston, TX USA
Expedition 1 Crew Resource Reel
Aug. 04, 1998; In English; Videotape: 55 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181404; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows footage of the Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, training for their stay on the International Space Station. Shepherd is seen training in the Soyuz spacecraft and inspecting the Service Module and Node 1. The three crewmembers are seen training for winter survival and extravehicular activity (in the Neutral Buoyancy Lab). They are taught how to use the fire extinguishers and extravehicular activity tools. Scenes show Gidzenko training in the crew compartment trainer and on the Mir Space Station and Krikalev on the STS-60 mission. A computer animation shows the Soyuz spacecraft docking with the Service Module.
CASI
Computer Animation; Extravehicular Activity; International Space Station; Training Devices; Astronaut Training

20010117037 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts [Lunar EVA]
Jun. 23, 1994; In English; Videotape: 1 hr. 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181406; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Apollo 11 Commander Neil Armstrong and Lunar Module Pilot Edwin Aldrin, Jr., are seen on the surface of the Moon performing their extravehicular activities (EVAs).
CASI
Extravehicular Activity; Moon; Apollo 11 Flight

20010117038 NASA Johnson Space Center, Houston, TX USA
ISS General Resource Reel
Nov. 10, 1998; In English; Videotape: 1 hr. 18 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181407; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video is a collection of computer animations and live footage showing the construction and assembly of the International Space Station (ISS). Computer animations show the following: (1) ISS fly around; (2) ISS over a sunrise seen from space; (3) the launch of the Zarya Control Module; (4) a Proton rocket launch; (5) the Space Shuttle docking with Zarya and attaching Zarya to the Unity Node; (6) the docking of the Service Module, Zarya, and Unity to Soyuz; (7) the Space Shuttle docking to ISS and installing the Z1 Truss segment and the Pressurized Mating Adapter (PMA); (8) Soyuz docking to the ISS; (9) the Transhab components; and (10) a complete ISS assembly. Live footage shows the construction of Zarya, the Proton rocket, Unity Node, PMA, Service Module, US Laboratory, Italian Multipurpose Logistics Module, US Airlock, and the US Habitation Module. STS-88 Mission Specialists Jerry Ross and James

Newman are seen training in the Neutral Buoyancy Laboratory (NBL). The Expedition 1 crewmembers, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, are shown training in the Black Sea and at Johnson Space Flight Center for water survival.
CASI
Construction; International Space Station; Service Modules; Soyuz Spacecraft; Spacecraft Docking; Zarya Control Module

20010117039 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts [Post Mission Honorary Ceremony]
Jan. 01, 2001; In English; Videotape: 1 hr. 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181409; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Apollo 13 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are seen during this post mission honorary ceremony, led by President Richard Nixon. Lovell is shown during an interview, answering questions about the mission.
CASI
Astronauts; Apollo 13 Flight

20010117040 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts [Post Flight Press Conference]
Jan. 01, 2001; In English; Videotape: 1 hr. 16. min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181410; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Apollo 13 astronauts, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are seen during this post flight press conference. They describe their mission and answer questions from the audience.
CASI
Apollo 13 Flight; Astronauts; Postflight Analysis

20010117041 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts: Press Conference
Jan. 01, 2001; In English; Videotape: 1 hr. 24 min. playing time, in color, most with sound
Report No.(s): NONP–NASA–VT–2001181430; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Flight Director Gene Krantz gives an overview of the Apollo 13 mission as corrections are made in the power down checklist, passive thermal control, and orbital burns after the spacecraft runs into problems. He then answers questions from the press with the help of Tony England, Bill Peters, and Dick Thorson. Footage then shows newspaper headlines 'We're Not Concerned' and 'Getting Ready to Land' as people watch televisions to see if the astronauts landed safely. The press conference section of this video has sound, the headlines section does not.
CASI
Apollo 13 Flight; Spacecraft Landing; Procedures

20010117042 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts [On–Orbit Activities]
Jan. 01, 2001; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001174283; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the on-orbit Apollo 13 Command Module checkout and tour of the Lunar Module.
CASI
Checkout; Command Modules; Lunar Module; Apollo 13 Flight

20010117043 NASA Johnson Space Center, Houston, TX USA
ISS Node 1 and 2 Resource Reel
Sep. 01, 1995; In English; Videotape: 1 hr. 14 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181408; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows Nodes 1 and 2 being constructed (machined, refined, and washed) and tested (pressure tests) for the International Space Station. A computer animation shows the Space Shuttle as it attaches to an orbiting Node.
CASI
Machining; Refining; Space Station Structures

20010117167 NASA Johnson Space Center, Houston, TX USA
Apollo 11 Facts: First Moonwalks
Jun. 22, 1994; In English; Videotape: 1 hr. 20 min. 15 sec. playing time, black and white, with sound
Report No.(s): NONP–NASA–VT–2001181432; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows footage from the surface of the Moon as the astronauts Neil Armstrong and Edwin Aldrin, Jr. walk on the Moon for the first time. They are seen descending from the Lunar Module and collecting soil samples.
CASI
Moon; Soil Sampling; Crew Procedures (Inflight); Lunar Surface; Apollo 11 Flight

20010117192 NASA Johnson Space Center, Houston, TX USA
Apollo 13 Facts
Jan. 01, 2001; In English; Videotape: 1 hr. 28 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181443; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage is seen of the Earth from the Apollo 13 spacecraft as it travels towards the Moon. The crew, James Lovell, Jr., John Swigert, Jr., and Fred Haise, Jr., are shown performing various on-orbit activities. The Lunar Module rendezvous and docking, tunnel repressurization, and S4-B separation are also seen.
CASI
Apollo 13 Flight; Spacecrews; Crew Procedures (Inflight); Earth Observations (From Space)

13
ASTRODYNAMICS

Includes powered and free-flight trajectories; and orbital and launching dynamics.

19940011020 NASA, Washington, DC, USA
Space flight: The application of orbital mechanics
Dec 1, 1989; In English; 35 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190221; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This is a primer on orbital mechanics originally intended for college-level physics students.
CASI
Orbital Mechanics; Space Navigation

20000080177 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Orbit Insertion Briefing
Aug. 24, 1993; In English; Videotape: 62 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081556; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Steve Wall is the host of this video entitled, "Return to the Red Planet". Live animation of the Mars Observer orbiting Mars is presented. Steve Wall explains the spacecraft insertion maneuver and also explains the purpose for the Mars Observer launch. Live coverage of the Cape Canaveral launch of the Mars Observer is also presented. Suzanne Dodd, Chief of the Mission Planning team describes the burn start and how the spacecraft will be captured by Mars' gravity. Glenn Cunningham, Mars Observer Project Manager, gives background information on the Mars Observer and describes the organizations behind the Mars Observer Spacecraft, such as the Deep Space Network, the Mission Operation Support Office, Science Investigators, the Flight Engineering Office, Operations Office, and the Ground Data System Office. Dr. William Piotrowski, Acting Director, Solar System Exploration Division, NASA, talks about the purpose of the Mars Pathfinder which is to develop the technology and systems for landing small science packages on Mars. Mr. Roger Gibbs, Former Mars Observer Spacecraft Systems Engineer, tells us how the Mars Observer was built

and describes the structural elements on the Mars Observer. The 11-month cruise period for the spacecraft is given by Joseph Beerer, Manager of the Engineering office. The thrust for the Mars Orbit Insertion is described by Ronald Klemetson, Technical Manager, Propulsion Subsystem Jet Propulsion Laboratory (JPL). George Chen, Lead Engineer Attitude and Articulation Subsystem Spacecraft Team, explains the importance of the attitude control engines on the Spacecraft. Marvin Traxler, Manager of Tracking and Data Acquisition, describes how searching for a signal from the Mars Observer works. See NONP-NASA-VT-2000081555 for a continuation of this discussion with Marvin Traxler.
CASI
Mars Observer; Orbit Insertion; Spacecraft Maneuvers; Spacecraft Launching

20000080367 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Orbit Insertion Briefing
Aug. 24, 1993; In English; Videotape: 56 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

For the first part of this briefing, see NONP-NASA-VT-2000081556. Marvin Traxler continues his discussion on signal tracking from the Mars Observer. Julie Webster, Lead Engineer, Telecommunications Subsystem, is introduced. She explains how signals coming back from Mars are detected. Dr. Pasquale Esposito talks about flyby orbits and capture orbits. He says that frequencies coming from the spacecraft can determine if the spacecraft has flown by Mars, or if a capture orbit has occurred. Charles Whetsel, System Engineer Spacecraft Team, presents a computer program. He shows where the signal will appear on the computer from the Spacecraft. Suzanne Dodd presents orbit insertion geometry. Dr. Arden Albee, Project Scientist Mars Observer Project, Cal Tech tech, says that Mars is studied to get more data to confirm their hypotheses derived from previous Mars Missions such as the Viking Mars Program and the Mariner Program. Dr. Albee also describes instrumentation on the Mars Observer such as the Ultra Stable Oscillator, Mars Orbiter Laser Altimeter, and Magnetometer. The camera on the spacecraft is similar to a fax machine because it scans one line at a time as the spacecraft orbits Mars. Dr. Michael Malin, Principle Investigator Mars Observer Camera, Malin Space Science Systems, Inc., describe this process.
CASI
Mars Missions; Mars Observer; Orbit Insertion; Spacecraft Orbits

14
GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and test chambers and simulators. Also includes extraterrestrial bases and supporting equipment. For related information see also 09 Research and Support Facilities (Air).

19940010262 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 crew trash compactor briefing
May 1, 1990; In English; 7 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190284; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Parker, Brand, and Gardner are shown in the CCT learning how to work the trash compactor on the middeck.
Author
Garbage; Spacecrews; Waste Disposal

19940010314 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 integrated sim in SMS and MOCR
May 1, 1990; In English; 22 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190288; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A clip that intercuts between the MOCR and the SMS during an STS-35 sim is provided.
Author (revised)
Space Transportation System; Space Transportation System Flights

19940010763 NASA, Washington, DC, USA
Human factor studies
Aug 1, 1985; In English; 2 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190463; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape looks at research done in the Manned Vehicle Systems Research Facility at ARC to investigate issues related to aircraft pilot and crew performance.
CASI
Aircraft Pilots; Flight Crews; Human Factors Engineering; Human Performance

19940010792 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 suited ascent training in fixed base SMS
Apr 1, 1989; In English; 10 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190379; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown training for the ascent portion of the mission in the fixed base/SMS.
CASI
Ascent; Astronaut Training; Space Shuttle Missions

19940010797 NASA Goddard Space Flight Center, Greenbelt, MD, USA
GFSC–TV demo tape
Jan 1, 1989; In English; 8 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190384; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This demonstration tape produced by and for the Goddard Space Flight Center Television facility shows some of the capabilities of this state of the art facility that are available to projects at Goddard.
CASI
Research Facilities; Test Facilities

19940010800 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Stock footage of Goddard Space Flight Center and Headquarters
Jun 1, 1989; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190387; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Produced for Century Teleproductions in Boston, MA this video is a camera master showing various views, with natural sound, of the space flight center during the late spring. This finished footage is used in an interactive laser disc presentation that is used at Kennedy Space Center Visitor Center.
CASI
NASA Space Programs; Research Facilities

19940010826 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
The 61–M long duration sim video highlights resource tape
Jan 1, 1988; In English; 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190367; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the crew on the middeck mockup during the long duration sim. The video also shows the FCR during the sim.
CASI
Astronaut Training; Space Environment Simulation; Space Shuttle Missions

19940010828 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 Magellan deploy Sim in SMS and MOCR
Feb 1, 1989; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190369; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown in SMS training for the Magellan spacecraft deploy. Intercuts of the MOCR are included.
CASI
Astronaut Training; Magellan Spacecraft (NASA); Space Shuttle Missions

19940010845 NASA Ames Research Center, Moffett Field, CA, USA
Manned vehicle systems research facility
Mar 1, 1989; In English; 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190448; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

This videotape presents a guided tour of the Manned Vehicle Systems Research Facility (MVSRF) at ARC.

CASI

Flight Simulation; Man Machine Systems; Research Facilities

19940010858 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–26 IUS and latch contingency training

Mar 1, 1988; In English; 16 min. 53 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190359; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Astronauts Nelson and Lounge are shown in the WETF while astronauts Covey and Hilmer observe topside.

CASI

Astronaut Training; Astronauts; Spacecrews; Weightlessness Simulation

19940010859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–26 generic integrated IUS deploy simulation

Feb 1, 1988; In English; 16 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190360; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew is shown in the SMS during TDRS deploy training. It includes intercuts of the MOCR.

CASI

Astronaut Training; Inertial Upper Stage; Simulation; Space Shuttle Missions; Spacecrews; TDR Satellites

19940010860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–26 EVA rescue training

Jul 1, 1988; In English; 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190361; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows astronauts Covey, Hilmers, and Hauck training in SES. It involves a simulated EVA rescue using the RMS. A computer-generated image is used to simulate the movement of a free-floating astronaut for grapple with the arm.

CASI

Astronaut Training; Computerized Simulation; Extravehicular Activity; Remote Manipulator System; Rescue Operations; Space Shuttle Missions

19940010913 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Building 46 grand opening

Feb 1, 1989; In English; 5 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190321; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows the grand opening ceremonies of Building 46 Central Computer Facility at the NASA Johnson Space Center.

CASI

Facilities; Research Facilities

19940010920 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Lunar Curatorial Facility resource

Jul 1, 1989; In English; 6 min. 46 sec. playing time, in color, no sound

Report No.(s): NONP–NASA–VT–93–190328; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape shows daily activities in the Lunar Curatorial Facility. The video covers the various studies being conducted on lunar dust, rock, and core samples brought back by Apollo crews.

CASI

Lunar Dust; Lunar Rocks; Lunar Soil; Research Facilities

19940010969 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 Hubble space telescope deploy: Training at MDF with Hawley

Apr 1, 1990; In English; 7 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190278; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Steve Hawley is shown working with the Hubble Space Telescope mockup on the Remote Manipulator System mockup above the Manipulator Development Facility (MDF).

CASI

Astronaut Training; Hubble Space Telescope; Space Shuttle Missions

19940010976 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 HST deploy sim in SMS and MOCR

Apr 1, 1990; In English; 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190279; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the crew on a simulated middeck during the Hubble Space Telescope (HTS) deploy simulation. Intercut from the MOCR is included.

CASI

Astronaut Training; Hubble Space Telescope; Simulation

19940010977 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 crew training inflight maintenance and bailout exercises in CCT and WETF

Mar 1, 1990; In English; 19 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew is shown in the CCT practicing on orbit maintenance tasks, along with bailout procedures. The crew is also shown practicing water survival techniques in the Weightless Environment Training Facility (WETF).

CASI

Astronaut Training; Bailout; Crew Procedures (Inflight); Maintenance Training; Space Shuttle Missions; Weightlessness Simulation

19940010978 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 crew training: firefighting, food tasting, EVA prep and post

Mar 1, 1990; In English; 17 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190281; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Space Shuttle crew is shown lighting a pond of gasoline and then performing firefighting tasks. The crew is also shown tasting food including lemonade, chicken casserole, and tortillas, and performing extravehicular activity (EVA) equipment checkouts in the CCT middeck and airlock.

CASI

Astronaut Training; Consumables (Spacecrew Supplies); Fire Fighting; Space Vehicle Checkout Program; Spacecraft Maintenance

19940010979 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–40 crew during spacelab Sim

Aug 1, 1990; In English; 12 min. 50 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190290; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Crew members working in the SLS-1 simulator are shown. Activities in the module mockup include work with the cardiovascular equipment, Body Mass Measurement Device, and Jellyfish experiment.

Author (revised)

Exobiology; Life Sciences; Sim; Simulators; Space Shuttle Missions; Space Transportation System Flights; Spaceborne Experiments; Spacelab; Spacelab Payloads

19940010994 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Richards, Dick: Training clip

Jul 1, 1989; In English; 12 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190300; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Richards is shown during his ASCAN training, including weightless environment training facility (WETF) training and various simulations.

CASI

Astronaut Training; Astronauts; Space Environment Simulation; Training Simulators; Weightlessness Simulation

19940011000 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Commitment to challenge
May 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190320; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape gives a brief overview of the NASA JSC including the following: mission control, mission operations, and mission planning; new scientific and technologies developments; and educational programs.
CASI
Mission Planning; NASA Space Programs; Research Facilities; Space Laboratories

19940011001 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 long duration simulation: Crew entering SMS
Sep 1, 1988; In English; 2 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190358; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the crew entering the SMS for the long-duration SIM in preparation for their flight.
CASI
Astronaut Training; Astronauts; Long Duration Space Flight; Simulation

19940011044 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 crew training bailout in CCT, 16mm camera class EVA prep, habitation equipment procedures, and food tasting
Sep 1, 1990; In English; 17 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190314; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape shows the crew during several training exercises including work in the CCT, photography class, and food tasting.
CASI
Astronaut Training; Bailout; Photography; Space Transportation System Flights

19940027308 NASA Lewis Research Center, Cleveland, OH, USA
Aerospace test facilities at NASA LERC Plumbrook
Oct 1, 1992; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the facilities and research being conducted at LeRC's Plumbrook field station is given. The video highlights four main structures and explains their uses. The Space Power Facility is the worlds largest space environment simulation chamber, where spacebound hardware is tested in simulations of the vacuum and extreme heat and cold of the space plasma environment. This facility was used to prepare Atlas 1 rockets to ferry CRRES into orbit; it will also be used to test space nuclear electric power generation systems. The Spacecraft Propulsion Research Facility allows rocket vehicles to be hot fired in a simulated space environment. In the Cryogenic Propellant Tank Facility, researchers are developing technology for storing and transferring liquid hydrogen in space. There is also a Hypersonic Wind Tunnel which can perform flow tests with winds up to Mach 7.
CASI
Aerospace Engineering; Cryogenic Fluid Storage; Environmental Tests; NASA Programs; Nuclear Electric Power Generation; Research and Development; Research Facilities; Research Projects; Space Environment Simulation; Spacecraft Propulsion; Test Facilities

19940029052 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Stennis Space Center 1992
Jan 1, 1992; In English; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12924; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The history and a description of the John C. Stennis Space Center is presented.
CASI
Histories; NASA Space Programs; Test Facilities

19940029054 NASA Lewis Research Center, Cleveland, OH, USA
The making of the time capsule
Jan 1, 1991; In English; 7 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12935; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the celebration of NASA Lewis Research Center's 50th anniversary celebrations. to commemorate this event, employees designed and manufactured a statue that contains a time capsule. The design process is shown, as well as the unveiling ceremony which features speeches by the center director and local dignitaries.
CASI
NASA Programs; Structures

19940029061 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
John C. Stennis Space Center overview
May 1, 1994; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12944; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of research being conducted at the John C. Stennis Space Center is given. The Space Center is not only a NASA Space Flight Center, but also houses facilities for 22 other governmental agencies. The programs described are Stennis' High Heat Flux Facility, the Component Test Facility (used to test propulsion rockets and for the development of the National Aerospace Plane), oceanographic and remote sensing research, and contributions to the development of Space Station Freedom.
CASI
National Aerospace Plane Program; Research Facilities; Space Station Freedom; Test Facilities

19940029265 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Way station to space: The history of Stennis Space Center
Jan 1, 1994; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12947; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The video traces the history of the Stennis Space Center from its origins as a test facility for President Kennedy's initiative to put a man on the moon to its present day tasks as a leading center for propulsion research and its contributions towards the development or Space Station Freedom.
CASI
Histories; NASA Programs; Test Facilities

19950004142 NASA, Washington, DC, USA
Goldstone
Aug 1, 1991; In English; 6 min. 21 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23147; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Goldstone is a complex of deep space communications antennas that command and receive information from satellites or receive information from satellites or about distant stars and galaxies. The video feature discusses the Goldstone complex and its 30 plus years of service to NASA.
CASI
Ground Stations; Space Communication; Tracking Stations

20000011228 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Payload Removal From Shipping Canister PHSF: Discovery Hubble Repair Mission
Aug. 16, 1999; In English; Videotape: 3 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008207; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 payload, Orbital Replacement Unit Carrier, removal from a shipping canister is shown. The carrier is a modified Spacelab pallet that contains the tools and replacement parts necessary to service the HST.
CASI
Space Transportation System; Space Shuttle Payloads; Discovery (Orbiter); Ground Handling

20000058142 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas GEOS–J Pad Activity with Blockhouse
May 19, 1995; In English; Videotape: 4 min. 32 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows night shots of the erected Atlas GEOS-J on the launch pad, and work being done.
CASI
Launching Pads; Preflight Operations; Flight Operations; Aircraft Maintenance

15
LAUNCH VEHICLES AND LAUNCH OPERATIONS

Includes all classes of launch vehicles, launch/space vehicle systems, and boosters; and launch operations. For related information see also 18 Spacecraft Design, Testing, and Performance; and 20 Spacecraft Propulsion and Power.

19940010868 NASA, Washington, DC, USA
Mission San Marco
Nov 1, 1988; In English; 3 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190239; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The videotape shows a satellite launch from San Marco, Africa.
CASI
San Marco Satellites; Spacecraft Launching

19950006716 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
White Sands Test Facility
Jan 1, 1994; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28237; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This is an overview of the White Sands Test Facility's role in ensuring the safety and reliability of materials and hardware slated for launch aboard the Space Shuttle. Engine firings, orbital flights debris impact tests, and propulsion tests are featured as well as illustrating how they provide flight safety testing for the Johnson Space Center, other NASA centers, and various government agencies. It also contains a historical perspective and highlights of major programs that have been participated in as part of NASA.
JSC
Flight Safety; Prelaunch Tests; Propulsion; Space Shuttles; Test Facilities

19950007287 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Delta, America's space ambassador
Oct 1, 1994; In English; 24 min. playing time
Report No.(s): NONP–NASA–VT–94–29868; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presentation features the major satellites launched by the Delta rocket in a celebration of this dependable launch vehicle's past.
GSFC
Delta Launch Vehicle; Space Programs

19950011735 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Meteor 3/TOMS launch of 15 August 1991 in Plesetsk, USSR
Aug 3, 1994; In English; 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–37004; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The TOMS launch of August 15, 1991, was a joint effort between the U.S.S.R. and the USA. The pre-launch briefing, a tour of the TOMS storage site, it's delivery and setup at the launch site, and the actual launch were viewed in this video, along with a post-launch conference and a dinner. The launch occurred in Plesetsk, U.S.S.R., with the TOMS payload being launched on a Soviet Meteor. Officials from NASA were present for the launch.
CASI
Atmospheric Circulation; International Cooperation; Liftoff (Launching); Meteorological Satellites; Ozone Depletion; Payloads; Total Ozone Mapping Spectrometer

19990032573 NASA Johnson Space Center, Houston, TX USA
Delta II Stardust Pre–Launch Press
Feb. 05, 1999; In English; Videotape: 1 hour 2 min. 13 sec. playing time. in color, with sound
Report No.(s): NONP–NASA–VT–199036752; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Coverage of the press conference for the Stardust Launch Mission is presented. The objective of this press conference is to identify and explain the purpose of the Stardust Mission. A question and answer phase followed the mission objective. Also presented was an animation of the exact mission highlights, which included the orbit of the probe, collection of dust materials and space particles, and deployment of the solar panels.
CASI
Conferences; Return to Earth Space Flight; Stardust Mission; Space Probes

19990032574 NASA Johnson Space Center, Houston, TX USA
Delta II Stardust Mission Briefing
Jan. 13, 1999; In English; Videotape: 1 hour 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036753; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
An overview of the Stardust Mission is shown. NASA personnel is seen discussing and explaining the path of the probe. An animated clip is presented to demonstrate how the probe will collect interstellar dust materials, and space particles by using an aerogel. The animation also described the process by which the probe will take photographs of the comets from the on board camera. The dust samples and the photographs will be analyzed in order to learn more about interstellar materials.
CASI
Conferences; Stardust Mission; Space Probes; Cosmic Dust; Space Debris

19990032575 NASA Johnson Space Center, Houston, TX USA
Stardust Launch Coverage
Feb. 07, 1998; In English; Videotape: 1 hour playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036754; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The ground crew is shown building the Stardust launch vehicle. Important visual images include loading the launch vehicle, erecting the Solid Rocket Boosters, the countdown and launch of the Delta Rocket, separation of the four Boosters, and the main engine cut off. The cut off of the main engine marks the beginning of the second stage engine. During its circular path, Stardust collects interstellar and cometary dust from the Wild 2 comet.
CASI
Launch Vehicles; Interstellar Matter; Cosmic Dust; NASA Space Programs; Mars Sample Return Missions; Wild 2 Comet; Stardust Mission

20000057567 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Launch with Pre–Launch Activities
Jul. 24, 1992; In English; Videotape: 61 min, 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078319; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The Geotail satellite payload is part of the International Solar Terrestrial Physics Program. Its primary objective is to gather information on Sun/Earth interactions and explore the tail of the Earth's Magnetosphere. The launch by the Delta II launch vehicle has a 5 minute window with fueling completed on time and the weather was acceptable.
CASI
Delta Launch Vehicle; Geomagnetic Tail; Launching

20000057568 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Launch with Pre–Launch Activities
Jul. 24, 1992; In English; VIDEOTAPE: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078321; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Geotail satellite is a joint effort between the U.S. and Japan to explore the tail of the Earth's Magnetosphere and study Sun/Earth interactions. The launch by the Delta II launch vehicle proceeded without incident after on-time

fueling and routine checks on all pertinent systems. The footage alternates between scenes from the control room to the launch pad itself.
CASI
Delta Launch Vehicle; Geomagnetic Tail; Launching; Payloads

20000057569 NASA Kennedy Space Center, Cocoa Beach, FL USA
RADARSAT Launch VAFB
Nov. 01, 1995; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078327; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Replay of the launch of Delta II is shown and it proceeded without any technical problems. The launch was perfect and the first stage separated exactly as it should. The launch window was 22 seconds and the weather was perfect with the temperature at 40 degrees. The second stage took 10 seconds longer than anticipated while Delta II went into a nearly circular orbit.
CASI
Launching; Radarsat; Delta Launch Vehicle

20000057585 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Launch Activities and Scrub (Anomaly) at Cape Canaveral Air Station Complex 17
Dec. 17, 1995; In English; Videotape: 4 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–200078620; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents launch activities of the Delta X-ray Timing Explorer and scrub aboard a McDonnell Douglas Delta II rocket from Complex 17. The primary objective of the Delta XTE is to study time variability and broadband spectral phenomena in the X-ray emission from astronomical sources. XTE is designed for a required lifetime of two years with a goal of five years and will be inserted into a low-Earth circular orbit at an altitude of 600 km. The launch was postponed due to unfavorable wind conditions aloft.
CASI
Anomalies; X Ray Timing Explorer; Spacecraft Launching; Delta Launch Vehicle

20000057587 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Launch Activities (Scrub #2)
Dec. 11, 1995; In English; Videotape: 3 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078623; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents Delta XTE (X-Ray Timing Explorer) launch activities on 12/11/95. The launch was rescheduled for next weekend due to out of limit upper level wind conditions.
CASI
X Ray Timing Explorer; Delta Launch Vehicle

20000058131 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas–SOHO Propulsion Unit and Electrical Module Uncrating at SAEF–2
Aug. 08, 1995; In English; Videotape: 6 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078652; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The uncrating of the Atlas-SOHO's (Solar and Heliospheric Observatory) electrical and propulsion units in the Spacecraft Assembly and Encapsulation Facility (SAEF-2) is shown.
CASI
SOHO Mission; Atlas Centaur Launch Vehicle; Electronic Modules; Propulsion; Ground Handling; Spacecraft Modules

20000058133 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur 77 GOES–J Mated to Centaur at Cape Canaveral Air Station Complex 36B
May 06, 1995; In English; Videotape: 4 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078585; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Geostationary Operational Environmental Satellite-J (GOES-J), a weather satellite to be launched aboard the Atlas I rocket, is hoisted into the Pad 36-B gantry and mated to the Atlas Centaur 77 (AC-77) rocket.
CASI
GOES Satellites; Launching Pads; Atlas Centaur Launch Vehicle; Preflight Operations

20000058140 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas SOHO Wet Dress Rehearsal
Oct. 30, 1995; In English; Videotape: 7 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078649; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Atlas launch vehicle Wet Dress Rehearsal (WDR) is shown. The WDR verifies the launch readiness of the vehicle, the launch support equipment at the pad and in the blockhouse.
CASI
Atlas Launch Vehicles; Ground Handling; Prelaunch Tests

20000058141 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas First Stage Erection, GEOS I
Jan. 24, 1994; In English; Videotape: 4 min. 58 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078627; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the erection of the Atlas GEOS I on the launch pad.
CASI
Construction; GEOS Satellites (ESA); Atlas Launch Vehicles

20000058191 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta–WIND Solar Panel Repair and Move at Cape Canaveral Air Station, Hangar AO
Sep. 13, 1994; In English; Videotape: 4 min. 56 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000080447; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents footage of workcrews moving the WIND solar panel in order to make repairs in Hangar AO prior to launch at Cape Canaveral Air Station, Sep. 13, 1994. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.
CASI
Solar Arrays; Spacecraft Maintenance

20000059202 NASA Kennedy Space Center, Cocoa Beach, FL USA
RADARSAT Launch
Nov. 01, 1995; In English; Videotape: 2 hrs. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078326; No Copyright; Avail: CASI; B05, Videotape-Beta; V05, Videotape-VHS

The footage begins with scenes from Space Launch Complex 2 at Vandenburg AFB, CA, including the Canadian Space Agency's RADARSAT satellite and Delta II Launch Vehicle on the launch pad. There is pre-recorded footage of the McDonnell Douglas and NASA launch teams in the blockhouse and pre-recorded information from the Canadian Space Agency about the RADARSAT mission. The rest of the footage returns to "live" coverage of the launch.
CASI
Delta Launch Vehicle; Radarsat; Launching Bases; Launching

20000059206 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta/NEAR Launch
Feb. 17, 1996; In English; Videotape: 60 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078322; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of the live presentation of the Delta/Near Earth Asteroid Rendezvous Spacecraft (NEAR) launch is presented. Data from the launch of NEAR is anticipated. While waiting for data to be received, a video tape is shown by Andrew Santo of the Johns Hopkins University Applied Physics Laboratory

in Laurel, Maryland. Data is finally received from Guam and all of the spacecraft functions are proper. For the first part of the Delta/NEAR launch, see NONP-NASA-VT-2000078323.
CASI
Asteroid Missions; Spacecraft Launching; Near Earth Asteroid Rendezvous Mission; Delta Launch Vehicle

20000060840 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS–2 Video News Release
Mar. 30, 1993; In English; Videotape: 2 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081544; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video presents a Marshall Space Flight Center-Television (MSFC-TV) news release describing the objectives of the Atmospheric Laboratory for Applications in Science-2 (ATLAS-2), which is being flown on STS-56. Dr. Tim Miller (Mission Scientist), Dr. Marsha Torr (Mission Scientist), and Teresa Vanhooser (Mission Manager) explain that the ATLAS-2 mission is being launched to study earth atmospheric interactions with the sun in general and how manmade chemicals and pollution are contributing to ozone depletion in our atmosphere in particular. Seven instruments comprise the core payload. ATLAS-2 is an integral part of the Spacelab contribution to NASA's Mission to Planet Earth and characterizes the chemical and physical components of Earth's middle atmosphere and the solar energy injected in the atmosphere, studies that began on ATLAS-1.
CASI
Spacelab; Spacelab Payloads; Earth Atmosphere; Solar Activity

20000060841 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS–1 Video News Release
Mar. 06, 1992; In English; Videotape: 2 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081543; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Allen Kenitzer, from Marshall Space Flight Center (MSFC), narrates this NASA Kennedy Space Center video presenting a MSFC-Television news release describing the overall scientific objectives of the Atmospheric Laboratory for Applications in Science-1 (ATLAS-1) Spacelab mission. Byron Lichtenberg (NASA Science Astronaut) and Anthony O'Neil (ATLAS-1 Mission Manager) explain that the 13 sophisticated and complementary instruments carried in shuttle Atlantis' payload bay are designed to identify the chemical species in our atmosphere, to measure the Sun's energy falling on and entering the atmosphere, to study the behavior of charged particles in the electric and magnetic fields surrounding the earth, and to gather ultraviolet light from stars and galaxies. ATLAS-1 is the first Spacelab flight of the National Aeronautics and Space Administration's (NASA's) Mission to Planet Earth.
CASI
Spacelab; Spacelab Payloads; Earth Atmosphere; Solar Activity; Ultraviolet Radiation; Space Shuttle Missions

20000060864 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Spacecraft Activities at CCAS Skid Strip
Dec. 10, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078619; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the night launch activities of the Delta XTE Spacecraft. The activities for 12/10/95 were scrubbed.
CASI
Delta Launch Vehicle; Preflight Operations; Flight Operations; Crew Procedures (Preflight)

20000062303 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II Geotail — 1st Stage and Solid Motor Booster Erection
Jul. 22, 1992; In English; Videotape: 2 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078584; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Geotail mission's goal was to investigate the structure and dynamics of the geomagnetic tail that extends on the nightside of the Earth. The launch date was July 24, 1992. This video shows the Delta II on the pad, being prepared for the launch. The first stage and the solid motor booster are shown being moved into place on the rocket.
CASI
Construction; Delta Launch Vehicle; Rocket Vehicles

20000062360 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Spacecraft Processing
Sep. 25, 1992; In English; Videotape: 51 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081547; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows various Mars Observer activities. Scenes include the checkout of the radar pin, the arrival of both the transfer orbit stage and the Mars Observer Spacecraft. Also shown are the mating of the spacecraft, pre-launch activities, countdown, animation of the Martian Environment, and replays of the launching of the Titan satellite.
CASI
Mars Observer; Mars Missions; Mars Exploration; Mars Environment

20000063386 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas 2 Animation
Mar. 30, 1993; In English; Videotape: 6 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–200081533; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Atmospheric Laboratory for Applications and Science-2 (ATLAS-2), was designed to collect data on the relationship between the sun's energy output and Earth's middle atmosphere and how these factors affect the ozone layer. The ATLAS-2 flew on the Space Shuttle Discovery's mission SST-56, launched on April 8, 1993. The videotape consists of an animated tour of the instruments that were included as part of the mission. The first half of the tape shows the various instruments, pointing to each in turn and identifying each by the associated initialisms. The instruments identified were: the Atmospheric Trace Molecule Spectroscopy (ATMOS), Millimeter Wave Atmospheric Sounder (MAS), Shuttle Solar Backscatter Ultraviolet/A (SSBUV/A) spectrometer, Solar Spectrum Measurement (SOLSPEC) instrument, Solar Ultraviolet Irradiance Monitor (SUSIM), Active Cavity Radiometer (ACR) and Solar Constant (SOLCON).) The second half of the animation shows the same tour without the pointing or the identification of the instruments.
CASI
Solar Instruments; Space Transportation System Flights; Radiation Measuring Instruments

20000063490 NASA Kennedy Space Center, Cocoa Beach, FL USA
AC 67 Launch Video
Mar. 26, 1987; In English; Videotape: 2 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078612; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Unmanned Atlas Centaur (AC) 67 launch is presented on March 26, 1987 at the WESH television station in Florida. Lightning is shown after 49 seconds into the flight. The vehicle is totally destroyed due to a cloud-to-ground lightning flash.
CASI
Pilotless Aircraft; Atlas Centaur Launch Vehicle; Liftoff (Launching)

20000063520 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas/Centaur 121 SOHO Launch
Dec. 02, 1995; In English; Videotape: 1 hr. 2 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081545; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the early morning launch of the Atlas/Centaur rocket. Also seen are panoramic views of the launch complex. Scenes of the countdown, engine ignition, and liftoff are also presented. The jettison of both the first and second stage engines are also seen.
CASI
Atlas Centaur Launch Vehicle; Stage Separation; Jettisoning

20000065629 NASA Kennedy Space Center, Cocoa Beach, FL USA
TITAN III/Mars Observer Post–Launch Press Conference
Sep. 25, 1992; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081548; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows George Diller, NASA's Public Affairs Officer, as he introduces the panel members. Speakers includes: William Piotrowski, Program Manager from NASA Headquarters; James Womack, NASA Launch Manager from Kennedy Space Center; John Gibb, TITAN Launch Vehicle Manager from Langley Research Center; Sid Saucier, Transfer Orbit Stage, Director from Marshall Space Flight Center; and David Evans, Mars Observer, Director from the Jet Propulsion Laboratory. The speakers discuss the launch procedures, activities, and some trouble that the Observer is having. The panelists are also seen answering questions from both the audience as well as other NASA Centers.
CASI
Titan Launch Vehicles; Mars Observer; Conferences

20000067669 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas/Centaur–SOHO Pre–Launch News Conference
Nov. 22, 1995; In English; Videotape: 20 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081546; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live coverage of a pre-launch news conference on the Atlas/Centaur SOHO mission is presented. George Diller, NASA Public Affairs, introduces the panel. Floyd Curington, NASA Launch Manager, Kennedy Space Center, presents countdown activities. Pat Symons, Launch Vehicle Manager, NASA Lewis Research Center, analyzes the time duration from liftoff to spacecraft separation. Fabrizio Felici, SOHO Mission Director European Space Agency (ESA), explains the important features of SOHO, which includes a payload of 650 kilos and 12 major instruments with multisensors. Ken Sizemore, International Solar Terrestrial Physics (ISTP) Project Manager Goddard Space Flight Center (GSFC), talks about the successful international collaboration between the ESA and NASA. Joel Tumbiolo, Launch Weather Officer USA Air Force (USAF, presented the weather forecast. SOHO was launched aboard an Atlas II rocket on November 23, 1995. The news conference ends with a brief question and answer period.
CASI
Atlas Centaur Launch Vehicle; SOHO Mission; Prelaunch Summaries; Spacecraft Launching

20000068527 NASA Kennedy Space Center, Cocoa Beach, FL USA
INTELSAT V–A (F–10) Launch
Mar. 22, 1985; In English; Videotape: 38 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078610; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows panoramic views of the Atlas launch vehicle on the launch complex. Also shown are ignition, liftoff, several different launch replays from different cameras, and views of the complex after launch.
CASI
Intelsat Satellites; Atlas Launch Vehicles

20000118267 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer
Jul. 31, 1991; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000096692; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Mars Observer is shown arriving at the Payload Hazardous Servicing Facility (PHSF) and being moved into the hangar. Close-up shots are also shown of the Observer.
CASI
Mars Observer; Prelaunch Tests; Mars Missions; Mars Satellites

16
SPACE TRANSPORTATION AND SAFETY

Includes passenger and cargo space transportation, e.g., shuttle operations; and space rescue techniques. For related information, see also 03 Air Transportation and Safety and 15 Launch Vehicles and Launch Vehicles, and 18 Spacecraft Design, Testing and Performance. For space suits, see 54 Man/System Technology and Life Support.

19940009165 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Launch, entry, and landing resource clip
Jan 1, 1989; In English; 9 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185312; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A video tape of scenes of the shuttle during launch is presented. The scenes were shot from various points of view. The following scenes are also included: SRB and ET separation, OMS burn, reentry glow, and landing at Edwards AFB, California.
Author (revised)
Space Shuttle Missions; Spacecraft Landing; Spacecraft Launching; Spacecraft Reentry

19940009168 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 post–insertion/deorbit prep and crew bailout
Jan 1, 1989; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185314; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Crew enters CCT after donning vests where they practice post insertion deorbit prepared for bailout procedure. Entire crew takes turns bailing out through the side hatch of the CCT.
Author
Aerospace Safety; Bailout; Space Shuttle Mission 61-A; Spacecrews

19940010261 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 launch and landing clip
Nov 1, 1989; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190265; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Launch (from engine gimbal to loss of sight) and landing of the Shuttle at Edwards AFB, California, from ground-based cameras is shown.
Author (revised)
Space Shuttles; Space Transportation System; Spacecraft Landing; Spacecraft Launching

19940010263 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 post–flight press conference
May 1, 1990; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190287; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The following contains footage selected and narrated by the crew. The footage covers the following areas: launch, work with the ASTRO-1 payload, onboard activities, and landing.
Author (revised)
Conferences; Space Transportation System; Space Transportation System Flights

19940010752 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Astro smile
Mar 1, 1989; In English; 20 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190303; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This is a humorous look at life aboard the Space Shuttle.
CASI
Human Behavior; Laughing; Spacecrews

19940010788 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 Post–Flight Press Conference
Oct 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190355; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape contains footage selected and narrated by the STS-26 crew including launch, TDRS-C/IUS (Tracking and Data Relay Satellite C / Inertial Upper Stage) deployment, onboard activities, and landing.
CASI
Deployment; Space Shuttle Missions; TDR Satellites

19940010789 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 onboard 16mm photography quick release
Oct 1, 1988; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190356; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape features scenes shot by the crew of onboard activities including the TDRS (Tracking and Data Relay Satellite) deploy, Earth views, and middeck experiments.
CASI
Deployment; Space Shuttle Missions; TDR Satellites

19940010791 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 Post–Flight Press Conference
May 1, 1989; In English; 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190378; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by the Commander and Space Shuttle crew including launch, Magellan/IUS deployment, onboard crew activities, and landing.
CASI
Crew Procedures (Inflight); Space Shuttle Missions; Space Shuttle Orbiters

19940010793 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 mission tape
May 1, 1989; In English; 59 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190380; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains important visual events including launch, Magellan/IUS Highlights Resource onboard crew activities, and landing. Air-to-ground transmission between the crew and Mission control is also included.
CASI
Crew Procedures (Inflight); Space Shuttle Missions

19940010833 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 Post–Flight Press Conference
Apr 1, 1989; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190373; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by the Commander and the Space Shuttle crew including launch, TDRS-D/IUS deployment, onboard crew activities, and landing.
CASI
Crew Procedures (Inflight); Space Shuttle Missions; Space Shuttle Orbiters; Spacecrews

19940010834 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 onboard 16mm photography quick release
Mar 1, 1989; In English; 24 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190374; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video features scenes shot by the crew of onboard activities including Earth shots, middeck experiments, TDRS deploy, and other mission objectives.
CASI
Crew Procedures (Inflight); Space Shuttle Missions

19940010841 NASA, Washington, DC, USA
Space Shuttle highlights
Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190404; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape recaps the space shuttle successes of 1984: STS 41-B, STS 41-C, STS 41-G, and 51-A.
CASI
NASA Programs; Space Shuttles; Space Transportation System Flights

19940010844 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Return to Space Mission: The STS–26 crew report
Feb 1, 1989; In English; 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190366; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This videotape features footage from NASA's return to space flight after the 51-L accident. The videotape is narrated by the crew, and it includes the following: launch, landing, and the TDRS/IUS deployment.
CASI
Deployment; Space Missions; Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching

19940010873 NASA, Washington, DC, USA
Gearing up for 1988
Dec 1, 1986; In English; 4 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190415; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains all engineering efforts to ensure safety and reliability for the next Shuttle mission, STS-26.
CASI
Aerospace Safety; Space Shuttle Mission 51-F; Spacecraft Reliability

19940010880 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 Space Shuttle Portable Onboard Computer (SPOC) briefing
Aug 1, 1989; In English; 7 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190255; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Space Shuttle crew is shown learning how to operate the Shuttle Portable Onboard Computer (SPOC).
CASI
Airborne/Spaceborne Computers; Space Shuttle Orbiters; Space Shuttles

19940010881 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 post–flight press conference
Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190256; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape contains footage selected and narrated by crew including launch, Galileo/IUS deployment, onboard crew activities, and landing.
CASI
Space Shuttle Missions; Spacecrews

19940010882 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 onboard 16mm photography quick release
Oct 1, 1989; In English; 23 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190257; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape features scenes shot by the crew of onboard activities including Galileo deploy, Shuttle Solar Backscatter Ultraviolet (SSBUV) student experiments, other activities on the flight deck and middeck, and Earth and payload bay views.
CASI
Photography; Space Shuttle Missions

19940010883 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 mission highlights resource tape, part 1
Nov 1, 1989; In English; 53 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190258; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video tape contains important visual events including launch

Galileo/IUS deployment, onboard crew activities, and landing. Also included is air-to-ground transmission between the crew and Mission Control.
CASI
Space Shuttle Missions; Spacecrews

19940010884 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 McCully and Baker during IFM training
Aug 1, 1989; In English; 10 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190259; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts McCully and Baker are shown learning how to use various tools that will be aboard the Space Shuttle. They are also seen cleaning air filters and checking wires.
CASI
Astronaut Training; Crew Procedures (Inflight); Space Shuttles; Spacecrews

19940010885 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 Galileo integrated deploy sim
Sep 1, 1989; In English; 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190260; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Space Shuttle crew practices Galileo deploy from the SMS. Intercuts of the MOCR are included.
CASI
Crew Procedures (Inflight); Galileo Spacecraft; Space Shuttle Missions

19940010900 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 mission highlights resource tape
Apr 1, 1989; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190339; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains important visual events including launch, TDRS-D/IUS deployment, onboard crew activities, and landing. Also included are air-to-ground transmission between the crew and Mission Control.
CASI
Astronauts; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spacecraft Launching; Spacecrews; TDR Satellites

19940010903 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 onboard 16mm photography quick release
Jan 1, 1990; In English; 21 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190269; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape features scenes, shot by the crew, of onboard activities including Syncom deploy, Long Duration Exposure Facility retrieval, various middeck experiments, and Earth and payload bay views.
CASI
Long Duration Exposure Facility; Payload Retrieval (STS); Space Shuttle Missions; Space Shuttle Payloads; Syncom 4 Satellite

19940010906 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 LDEF approach in SES
Nov 1, 1989; In English; 9 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190271; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Wetherbee, Dunbar, and Low are shown in the Shuttle Engineering Simulator (SES) practicing techniques for approaching the Long Duration Exposure Facility on orbit.
CASI
Astronaut Training; Long Duration Exposure Facility; Payload Retrieval (STS); Shuttle Engineering Simulator; Simulation

19940010911 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–31 Post–Flight Conference
May 1, 1990; In English; 22 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190274; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape contains footage selected and narrated by the STS-31 Commander and crew including launch, Hubble Space Telescope deployment, onboard activities, and landing.
CASI
Hubble Space Telescope; Space Shuttle Missions

19940010916 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Movement in microgravity
May 1, 1988; In English; 8 min. 50 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190323; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video takes a serious and humorous look at life in the low gravity environment of space flight. The video also includes onboard activities from Skylab to Space Shuttle missions.
CASI
Bioastronautics; Microgravity; Weightlessness

19940010925 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 EVA prep and post with Gregory, Blaha, Carter, Thorton, and Musgrave in FFT
Oct 1, 1989; In English; 9 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190266; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows the crew in the airlock of the FFT, talking with technicians about the extravehicular activity (EVA) equipment. Thornton and Carter put on EVA suits and enter the airlock as the other crew members help with checklists.
CASI
Extravehicular Activity; Spacecrews

19940010927 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 crew post flight film
Feb 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190267; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape contains footage selected by the Commander and crew of the STS-33 DoD mission, including launch, limited onboard activities, and landing.
CASI
Space Shuttle Missions; Spacecrews

19940010930 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew presentation clip
Jan 1, 1989; In English; 14 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190349; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video features scenes from this Department of Defense Space Shuttle Mission. Included are launch, landing, the crew playing weightless football and exercising, and food preparation on middeck.
CASI
Physical Exercise; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Landing; Spacecraft Launching

19940010934 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 missions highlight resource tape
Oct 1, 1988; In English; 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190357; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains important visual events including launch, TDRS-C/IUS onboard crew activities and landing. Also includes air-to-ground transmission between ground and Mission Control.
CASI
Astronauts; Ground Based Control; Space Communication; Space Shuttle Missions; Spacecraft Landing; Spacecraft Launching; Spacecrews; TDR Satellites

19940010950 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 onboard 16mm photography quick release
May 1, 1989; In English; 21 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190377; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the Space Shuttle crew of onboard activities including Magellan deploy, Earth views, payload bay views, and middeck views.

CASI

Crew Procedures (Inflight); Magellan Spacecraft (NASA); Payload Stations; Space Shuttle Orbiters

19940010965 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 onboard 16mm photography quick release

May 1, 1990; In English; 30 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190275; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the crew of onboard activities including Hubble Space Telescope deploy, remote manipulator system (RMS) checkout, flight deck and middeck experiments, and Earth and payload bay views.

CASI

Crew Procedures (Inflight); Space Shuttle Missions; Spaceborne Experiments

19940010967 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–31 mission highlights resource tape

Jun 1, 1990; In English; 56 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190276; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains important visual events including launch, Hubble Space Telescope deployment, onboard crew activities, and landing. Air-to-ground transmission between crew and Mission Control is also included.

CASI

Crew Procedures (Inflight); Hubble Space Telescope; Space Shuttle Missions

19940010988 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–36 crew presentation clip

Jul 1, 1990; In English; 20 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190294; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes from this Department of Defense Shuttle mission showing crew onboard activities.

CASI

Astronauts; Defense Program; Space Shuttle Missions; Space Transportation System Flights; Spacecrews

19940010991 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–35 onboard photography quick release

Dec 1, 1990; In English; 25 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190297; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video features scenes shot by the crew of onboard activities including ASTRO-1 operation, middeck experiments, flight deck views, and earth and payload bay views.

CASI

Astro Missions (STS); Astronauts; Intravehicular Activity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Photography

19940010992 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–35 mission highlights resource tape

Feb 1, 1991; In English; 59 min. 27 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190298; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This document contains video on launch, ASTRO-1 operations, onboard operations, crew activities, and landing. It also includes air-to-ground transmission between crew and Mission Control.

CASI

Astro Missions (STS); Astronauts; Ground-Air-Ground Communication; Intravehicular Activity; Space Shuttle Missions; Space Transportation System Flights; Spacecraft Communication; Spacecraft Landing

19940010993 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Science operation in space: Lessons

Jan 1, 1988; In English; 32 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190299; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This program (conceived by a group of veteran Shuttle astronauts) shows prospective experimenters how they can better design their experiments for operation onboard Shuttle flights. Shuttle astronauts Dunbar, Seddon, Hoffman, Cleave, Ross, and ChangDiaz also show how crews live and work in space.

CASI

Astronauts; Experiment Design; Intravehicular Activity; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19940010995 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–27 crew deorbit prep in SMS with Gibson, Shepard, Mullane, Ross, and G. Gardner

May 1, 1988; In English; 5 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190315; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the crew training. Forward and aft flight deck views are provided.

CASI

Astronaut Training; Space Transportation System Flights; Spacecrews

19940011043 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–41 post–flight press presentation

Nov 1, 1990; In English; 21 min. 36 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190311; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape contains footage selected and narrated by the crew. The footage covers the launch, the deployment of Ulysses, onboard crew activities, and the landing.

CASI

Deployment; Space Transportation System Flights; Ulysses Mission

19940011045 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–41 onboard 16mm photography quick release

Oct 1, 1990; In English; 17 min. 34 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190312; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape features scenes of onboard activities. The videotape was shot by the crew. The scenes include the following: Ulysses' deployment, middeck experiments, computer workstations, and Earth payload bay views.

CASI

Deployment; Space Transportation System Flights; Spacecrews; Ulysses Mission

19940011048 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

STS–41 mission highlights resource tape

Jan 1, 1991; In English; 54 min. 44 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190313; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This videotape contains important visual events including launch, Ulysses' deployment, onboard crew activities, and landing. The videotape also includes air-to-ground transmission between the crew and Mission Control.

CASI

Deployment; Space Transportation System Flights; Spacecrews; Ulysses Mission

19940014447 NASA, Washington, DC, USA

Robotics

Aug 1, 1985; In English; 2 min. 51 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–94–198198; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of research being done into the use of robotic devices in space by MSFC is discussed. The video includes footage and explanations of robots being used to blast layers of thermal coating from the Space Shuttle's external

tanks, the Shuttle's Remote Manipulator Arm, and animations of an Orbiting Maneuvering Vehicle to retrieve and repair satellites.
CASI
External Tanks; Remote Manipulator System; Robotics; Robots; Space Shuttles; Spacecraft Maintenance; Thermal Control Coatings

19940014481 NASA Marshall Space Flight Center, Huntsville, AL, USA
Shuttle–C, the future is now
Feb 1, 1989; In English; 7 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198202; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details plans for Shuttle-C, an unmanned heavy launch vehicle to carry payloads into orbit. Computer animations depict the Shuttle-C, which uses the same recoverable external boosters, external fuel tank and main orbiter engines as the existing Space Shuttles, through liftoff and entry into orbit, where it progressively jettisons the cargo shroud, external fuel tank, and nose shroud. The video also shows computer simulations of a remotely controlled orbital maneuvering vehicle positioning preassembled components of a Space Station and delivering planetary probes and lunar exploration materials to orbit.
CASI
Computer Animation; Heavy Lift Launch Vehicles; Orbital Assembly; Orbital Maneuvering Vehicles; Shuttle Derived Vehicles; Space Exploration; Space Stations; Spacecraft Design

19940014482 NASA, Washington, DC, USA
Return to space
Aug 1, 1989; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198203; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video documents the preparations for Shuttle Flight STS-26 with Shuttle Discovery, NASA's return to manned space flight after the Challenger disaster. Footage and descriptions document such changes to the new Shuttle as new joints, improved insulation, and added O-rings to the solid rocket boosters; new safety hardware and procedures such as parachute and sidewire evacuations during liftoff, and new pressure suits; modified landing gear, brakes, and nose wheel steering, as well as a modified landing runway. Also profiled are the 5 member crew of all veteran Shuttle astronauts, the TDRS 3 Satellite to be released from the cargo bay in orbit, and 11 commercial and student experiments to be performed during the mission.
CASI
Discovery (Orbiter); Manned Space Flight; Space Shuttle Missions; Space Transportation System Flights

19940014598 NASA Marshall Space Flight Center, Huntsville, AL, USA
Pathfinder: Shuttle exhibit
Aug 1, 1988; In English; 1 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198204; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video introduces the Pathfinder Shuttle Exhibit, a joint project between the Marshall Space Flight Center and the State of Alabama's Space and Rocket Center in Huntsville. The exhibit features a never flown Shuttle vehicle, Pathfinder, that was used in early ground tests in the Shuttle Program, as well as an actual external fuel tank and set of booster rockets. The video includes footage of actual launches, the Pathfinder Shuttle Exhibit, and shots of the Space Camp at Alabama's Space and Rocket Center.
CASI
Museums; Space Shuttle Orbiters

19940029065 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
STS–59/SRL–1
Apr 20, 1994; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12965; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video covers the STS-59 mission. Video segments include breakfast, suit-up, departure, launch, on-orbit operations, and landing.
CASI
Astronaut Performance; Flight Operations; Space Shuttle Missions

19940029093 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–57 post flight press conference
Jan 1, 1994; In English; 21 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video contains footage selected and narrated by crew members.
CASI
Space Shuttle Missions; Space Transportation System

19940029282 NASA, Washington, DC, USA
Shuttle 51L: Challenger
Jan 1, 1994; In English; 45 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12963; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video follows the pre-launch and launch of the Space Shuttle Challenger preceding the accident. It then details the accident investigation report.
CASI
Accident Investigation; Challenger (Orbiter); Space Shuttle Mission 51-L; Spacecraft Launching

19950004134 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
KSC technology: Automated orbiter window inspection system
Mar 30, 1990; In English; 2 min. 42 sec. playing time
Report No.(s): NONP–NASA–VT–94–23138; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video recording is a demonstration of the procedures for visual inspection of the six orbiter windows at the end of each flight.
KSC
Inspection; Quality Control

19950004153 NASA Lewis Research Center, Cleveland, OH, USA
Simulated Shuttle no. 4008
May 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Review of the simulated shuttle program including the building of their buses into the shuttle and their trips. This is a cooperative school/community effort.
LeRC
Education; Space Shuttles

19950004322 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–60 mission highlights resource tape
Jan 1, 1994; In English; 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23622; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The important visual events of each mission including launch, onboard crew activities, and landing are depicted.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950004323 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–62 mission highlights resource tape
Jan 1, 1994; In English; 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23623; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The important visual events of each mission including launch, onboard crew activities, and landing are depicted.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950004324 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–59 mission highlights resource tape
Jan 1, 1994; In English; 59 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The important visual events of each mission including launch, onboard crew activities, and landing are depicted.
JSC
Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments

19950006709 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
From undersea to outer space: The STS–40 jellyfish experiment
Jan 1, 1994; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28236; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is an educational production featuring 'Ari', animated jellyfish who recounts his journey into space. Jellyfish were flown aboard the shuttle to study the effects of microgravity on living organisms. Topics Ari explores are: microgravity, life sciences, similarities between jellyfish and humans, and the life cycle and anatomy of a jellyfish.
JSC
Gravitational Effects; Invertebrates; Microgravity

19950006717 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–65 mission highlights resource tape
Jan 1, 1994; In English; 57 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28238; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The important visual events of each mission including launch, onboard crew activities, and landing are depicted.
JSC
Space Shuttle Missions; Space Transportation System; Spacecraft Landing; Spacecraft Launching

19950006718 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–68 post flight presentation
Jan 1, 1994; In English; 47 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28239; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This contains mission footage selected by the STS-68 crew of pre-launch, launch, onboard activities and experiments, Space Radar Laboratory-2 (SRL-2), Get Away Special canisters (GAS cans), Earth views, and landing. Crew members provide descriptive voice-over narration of the scenes.
JSC
Get Away Specials (STS); Postflight Analysis; Space Shuttle Missions; Space Transportation System Flights

19950006719 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–61 mission highlights resource tape
Jan 1, 1994; In English; 2 hr. 1 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28240; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This contains important visual events including launch, Hubble Space Telescope (HST) capture, repair and re-deployment, onboard activities, earth views, and landing. Also included is the air-to-ground transmission between the crew and Mission Control.
JSC
Postflight Analysis; Space Shuttles; Space Transportation System; Space Transportation System Flights

19950006720 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Memorial service for the mission 51–L crew (edited)
Jan 31, 1994; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–28241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The original memorial service held at NASA JSC for the STS-51L Challenger crew who died onboard the Shuttle is presented. President Ronald Reagan conducts this briefing.
JSC
Challenger (Orbiter); Death; Space Shuttle Mission 51-L; Spacecrews

19950009485 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–66 post flight presentation
Jan 1, 1994; In English; 40 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–33203; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video contains mission footage selected by the STS-66 crew of pre-launch, launch, onboard activities and experiments, ATLAS-3, CRISTA/SPAS, SSBUV/A, ESCAPE II, Earth views, and landing. Crew members provide descriptive voice-over narration of the scenes.
JSC
Postlaunch Reports; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching

19950014696 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63 flight day 4 highlights/MIR–Shuttle rendezvous
Feb 5, 1995; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42156; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
STS 63 Flight, day 4, the MIR-Shuttle rendezvous is highlighted in this video. The six-member team in the Shuttle are introduced and discuss their functions and tests for this day of the flight. There is actual footage of earth from space, of the MIR Space Station, a tour of the Shuttle cockpit, some footage from the MIR of the Space Shuttle, and footage from inside the MIR with the cosmonauts. Mission control communications with the Shuttle, communication between the Shuttle and MIR, and an historic communication between the Shuttle's astronauts and President Bill Clinton are included. President Clinton interviews each of the six-member team and discusses the upcoming space walk by Dr. Bernard Harris, the first black astronaut to walk in space. This video was recorded on February 6, 1995.
CASI
Advanced Launch System (STS); Earth Orbital Rendezvous; Mir Space Station; Mission Planning; Rendezvous Spacecraft; Space Shuttles; Space Transportation System Flights; Spacecraft Communication

19950015141 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS 63: Post flight presentation
Feb 27, 1995; In English; 42 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42494; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
At a post flight conference, Captain Jim Wetherbee, of STS Flight 63, introduces each of the other members of the STS 63 crew (Eileen Collins, Pilot; Dr. Bernard Harris, Payload Commander; Dr. Michael Foale, Mission Specialist from England; Dr. Janice Voss, Misssion Specialist; and Colonel Vladimir Titor, Misssion Specialist from Russia. A short biography of each member and a brief description of their assignment during this mission is given. A film was shown that included the preflight suit-up, a view of the launch site, the actual night launch, a tour of the Space Shuttle and several of the experiment areas, several views of earth and the MIR Space Station and cosmonauts, the MIR-Space Shuttle rendezvous, the deployment of the Spartan Ultraviolet Telescope, Foale and Harris's EVA and space walk, the retrieval of Spartan, and the night entry home, including the landing. Several spaceborne experiments were introduced: the radiation monitoring experiment, environment monitoring experiment, solid surface combustion experiment, and protein crystal growth and plant growth experiments. This conference ended with still, color pictures, taken by the astronauts during the entire STS 63 flight, being shown.
CASI
Earth Orbital Rendezvous; Extravehicular Activity; Mir Space Station; Night Flights (Aircraft); Payload Deployment & Retrieval System; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Spaceborne Experiments

19950015878 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS Flight 64 mission highlights
Feb 21, 1995; In English; 1 hr. 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42495; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The pre-launch, launch, in-flight, and landing activities of STS Flight 64 are highlighted in this video. Footage of the astronauts (Richard, Hammond, Lee, Helms, Meade, and Linenger) suiting up, the payload activities with the Shuttle

arm, the deployment of the Spartan satellite, the untethered spacewalk of Lee and other in-space experiments with Lee and Meade (including a body roll), the pre-landing shots and actual landing, and some footage of the Mission Operations Control Room watching the Space Shuttle maneuvers are included.
CASI
Astronaut Locomotion; Extravehicular Activity; Liftoff (Launching); Payload Deployment & Retrieval System; Roll; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Spaceborne Experiments; Spacecraft Landing

19950016855 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Toys in space, 2
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Jun 24, 1993; In English; Its Liftoff to Learning Series; 37 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43944; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this educational video from the 'Liftoff to Learning' series, astronauts from the STS-54 Mission (Mario Runco, John Casper, Don McMonagle, Susan Helms, and Greg Harbaugh) explain how microgravity and weightlessness in space affects motion by using both mechanical and nonmechanical toys (gravitrons, slinkys, dart boards, magnetic marbles, and others). The gravitational effects on rotation, force, acceleration, magnetism, magnetic fields, center of axis, and velocity are actively demonstrated using these toys through experiments onboard the STS-54 Mission flight as a part of their spaceborne experiment payload.
CASI
Education; Gravitational Effects; Mechanical Devices; Microgravity; Payloads; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Weightlessness

19950017244 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Endeavor: Now and then
Sep 22, 1992; In English; Its Liftoff to Learning Series; 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43942; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this educational 'Liftoff to Learning' video series, astronauts from STS-49 Space Shuttle Mission (Thomas Akers, Bruce Melnick, Pierre Thuot, Kathy Thorton, Kevin Chilton, and Richard Hieb) compare their mission aboard the Space Shuttle Endeavor and their shuttle with its namesake, the ship 'Endeavor', commanded by Captain James Cook of England in the late 1700's. Using historical paintings, drawings, and computer graphics, Cook's Endeavor is brought to life. Its voyage path, problems, biological experiments, and discoveries are shown and compared to the modern-day Endeavor, its mission and experiments. The Space Shuttle Endeavor was named in 1988, through a nation-wide school contest. It is the fifth Space Shuttle to be built and employs new technology in its design, for example, its drag shoot for shuttle landings. One part of the STS-49 Mission was the retrieval of the Intel satellite.
CASI
Aerospace Technology Transfer; Computer Animation; Computer Graphics; Histories; Intelsat Satellites; Payload Retrieval (STS); Ships; Spaceborne Experiments; Technology Utilization

19950017245 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
All systems go!
Sep 2, 1992; In English; Its Liftoff to Learning Series; 33 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43945; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this educational 'Liftoff to Learning' video series, astronauts from STS-40 Space Shuttle Mission (F. Drew Gaffney, Millie Hughes-Fulford, Rhea Seddon, James Bagia, Bryan O'Connor, Tamara Jernigan, and Sidney Gutierrez) show, using footage and highlights from their mission, how microgravity causes changes in the human body. The STS-40 was a mission of spaceborne experiments concerned with the physiological, biological, and chemical changes that occur in the human body as a result of microgravity. Different experiments are shown and their significance are explained.
CASI
Aerospace Medicine; Biological Effects; Chemical Reactions; Flight Stress (Biology); Gravitational Physiology; Human Body; Microgravity; Pathological Effects; Physiological Responses; Space Shuttle Missions; Spaceborne Experiments

19950017775 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Go for EVA
Apr 5, 1995; In English; Its Liftoff to Learning Series; 13 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43940; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this educational video series, 'Liftoff to Learning', astronauts from the STS-37 Space Shuttle Mission (Jay Apt, Jerry Ross, Ken Cameron, Steve Nagel, and Linda Godwin) show what EVA (extravehicular activity) means, talk about the history and design of the space suits and why they are designed the way they are, describe different ways they are used (payload work, testing and maintenance of equipment, space environment experiments) in EVA work, and briefly discuss the future applications of the space suits. Computer graphics and animation is included.
CASI
Aerospace Environments; Equipment Specifications; Extravehicular Mobility Units; Space Exploration; Space Shuttle Payloads; Spaceborne Experiments; Spacecraft Maintenance; Structural Design; Umbilical Connectors; Weightlessness

19950017777 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–66 mission highlights resource tape
Jan 1, 1995; In English; 54 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–44679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains the mission highlights of the STS-66 Space Shuttle Atlantis Mission in November 1994. Astronauts included: Don McMonagle (Mission Commander), Kurt Brown, Ellen Ochoa (Payload Commander), Joe Tanner, Scott Parazynski, and Jean-Francois Clervoy (collaborating French astronaut). Footage includes: pre-launch suitup, entering Space Shuttle, countdown and launching of Shuttle, EVA activities (ATLAS-3, CRISTA/SPAS, SSBUV/A, ESCAPE-2), on-board experiments dealing with microgravity and its effects, protein crystal growth experiments, daily living and sleeping compartment footage, earthviews of various meteorological processes (dust storms, cloud cover, ocean storms), pre-landing and land footage (both from inside the Shuttle and from outside with long range cameras), and tracking and landing shots from inside Mission Control Center. Included is air-to-ground communication between Mission Control and the Shuttle. This Shuttle was the last launch of 1994.
CASI
Advanced Technology Laboratory; Descent; Earth Orbits; Extravehicular Activity; Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Spaceborne Telescopes; Spacecraft Launching; Spacecraft Orbits

19950017778 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–67 post flight presentation
Apr 3, 1995; In English; 41 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is the post-flight presentation by the astronauts of the STS-67 Space Shuttle Mission. The astronauts were: Steve Oswald (Mission Commander), Bill Gregory (Shuttle Pilot), John Grunsfeld (Mission Specialist), Sam Durrance (Payload Specialist), Ron Parise (Payload Specialist), and Tammy Jernigan (Payload Commander). Footage includes: pre-launch suitup and launch (liftoff), the deployment of the telescope package payload (Hopkins UV telescope, Wisconsin UV polarimeter, and Astrostar Tracker) for their astronomical observations of different stellar objects, inside Shuttle shots of data collection stations, protein crystal growth experiments, medical BSO of head and eye functions in microgravity environment, storm activity over the USA and other Earth observation shots, Mid-deck Act Control Experiments, school-Shuttle direct radio communication, and descent and landing footage. This launch was a night launch and the flight was a 17 day flight (extended two days from original flight plan).
CASI
Aerospace Medicine; Earth Observations (From Space); Gravitational

Physiology; Payload Deployment & Retrieval System; Physiological Tests; Polarimeters; Radio Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Ultraviolet Telescopes

19950017795 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 13: Houston, we've got a problem
Apr 10, 1991; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–44678; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video contains historical footage of the flight of Apollo-13, the fifth Lunar Mission and the third spacecraft that was to land on the Moon. Apollo-13's launch date was April 11, 1970. On the 13th of April, after docking with the Lunar Module, the astronauts, Jim Lovell, Fred Haise, and Jack Swiggert, discovered that their oxygen tanks had ruptured and ended up entering and returning to Earth in the Lunar Module instead of the Command Module. There is footage of inside module and Mission Control shots, personal commentary by the astronauts concerning the problems as they developed, national news footage and commentary, and a post-flight Presidential Address by President Richard Nixon. Film footage of the approach to the Moon and departing from Earth, and air-to-ground communication with Mission Control is included.
CASI
Apollo 13 Flight; Command Modules; Ground Support Systems; Histories; Lunar Exploration; Lunar Flight; Lunar Module; Mission Planning; Space Missions

19950019454 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–63 mission highlights resource tape
Jan 1, 1995; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45997; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video (JSC1472) contains important visual events including launch, SPARTAN 204, SPACEHAB-03, CGP/ODERACS, and the rendezvous with the MIR Space Station, along with onboard activities, and landing. Also included are air-to-ground transmission between the crew and Mission, and various earthviews.
JSC
Space Shuttles; Space Transportation System Flights; Spacecraft Environments; Spacecraft Launching

19950022294 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–67 mission highlights resource tape
Welch, Chuck, editor, NASA Lyndon B. Johnson Space Center, USA; May 10, 1995; In English; 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–50092; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Space Shuttle Mission, STS-67, is highlighted in this video. Flight crew (Stephen S. Oswald (Commander), William G. Gregory (Pilot), Tamara E. Jernigan, Wendy B. Lawrence, John M. Grunfeld (Mission Specialists), Samuel T. Durrance, and Ronald A. Parise (Payload Specialists)) prelaunch and launch activities, EVA activities with payload deployment and retrieval (ASTRO-2 and WUPPE (Wisconsin Ultraviolet Photo Polarimeter Experiment)), spaceborne experiments (astronomical observation and data collection, protein crystal growth, and human physiological processes), and pre-reentry activities are shown. There are astronomical telescopic observation from the two telescopes in the payload, the Hopkins Ultraviolet Telescope and the Ultraviolet Imaging Telescope, of Io and of globular clusters, and their emission spectra is collected via a spectrometer. Earth view film and photography is shown, which includes lightning on terrestrial surfaces, cyclone activity, and cloud cover.
CASI
Astronomical Polarimetry; Astronomical Spectroscopy; Earth Observations (From Space); Globular Clusters; Imaging Techniques; Io; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Ultraviolet Telescopes

19950023533 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 1
Jun 30, 1995; In English; 15 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56567; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-71 flight of the Space Shuttle Atlantis is contained in this video. This mission highlights the first U.S. docking with the Mir Space Station. The scope of this part of the STS-71 mission is to drop off and pickup two cosmonauts, and to pickup one American astronaut who has been living aboard the Mir Station for several months. The STS-71 flight crew consists of: Atlantis Mission Specialist Gregory Harbaugh; Ellen Baker, Flight Commander Robert Gibson; Russian cosmonaut Anatoly Solovyen; Vladimir Dezhuroz; Gennady Strekalov; and Dr. Norman Thagard. Flight footage contains prelaunch activities.
Author
Mir Space Station; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spacecraft Docking; Spacecraft Launching

19950023534 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 2
Jun 30, 1995; In English; 20 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56568; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The second day of the STS-71 flight of the Space Shuttle Atlantis is contained in this video. Flight footage contains launch, and orbital activities.
Author
Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights

19950023535 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 3
Jun 30, 1995; In English; 32 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56569; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The third day of the STS-71 flight of the Space Shuttle Atlantis is contained in this video. Flight footage contains earth views from space, and views of Mir Space Station taken from various angles.
Author
Earth Observations (From Space); Earth Orbits; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights

19950023536 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 4
Jun 30, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56570; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 4 of the STS-71 flight Space Shuttle Atlantis mission is highlighted in this video. During this segment of the mission the Space Station is docked with the Mir Space Station. There are interviews with the astronauts by Vice President Al Gore.
Author
Ground-Air-Ground Communication; Mir Space Station; Space Shuttle Missions; Space Stations; Space Transportation System Flights; Spacecraft Communication; Spacecraft Docking

19950023537 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 5
Jun 30, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56571; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 5 of the STS-71 flight Space Shuttle Atlantis mission is highlighted in this video. During this segment of the mission the Space Station is docked with the Mir Space Station and they are orbiting the earth together. There is footage of the astronauts performing physiological tests inside the Shuttle.
Author
Earth Orbits; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft Docking

19950023538 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 6
Jun 30, 1995; In English; 27 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56572; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 6 of the STS-71 flight Space Shuttle Atlantis mission is highlighted in

this video. During this segment of the mission the Space Station is docked with the Mir Space Station and they are orbiting the earth together. Also contained are views of the orbiter docking system and brief views of earth.
Author
Earth Observations (From Space); Earth Orbits; Mir Space Station; Multiple Docking Adapters; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft Docking

19950023539 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 7
Jul 3, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56573; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 7 of the STS-71 mission are featured in this video, a continuation from day 1-6, this video includes live footage onboard the STS-71 Space Station Atlantis and the Mir Space Station. Astronaut, Dr. Norman Thagard, after living in space for 3 months onboard the Mir Space Station, joins the crew of Atlantis for his trip back to earth. Live interviews are conducted with the crew of Atlantis.
Author
Earth Orbits; Ground-Air-Ground Communication; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft Communication; Spacecraft Docking

19950023540 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 8
Jul 3, 1995; In English; 17 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56574; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 8 of the STS-71 mission are featured in this video, a continuation from days 1-7, this video includes live footage onboard the STS-71 Space Shuttle Atlantis and the Mir Space Station. Live interviews are conducted with the crew of Atlantis. Views are shown of the Mir Space Station from various angles.
Author
Earth Orbits; Ground-Air-Ground Communication; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecraft Communication; Spacecraft Docking

19950023541 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 9
Jul 3, 1995; In English; 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 9 of the STS-71 mission are featured in this video, a continuation from days 1-8, this video includes live footage onboard the STS-71 Space Shuttle Atlantis and the Mir Space Station. Views are shown of the Mir Space Station from various angles and its earth orbit after disconnection from Atlantis.
Author
Flight Operations; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights

19950023542 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 Shuttle/Mir flight: Day 10
Jul 6, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56623; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Day 10, the last day of the STS-71 Space Shuttle mission, is featured in this video. There is live footage from onboard the shuttle and interviews with the Shuttle's astronauts. Also, some earth view footage from the Shuttle is included.
Author
Earth Orbits; Flight Operations; Mir Space Station; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Landing

19950024431 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 post flight presentation
Jul 18, 1995; In English; 31 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59071; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The post flight presentation for the STS-71 Space Shuttle Atlantis Mission is featured on this video, with astronauts Gibson, Precourt, Baker, Harbough, Dunbar, Strekalov, Dezhurov, and Thagard, present for the press conference. They showed film footage and photographic slides of various pre-launch and launch activities, and onboard Shuttle activities and explained each of the different operations from the footage.
CASI
Cosmonauts; Earth Orbital Rendezvous; Mir Space Station; Prelaunch Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spacecraft Launching

19950024452 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 8
Jul 20, 1995; In English; 21 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59164; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The eighth day of the STS-70 Space Shuttle Discovery mission is featured on this video. The crew is interviewed in orbit via satellite regarding their personal opinions about their mission before they return to Earth.
CASI
Astronauts; Discovery (Orbiter); Space Shuttle Missions; Space Shuttles; Space Transportation System Flights

19950024453 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 7
Jul 19, 1995; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The seventh day of the STS-70 Space Shuttle Discovery mission is featured on this video. The astronauts obtained a successful alignment of the Hercules geo-locating camera and evaluated the manual setup procedures for the rotating wall Bioreactor. Specialist Don Thomas activated and deactivated the Microencapsulation in Space experiment, using a device that produces a timed-release of an antibiotic medication in a weightlessness environment. The Discovery crew begins to wrap up their experiments after a week of gathering data, ranging from observations of Earth's surface and atmosphere to biological studies. There are several minutes of Shuttle observations of Earth included.
CASI
Bioreactors; Cameras; Discovery (Orbiter); Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950024454 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 6
Jul 18, 1995; In English; 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59166; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The sixth day of the STS-70 Space Shuttle Discovery mission is featured on this video. During another trouble-free day, the crew again performed a variety of experiments ranging from optical studies to biological investigations. One such biological experiment showed orange colon cancer cells coalescing into globules. Using the Hercules Camera, the crew shot film footage of the Earth's surface and during the Windex experiment, several views of the Shuttle were shown.
CASI
Discovery (Orbiter); Earth Observations (From Space); Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950024455 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 5
Jul 17, 1995; In English; 25 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59167; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fifth day of the STS-70 Space Shuttle Discovery mission is contained on this video. The crew continues working on experiments, such as the Space Tissue Loss Analysis and the Bioreactor Development System. CNN reporter, John Holliman, interviewed the flight crew and the crew also answered questions posed by Internet users while on NASA's Shuttle Web. There are brief views of Earth's surface included.
CASI
Discovery (Orbiter); Flight Crews; Space Shuttle Missions; Space Shuttle

Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950024456 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 4
Jul 16, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59168; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fourth day of STS-70 mission of Space Shuttle Discovery is contained on this video. With the spacecraft continuing to perform flawlessly, Discovery's crew begins work with various experiments, ranging from biological studies to use of earth-observing cameras. The crew held a press conference via satellite link and answered questions from reporters in Florida and Ohio.
CASI
Discovery (Orbiter); Satellite Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19950024457 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 3
Jul 15, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59169; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The third day of the STS-70 mission of Space Shuttle Discovery is contained on this video. Astronauts Kregal and Thomas begin the day by working with the Hercules camera, which will record pinpoint data on the surface location of Earth observation imagery. Other work includes operations with an experiment that gauges astronauts' reflexes and hand-eye coordination. During the day, the crew spoke with World War 2 veteran, Harland Claussen,and ABC's Mike and Maty Show and the Toledo Blade newspaper (Toledo, Ohio) interviewed the astronauts via satellite link.
CASI
Discovery (Orbiter); Earth Observations (From Space); Satellite Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments

19950024458 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 2
Jul 14, 1995; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59170; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The second day of STS-70 Space Shuttle Discovery mission is contained on this video. The crew is shown onboard the Shuttle working on a variety of secondary experiments. These range from the Hercules camera, which imprints the latitude and longitude of areas photographed on Earth, to the Windex, which studies of the glow created as the Shuttle's surfaces interact with atomic oxygen in low Earth orbits. Also featured are astronauts Henricks, Kregal, and Weber answering questions from the general public via use of The New York Times On-Line Services.
CASI
Discovery (Orbiter); Earth Observations (From Space); Satellite Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments

19950024459 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 flight: Day 1
Jul 13, 1995; In English; 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59171; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-70 flight of the Space Shuttle Discovery is contained on this video. This mission highlights the deploy of NASA's communications satellite, the sixth and last such satellite to be deployed from a space shuttle. The STS-70 crew consists of Commander Tom Henricke, Pilot Kevin Kregel, and Mission Specialists Don Thomas, Nancy Currie, and Mary Ellen Weber. Flight footage contains prelaunch and launch activities.
CASI
Discovery (Orbiter); Payload Delivery (STS); Prelaunch Summaries; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spacecraft Launching

19950026118 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Liftoff to learning: Assignment space
Mar 27, 1995; In English; Sponsored by NASA, Washington; 16 min. 05 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of the STS-58 Space Shuttle Columbia -- Commander John Blaha, Pilot Richard Searfoss, Payload Commander Rhea Seddon, Mission Specialist Shannon Lucid, Mission Specialist David Wolf, and Payload Specialist William McArthur host this educational video (part of the Liftoff to Learning series). The Astronauts help students to understand the importance of safety procedures on Earth as well as in space. They also discuss the effects of microgravity on various experiments in space.
CASI
Astronauts; Columbia (Orbiter); Education; Space Shuttles; Students

19950027307 EVKO Productions, Inc., Alexandria, VA, USA
The Space Shuttle: America's team reaching for the future
Jan 1, 1995; In English; Sponsored by NASA, Washington; 23 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–63906; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video features the different NASA research centers and their contribution toward NASA's space program. It includes the following research centers: NASA headquarters, Ames Research Center, Goddard Flight Research Center, Jet Propulsion Laboratory, Johnson Space Flight Center, Kennedy Space Flight Center, Langley Research Center, Lewis Research Center, and Marshall Space Flight Center.
CASI
NASA Space Programs; Research Facilities; Space Shuttles

19950027859 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–42 mission highlights resource tape. Part 1 of 2
Jan 1, 1992; In English; 44 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–63905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The mission of STS-42, the first International Microgravity Laboratory (IML-1), is highlighted. The main purpose of this seven-member crews (including Payload specialist Raborto Bondar from Canada and Payload specialist Ulf D. Merbold from Germany) space shuttle was to perform different experiments at microgravity environment. The experiments were focussed on the following two major study areas: (1) life sciences (biorack, biostack, space physiology, mental workload and performance, Microgravity vestibular investigations, etc.); and (2) material sciences (critical point facility, cryostat, fluid experiment system, mercury lodide crystal growth and vapor crystal growth systems). Cargo bay and middeck experiments; earth views (Quebec, Manicougan Reservoir, St. Lawrence River, and Mountain ranges);and orbiter activities are also included.
CASI
Aerospace Medicine; Experimentation; Life Sciences; Microgravity; Space Shuttles; Space Transportation System

19950027860 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–42 mission highlights resource tape. Part 2 of 2
Jan 1, 1992; In English; 44 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–64175; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This second part of the STS-42 mission highlights resource tape presents the special events that had happened during the 8 days, 1 hour, 14 minutes, and 45 seconds mission duration. These special events include: phone calls from

President Bush, German Officials, and Canadian Officials; special appearance in Super Bowl pre-game events; and in-flight press conference.
CASI
Experimentation; Life Sciences; Microgravity; Space Transportation System; Spacecrews; Spacelab

19960000165 NASA, Washington, DC, USA
STS–43 post flight press conference
Jan 1, 1991; In English; 30 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65004; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew (Blaha, Baker, Low, Adamson, and Lucid) present and discuss their STS-43 Space Shuttle Mission in this press conference video. This mission was the first flight to deploy the Tracking Data and Relay Satellite (TDRS), the primary payload. A large number of secondary payload experiments were performed. The included: several cell tissue growth and enzyme analysis experiments; a Lower Body Negative Pressure Experiment; optic coupling and flame front propagation/combustion physics experiments; The Space Station Heat Pipe Advanced Radiator Experiment (SHARE) for the Space Station; a crystal control device evaluation; a software and hardware systems checkout for the Shuttle; some flight tests of the new orbiter auto-pilot system; some materials tests on polymer membranes; the Zero Gravity physics experiments; and the Space Shuttle Backscatter Ultraviolet Experiment. Earth views included: the Kuwait oil fires; cloud cover; and B/W lightning footage.
CASI
Checkout; Combustion Physics; Deployment; Earth Observations (From Space); Flight Crews; Flight Tests; Materials Tests; Physiological Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; TDR Satellites

19960000166 NASA, Washington, DC, USA
STS–70 post flight presentation
Peterson, Glen, editor, NASA, USA; Aug 1, 1995; In English; 32 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65005; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this post-flight overview, the flight crew of the STS-70 mission, Tom Hendricks (Cmd.), Kevin Kregal (Pilot), Major Nancy Currie (MS), Dr. Mary Ellen Weber (MS), and Dr. Don Thomas (MS), discuss their mission and accompanying experiments. Pre-flight, launch, and orbital footage is followed by the in-orbit deployment of the Tracking and Data Relay Satellite (TDRS) and a discussion of the following spaceborne experiments: a microgravity bioreactor experiment to grow 3D body-like tissue; pregnant rat muscular changes in microgravity; embryonic development in microgravity; Shuttle Amateur Radio Experiment (SAREX); terrain surface imagery using the HERCULES camera; and a range of other physiological tests, including an eye and vision test. Views of Earth include: tropical storm Chantal; the Nile River and Red Sea; lightning over Brazil. A three planet view (Earth, Mars, and Venus) was taken right before sunrise. The end footage shows shuttle pre-landing checkout, entry, and landing, along with a slide presentation of the flight.
CASI
Atmospheric Entry; Deployment; Earth Observations (From Space); Flight Crews; Microgravity; Physiological Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; TDR Satellites

19960000167 NASA, Washington, DC, USA
STS–7 launch and land
Aug 2, 1983; In English; 55 min. 30 sec. playing time, in color, with sound(18)
Report No.(s): NONP–NASA–VT–95–65006; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The prelaunch, launch, and landing activities of the STS-7 Space Shuttle mission are highlighted in this video, with brief footage of the deployment of the Shuttle Pallet Satellite (SPAS). The flight crew consisted of: Cmdr. Bob Crippen, Pilot Rich Hauck, and Mission Specialists John Fabian, Dr. Sally Ride, and Norm Thaggart. With this mission, Cmdr. Crippen became the first astronaut to fly twice in a Space Shuttle Mission and Dr. Sally Ride was the first American woman to fly in space. There is a large amount of footage of the Space Shuttle by the aircraft that accompanies the Shuttle launchings and landings.
CASI
Deployment; Shuttle Pallet Satellites; Space Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments

19960000168 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–48 mission highlights resource tape. Part 1 of 2
Jan 1, 1991; In English; 60 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–65007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a two part video mission-highlights set, the flight of the STS-48 Space Shuttle Orbiter Discovery is reviewed. The flight crew consisted of: J. O. Creighton (Commander); Ken Reightler (Pilot); Charles 'Sam' Gemar (Mission Specialist); James 'Jim' Buchli (MS); and Mark Brown (MS). Step-by-step pre-launch and sunset launch sequences are shown with accompanying shots inside the Mission Control Center. The primary goal of this mission was the deployment of Upper Atmosphere Research Satellite (UARS). Other (secondary) payloads included: the MidDeck Zero Gravity Experiment (MODE); the Sam/Cream device; the Shuttle Activation Monitor/Cosmic Ray Effects and Activation Monitor Experiment; and the Physiology and Anatomical Rodent Experiment (PARE). Crew activities were shown, along with Earth views (Aurora Borealis (B/W), light from the Kuwait oil fires, lightning over Italy and other areas, polar regions and ice caps, and the USA at night (B/W)). This was the thirteenth flight of the Space Shuttle Discovery. A night landing is shown.
CASI
Deployment; Discovery (Orbiter); Earth Observations (From Space); Launching; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Upper Atmosphere Research Satellite (UARS)

19960000169 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–48 mission highlights resource tape. Part 2 of 2
Jan 1, 1991; In English; 18 min. 18 sec. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–65008; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second part of a two part mission highlights tape for the STS-48 Mission, television interviewer, Larry King, hosts a live, satellite-link interview with the flight crew of the STS-48 Mission. Listeners called in and the astronauts answered questions about their flight and space travel in general. The flight crew consisted of: Cmdr. J. O. Creighton; Pilot Rick Hauck, and Mission Specialists Sam Gemar, Jim Buchli, and Mark Brown.
CASI
Astronauts; Discussion; Space Shuttle Missions; Space Transportation System Flights; Spacecrews; Television Systems

19960000428 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–47 mission highlights resource tape
Sep 1, 1992; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65630; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The mission of the STS-47 flight is highlighted in this video. The flight crew consisted of: Cmdr. 'Hoot' Gibson, Pilot Kurt Brown, Payload Cmdr. Jan Davis, Payload Specialist. M. Mohri (Japanese Astronaut), and Mission Specialists Jay Apt and May Jemison. The primary goal of this mission was the set-up and carrying out of experiments in the accompanying Japanese Spacelab (SL-J) in cooperation with the Japanese Space Program. Dr. Mohri is the first professional Japanese astronaut to fly in space. Vice President Dan Quayle and his wife are shown addressing the astronauts of the Space Shuttle Endeavour with a small pre-launch speech. On this flight many different physical, physiological, and biological spaceborne experiments were performed. These experiments included: a gas evaporation in low gravity environment experiment; a brainwave signals from carp experiment; several human eye movement and visual physiological tests; various physiological tests on a variety of insects and frogs; a embryology experiments on tadpoles; several experiments concerned with fluid dynamics; an imaging furnace test with heated glass containing gold particles (flow measurement); a Solid Surface Combustion Experiment; and a

protein crystal growth experiment. Launch, in-orbit, and landing footage is shown, along with a variety of crew activities. One feature that astronauts were able to videotape was the actual in-orbit movement of the side wing flaps of the Space Shuttle.
CASI
Endeavour (Orbiter); Fluid Dynamics; Furnaces; Imaging Techniques; International Cooperation; Physiological Tests; Protein Crystal Growth; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960001487 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–44 onboard 16mm photography
Dec 1, 1991; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This silent video was filmed by the crew of the STS-44 Space Shuttle using a 16mm camera. Astronauts, Frederick D. Gregory, Terence T. Henricks, F. Story Musgrave, Mario Runco, Jr., James S. Voss, and Thomas J. Hennen, filmed various crew activities inside the shuttle, the deployment of the Defense Support Program satellite (DSP), and several Earth view-footage of arid land masses and cloud cover.
Author
Artificial Satellites; Cameras; Deployment; Space Shuttle Payloads; Space Shuttles; Spaceborne Photography

19960001778 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–48 post flight press conference
Jan 1, 1991; In English; 28 min. 30 sec. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–95–65009; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-48 Space Shuttle Discovery's 13th Flight (Cmdr. J. O. Creighton, Pilot Ken Reightler, MS Charles Gemar, MS James Buchli, and MS Mark Brown) review their mission and discuss their in-flight activities and experiments in this video. The primary goal of this mission was the deployment of the Upper Atmosphere Research Satellite (UARS). Secondary payloads included: the Mid-Deck Zero Gravity Experiment (MODE) that showed how fluids in microgravity and in in-orbit conditions respond to different influences (dynamics and harmonic analysis) and the Extended Duration Orbiter physiological tests of astronaut heat and lung functions. Through these experiments, information useful in the construction and design of the proposed Space Station is hoped to be gained. Earth views included: the Aurora Borealis (B/W); polar region ice packs and caps; the Nile River (at night); the Galapagos Islands, and Earth lightning shots. A night landing is shown.
CASI
Deployment; Earth Observations (From Space); Physiological Tests; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Upper Atmosphere Research Satellite (UARS); Vibration Tests

19960002572 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–44 mission highlights resource tape. Part 2 of 2
Nov 1, 1991; In English; 25 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72064; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second part of a two part video set of the mission of STS-44, an in-orbit press conference was held. The astronauts (Cmdr. Fred Gregory, Pilot Tom Hendricks, Payload Specialist Tom Hennen, and Mission Specialists Jim Voss, Story Musgrave, and Mario Runco) conversed via satellite with the Johnson Press Center at the Johnson Space Center, Houston, Texas. Journalists asked questions regarding the mission, the status of the mission's experiments, the problems with living in a microgravity environment, upcoming NASA space programs, and future objectives of the Space Shuttle missions.
CASI
News Media; Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System Flights; Spacecrews

19960002573 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–44 mission highlights resource tape. Part 1 of 2
Nov 1, 1991; In English; 1 hr. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72066; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-44 mission is highlighted in this first part of a two part video set. The flight crew consisted of: Cmdr. Fred Gregory; Pilot Tom Hendricks; Payload Specialist Tom Hennen; and Mission Specialists Story Musgrave, Jim Voss, and Mario Runco. The primary space shuttle mission objective was the deployment of the Defense Support Program (DSP) satellite. Secondary payload and spaceborne experiments consisted of a microbial air sampler, the Terra Scout PADVOS system, an M88-1 camera demonstration, a lower body negative pressure test, the Visual Function Tester, and a bioreactor demonstration. A tour of the flight deck, mid-deck, bathroom, and flight compartments with explanations of the equipment found in each area was conducted, a trash compactor was demonstrated, and footage of the crew together for their Thanksgiving dinner was shown. Earth views include several oceans, cloud cover, typhoon Yuri, northeast Australia, and the Barrier Reef Islands. The actor John Patrick Stewart (Commander Pickard of the show 'Star Trek: The Next Generation') performed the wake-up call for the astronauts. This flight was shortened due to an inertial measurement unit failure on the sixth day of the mission.
CASI
Satellite-Borne Instruments; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews

19960002577 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 1 highlights
Sep 7, 1995; In English; 24 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-69 flight is highlighted in this video. Shown are the prelaunch and launch activities and the in-orbit SPARTAN-201 satellite pre-deployment checkout of the robot arm in the shuttle's bay. The flight crew consisted of Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt. Earth views of cloud cover are included.
CASI
Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Launching; Spacecrews

19960002578 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 2 highlights
Sep 8, 1995; In English; 19 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72067; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this second day of the STS-69 mission, the SPARTAN-201 satellite is deployed. The SPARTAN satellite is being used for the study of solar physics. An in-orbit interview is conducted with crew member, Mission Specialist Jim Newman, by KABC 7.90 Talk Radio. Newman answers questions from station listeners regarding the mission, future NASA objectives, present NASA objectives, and general questions regarding living in space. The remaining crew members include Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss and Mike Gernhardt.
CASI
Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecrews; Spartan Satellites

19960002579 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 11 highlights
Sep 17, 1995; In English; 24 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72079; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-69 flight, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt were awakened to the theme song for the cartoon 'Charlie

Brown. ' The crew spent most of the day preparing the shuttle for reentry and landing. Several reporters interviewed the crew via a satellite link. Questions ranging from the status and problems with the mission to NASA's future were asked. Walker and Cockrell performed a successful landing of the space shuttle at Kennedy Space Center.
CASI
Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights

19960002580 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 4 highlights
Sep 19, 1995; In English; 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72080; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the fourth day of the STS-69 mission, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by 5 year old Madeline Cockrell (Ken Cockrell's daughter) singing the song 'Bingo Was His Name.' The interception and retrieval of the SPARTAN-201 satellite was the first task of the day. The SPARTAN-201's mission was the study of the solar corona and the solar wind. The rest of the day was spent preparing for the deployment of the Wake Shield Facility (WSF), whose purpose during its two day orbit of the Earth, is to grow films for semiconductors in a vacuum-like environment. Earth views included some cloud cover and different areas of South America.
CASI
Payload Retrieval (STS); Semiconducting Films; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spartan Satellites

19960002581 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 5 highlights
Sep 11, 1995; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72081; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Awakening to the theme song of the television show 'Rin Tin Tin', the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, of the STS-69 mission began their fifth day in orbit. The deployment of the Wake Shield Facility (WSF) was accomplished successfully, although it was delayed several hours due to communication problems between the satellite and its carrier platform located in the shuttle's cargo bay. The WSF satellite's main purpose was to grow up to seven layers of semiconductor films in a vacuum-like state while orbiting behind the space shuttle. The shuttle's Global Positioning System and Satellite Tracking System were both given checkout tests.
CASI
Scientific Satellites; Semiconducting Films; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Instruments; Spacecrews

19960002582 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 6 highlights
Sep 12, 1995; In English; 45 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72082; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

After being awakened by the Beatles song, 'A Hard Days Night', the flightcrew of the STS-69 mission, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, began their sixth day in orbit by monitoring the free orbiting Wake Shield Facility (WSF). Later Cmdr. Walker conducted an interview with television reporters from Atlanta and Boston, answering questions about the mission and general questions about NASA's space program. The crew filmed a video fo themselves performing daily routines (eating, shaving, exercising), as well as some of the physiological experiments, and shuttle equipment maintenance and checkout. One of the secondary experiments included the Commercial Generic Bioprocessing Apparatus-7 (CGBA-7), which served as an incubator and experiment station for a variety of tests (agricultural, pharmaceutical, biomedical, and environmental). Earth views included some cloud cover, the Gulf of Mexico, Texas, and the Atlantic Ocean.
CASI
Scientific Satellites; Semiconducting Films; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Instruments; Spacecrews; Vacuum Deposition

19960002583 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 7 highlights
Sep 13, 1995; In English; 9 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72083; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On the seventh day of the STS-69 mission, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, were awakened by the theme song from the movie 'Patten.' Voss and Gernhardt performed a pre-EVA (Extravehicular Activity) checkout of the new thermal spacesuits that they will be wearing in two days. Solving problems with the Wake Shield Facility (WSF) occupied the other astronauts for most of this day. Earth views included tropical storm Marilyn in the Caribbean.
CASI
Checkout; Scientific Satellites; Space Shuttle Missions; Space Shuttles; Space Suits; Space Transportation System; Space Transportation System Flights; Spacecrews

19960002584 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 8 highlights
Sep 14, 1995; In English; 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72084; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt were awakened by the theme song of the television cartoon show 'Underdog' on this eighth day of the STS-69 mission. The retrieval of the Wake Shield Facility (WSF) occurred without any major problems. The WSF was unable to grow all seven layers of films before its retrieval. Only four were grown due to thermal problems.
CASI
Payload Retrieval (STS); Scientific Satellites; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecrews

19960002585 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 9 highlights
Sep 15, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72085; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The song, 'He's A Tramp', from the Walt Disney cartoon movie, 'Lady and the Tramp', awakened the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt, on the ninth day of the STS-69 mission. The Wake Shield Facility (WSF) was again unberthed from the shuttle cargo bay and , using the shuttle's robot arm, held over the side of the shuttle for five hours where it collected data on the electrical field build-up around the spacecraft as part of the Charging Hazards and Wake Studies Experiment (CHAWS). Voss and Gernhardt rehearsed their Extravehicular Activity (EVA) spacewalk, which was planned for the next day. Earth views included cloud cover, a hurricane, and its eye.
CASI
Extravehicular Activity; Payload Deployment & Retrieval System; Scientific Satellites; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spacecrews

19960002586 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 flight day 10 highlights
Sep 16, 1995; In English; 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–72086; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In honor of the Extravehicular Activity (EVA) spacewalk today, the tenth day of the STS-69 mission, the astronauts, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Jim Voss, Jim Newman, and Mike Gernhardt,

were awakened to the Frankie Valle and the Four Seasons tune, 'Walk Like A Man.' Voss and Gernhardt tested the new thermal spacesuits and some new tools in the shuttle's cargo bay for six hours. The EVA was successful. The rest of the astronauts monitored the EVA and packed up the equipment and experiments in preparation for their reentry flight tomorrow.
CASI
Extravehicular Activity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews

19960003228 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–70 mission highlights
Sep 5, 1995; In English; 39 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995005639; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The highlights of the STS-70 mission are presented in this video. The flight crew consisted of Cmdr. John Hendricks, Pilot Kevin Kregel, Flight Engineer Nancy Curie, and Mission Specialists Dr. Don Thomas and Dr. Mary Ellen Weber. The mission's primary objective was the deployment of the 7th Tracking Data and Relay Satellite (TDRS), which will provide a communication, tracking, telemetry, data acquisition, and command services space-based network system essential to low Earth orbital spacecraft. Secondary mission objectives included activating and studying the Physiological and Anatomical Rodent Experiment/National Institutes of Health-Rodents (PARE/NIH-R), The Bioreactor Demonstration System (BDS), the Commercial Protein Crystal Growth (CPCG) studies, the Space Tissue Loss/National Institutes of Health-Cells (STL/NIH-C) experiment, the Biological Research in Canisters (BRIC) experiment, Shuttle Amateur Radio Experiment-2 (SAREX-2), the Visual Function Tester-4 (VFT-4), the Hand-Held, Earth Oriented, Real-Time, Cooperative, User-Friendly, Location-Targeting and Environmental System (HERCULES), the Microcapsules in Space-B (MIS-B) experiment, the Windows Experiment (WINDEX), the Radiation Monitoring Equipment-3 (RME-3), and the Military Applications of Ship Tracks (MAST) experiment. There was an in-orbit dedication ceremony by the spacecrew and the newly Integrated Mission Control Center to commemorate the Center's integration. The STS-70 mission was the first mission monitored by this new control center. Earth views included the Earth's atmosphere, a sunrise over the Earth's horizon, several views of various land masses, some B/W lightning shots, some cloud cover, and a tropical storm.
CASI
Bioassay; Payload Deployment & Retrieval System; Physiological Tests; Radio Communication; Radio Relay Systems; Space Shuttle Missions; Space Shuttle Payloads; Space Technology Experiments; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; TDR Satellites

19960007440 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–71 mission highlights resource tape
Sep 25, 1995; In English; 1 hr. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006082; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video highlights the international cooperative Shuttle/Mir mission of the STS-71 flight. The STS-71 flightcrew consists of Cmdr. Robert Hoot' Gibson, Pilot Charles Precourt, and Mission Specialists Ellen Baker, Bonnie Dunbar, and Gregory Harbaugh. The Mir 18 flightcrew consisted of Cmdr. Vladamir Dezhurov, Flight Engineer Gennady Strekalov, and Cosmonaut-Research Dr. Norman Thagard. The Mir 18 crew consisted of Cmdr. Anatoly Solovyev and Flight Engineer Nikolai Budarin. The prelaunch, launch, shuttle in-orbit, and in-orbit rendezvous and docking of the Mir Space Station to the Atlantis Space Shuttle are shown. The Mir 19 crew accompanied the STS-71 crew and will replace the Mir 18 crew upon undocking from the Mir Space Station. Shown is on-board footage from the Mir Space Station of the Mir 18 crew engaged in hardware testing and maintenance, medical and physiological tests, and a tour of the Mir. A spacewalk by the two Mir 18 cosmonauts is shown as they performed maintenance of the Mir Space Station. After the docking between Atlantis and Mir is completed, several mid-deck physiological experiments are performed along with a tour of Atlantis. Dr Thagard remained behind with the Shuttle after undocking to return to Earth with reports from his Mir experiments and observations. In-cabin experiments included the IMAX Camera Systems tests and the Shuttle Amateur Radio Experiment-2 (SAREX-2). There is footage of the shuttle landing.
CASI
Earth Orbits; Mir Space Station; Orbital Rendezvous; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews

19960007441 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–69 postflight presentation
Oct 3, 1995; In English; 35 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006083; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A postflight conference of the STS-69 mission is presented. The flightcrew ('The Dog Team') consisted of Cmdr. David Walker, Pilot Kenneth Cockrell, Payload Cmdr. James Voss, and Mission Specialists James Newman and Michael Gernhardt. The mission's primary objective was the deployment and retrieval of the SPARTAN-201 satellite, which investigated the interaction between the Sun and it's solar wind. Other secondary experiments and shuttle payloads included the Wake Shield Facility (WSF), which grew several layers of semiconductor films, the International Extreme Ultraviolet Hitchhiker (IEH-1), the Capillary Pumped Loop-2/Gas Bridge Assembly (CAPL-2/GBA), several Get Away Specials (GAS) experiments, the Electrolysis Performance Improvement Concept Study (EPICS), the Thermal Energy Storage (TES-2) experiment, the Commercial Generic Bioprocessing Apparatus-7 (CGBA-7), the National Institutes of Health-Cells 4 (NIH-C4) experiment, and the Biological Research in Canister-6 (BRIC-6) experiment. Earth views consisted of Saudi Arabia water wells, uncommon vortices over Oman, the Amazon River, the Bahamas, Somalia, a sunset over the Earth's horizon, and two hurricanes, Luis and Marilyn.
CASI
Earth Observations (From Space); Get Away Specials (STS); Payload Deployment & Retrieval System; Scientific Satellites; Space Shuttle Missions; Space Transportation System; Space Transportation System Flights; Spaceborne Astronomy; Spaceborne Experiments; Spacecrews; Ultraviolet Astronomy

19960008023 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 1
Oct 20, 1995; In English; 23 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006227; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown in various stages of prelaunch and launch activities. This mission carries the USA Microgravity Lab-2 (USML-2) payload, in which a variety of spaceborne microgravity experiments will be performed. These experiments include the Advanced Protein Crystallization Facility (APCF), The Astroculture (tm)(ASC) hardware and experiment, the Commercial Generic Bioprocessing Apparatus (CGBA), the Crystal Growth Furnace (CGF), the Drop Physics Module (DPM), the Geophysical Fluid Flow Cell (GFFC), the Glovebox (GBX), the Zeolite Crystal Growth (ZCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Protein Crystal Growth (PCG) experiment, three Measuring Microgravity experiments (the Space Acceleration Measurement System (SAMS), the Three Dimensional Microgravity Accelerometer (3DMA), and the Orbital Acceleration Research Experiment (OARE)), and the High-Packed Digital Television (HI-PAC) demonstration system. Earth views include some cloud cover and various Earth land masses.
CASI
Earth Observations (From Space); Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008024 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 2
Oct 21, 1995; In English; 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and

Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments on the USA Microgravity Lab-2 (USML-2). These experiments included the Astroculture (tm)(ASC) experiment, the Protein Crystal Growth (PCG) experiment using liquid/liquid diffusion methods, and the Drop Physics Module (DPM) experiment. A High-Packed Digital Television (HI-PAC) system is used to downlink video images of the various experiments from the Shuttle to Mission Control. Video from Mission Control is uplinked to the shuttle using a Ground-Air Television (GATV) system.
CASI
Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008025 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 3
Oct 22, 1995; In English; 19 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-73 sixteen day mission, the crew, Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the High-Packed Digital Television (HI-PAC) demonstration. The HI-PAC allows the digitization of up to six video downlink signals from the Spacelab experiments and other cameras onboard the Shuttle, where previously only one downlink was allowed.
CASI
Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008043 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 4
Oct 23, 1995; In English; 23 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006230; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the High-Packed Digital Television (HI-PAC) demonstration, the Surface Tension Driven Convection Experiment (STDCE), and the Drop Physics Module (DPM) experiment. Video footage is shown of the crew working in the Spacelab along with a split screen Shuttle downlink/Ground-Air Television (GATV) uplink from Mission Control. Several of the astronauts are interviewed by Mission Control regarding the status of the experiments.
CASI
Ground-Air-Ground Communication; Space Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008044 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 5
Oct 24, 1995; In English; 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). These experiments are downlinked to Mission Control from the Spacelab using the High-Packed Digital Television (HI-PAC) systems onboard the Shuttle. The experiments shown include the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Protein Crystal Growth (PCG) experiment, and a Hand-Held Diffusion Test Cell experiment. Lopez-Alegria is interviewed in Spanish by two Spanish radio show hosts. Earth views include cloud cover, the Earth's horizon and atmospheric boundary layers, and several oceans.
CASI
Earth Observations (From Space); Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008045 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 6
Oct 25, 1995; In English; 22 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006232; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Protein Crystal Growth (PCG) experiment, the Astroculture(tm)(ASC) experiment, the Drop Physics Module (DPM) experiment, and the Surface Tension Driven Convection Experiment (STDCE). The High-Packed Digital Television (HI-PAC) system is further tested and an in-orbit interview with Lopez-Alegria by NBC Nightside is conducted. The entire flightcrew salutes the 5th game of the World Series between the Atlanta Braves and Cleveland Indians by pretending to throw out the first ball of the game through a downlink to the stadium. Earth views taken from the payload bay cameras include some cloud cover, oceans, land masses, and the Nile River and the Red Sea.
CASI
Earth Observations (From Space); Electronic Equipment Tests; Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008046 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 7
Oct 26, 1995; In English; 10 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006233; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM), the Protein Crystal Growth (PCG) experiment, and the Glovebox (GBX) demonstration. All the experiments were monitored by the High-Packed Digital Television (HI-PAC) system onboard the shuttle.
CASI
Ground-Air-Ground Communication; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008047 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 8
Oct 27, 1995; In English; 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006234; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Astroculture(tm)(ASC) experiment, the Protein Crystal Growth (PCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Commercial Generic Bioprocessing Apparatus (CGBA),and further testing of the High-Packed Digital Television (HI-PAC)

system. An interview with Bowersox and Thornton regarding the mission's status was conducted by radio World News Now in Houston.
CASI
Ground-Air-Ground Communication; News Media; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008048 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 9
Oct 28, 1995; In English; 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006235; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE) and the Protein Crystal Growth (PCG) experiment with different types of solution mixtures used. The imagery of the experiments inside the Spacelab were downlinked to Mission Control with the High-Packed Digital Television (HI-PAC) system.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008049 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 10
Oct 29, 1995; In English; 12 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006236; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Surface Tension Driven Convection Experiment (STDCE), the Drop Physics Module (DPM) experiment, and the Geophysical Fluid Flow Cell Experiment (GFFC). All experiment imagery was downlinked from the shuttle to Mission Control using the High-Packed Digital Television (HI-PAC) system.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008050 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 11
Oct 30, 1995; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006237; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Drop Physics Module (DPM) and the Surface Tension Driven Convection Experiment (STDCE). Thermistors are used in the STDCE to study the fluid dynamics behind particle motion.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008051 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 12
Oct 31, 1995; In English; 13 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006238; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), and the Astroculture (tm)(ASC) demonstration. Rominger was interviewed by a Colorado radio news show and asked questions about the mission and living in space. Earth views included cloud cover.
CASI
Earth Observations (From Space); Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008052 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 13
Nov 1, 1995; In English; 11 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006239; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown included the Drop Physics Module (DPM) experiment, human physiological experiments, and a Crystal Gel experiment.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008152 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 14
Nov 2, 1995; In English; 20 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown performing several of the spaceborne experiments onboard the USA Microgravity Lab-2 (USML-2). The experiments shown include the Drop Physics Module (DPM) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Geophysical Fluid Flow Cell (GFFC) experiment, and an experiment on fuel combustion and combustion products. Bowersox, Sacco, Thornton, and Rominger (the red team) were interviewed by high school students from Worcester, Massachusetts, who asked questions regarding the mission's experiments and general questions about living in space. Earth views included a black and white image of the Earth's atmospheric boundary layers.
CASI
Earth Observations (From Space); Ground-Air-Ground Communication; Microgravity; Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008153 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 15
Nov 3, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifteenth day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady'

Collman, and Michael Lopez-Alegria are shown hosting an in-orbit interview with various newspaper reporters from Johnson Space Center, Kennedy Space Center, and Marshall Space Flight Center via satellite hookup. The astronauts were asked questions regarding the status of the USA Microgravity Lab-2 (USML-2) experiments, their personal goals regarding their involvement in the mission, their future in the space program, and general questions about living in space. Earth views included cloud cover and a tropical storm.
CASI
Earth Observations (From Space); Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecrews; Spacelab

19960008154 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–73 flight day 16
Nov 4, 1995; In English; 19 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995006242; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this last day of the STS-73 sixteen day mission, the crew Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria are shown preparing the USA Microgravity Lab-2 (USML-2) and the shuttle for return to Earth. There is footage of the shuttle from the robot arm cameras and of Earth. Earth views include cloud cover, various land masses, mountain ranges, and oceans.
CASI
Earth Observations (From Space); Space Shuttle Missions; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecrews; Spacelab

19960009941 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 8
Nov 19, 1995; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007184; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this the eighth day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, using the remote manipulator system (RMS), took exterior views of the shuttle in space. Additionally, the crew answered several questions posted on one of NASA's websites on the Internet.
CASI
Space Transportation System; Space Transportation System Flights

19960010205 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–46 post flight press conference
Aug 14, 1992; In English; 1 hr. 23 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007176; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

At a post flight press conference, the flight crew of the STS-46 mission (Cmdr. Loren Shriver, Pilot Andrew Allen, Mission Specialists Claude Nicollier (European Space Agency (ESA)), Marsha Ivins (Flight Engineer), Jeff Hoffman (Payload Commander), Franklin Chang-Dias, and Payload Specialist Franco Malerba (Italian Space Agency (ISA))) discussed their roles in and presented video footage, slides and still photographs of the different aspects of their mission. The primary objectives of the mission were the deployment of ESA's European Retrievable Carrier (EURECA) satellite and the joint NASA/ISA deployment and testing of the Tethered Satellite System (TSS). Secondary objectives included the IMAX Camera, the Limited Duration Space Environment Candidate Materials Exposure (LDVE), and the Pituitary Growth Hormone Cell Function (PHCF) experiments. Video footage of the EURECA and TSS deployment procedures are shown. Earth views were extensive and included Javanese volcanoes, Amazon basin forest ground fires, southern Mexico, southern Bolivian volcanoes, south-west Sudan and the Sahara Desert, and Melville Island, Australia. Questions from reporters and journalists from Johnson Space Center and Kennedy Space Center were discussed.
CASI
Earth Observations (From Space); EURECA (ESA); European Space Agency; Flight Crews; Payload Deployment & Retrieval System; Postflight Analysis; Scientific Satellites; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Tethered Satellites

19960010206 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 1
Nov 12, 1995; In English; 17 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007177; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, are shown in prelaunch and launch activities. This mission is the second of seven Mir-Space Shuttle hook-ups. Major objectives of this mission are to include a docking between Mir and the Space Shuttle and the transfer of a Russian docking module, water, supplies, and two solar arrays to the Mir space station. This mission highlights the first time that astronauts from Canada, Russia, the U.S. and the European Space Agency (ESA) will be onboard a single spacecraft in space at the same time. Additional experimental payloads onboard the shuttle are the GLO-4 PASDE Payload (GPP) experiment and the Photogrammetric Appendage Structural Dynamics Experiment (PASDE).
CASI
Flight Crews; Mir Space Station; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

19960010207 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 2
Nov 13, 1995; In English; 26 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007178; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the second day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, were awakened to music from the play 'The Nutcracker'. The astronauts hosted an in-orbit interview with Canadian reporters and journalists from Toronto, answering general questions about living in space and space flight, and explaining the delicate maneuvers that the shuttle will have to perform for the Mir docking procedures scheduled for the next day. Due to the awkward angle that the shuttle will use to approach the Mir, the docking procedure will be done in an almost blind state.
CASI
Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecraft Maneuvers

19960010208 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 3
Nov 14, 1995; In English; 30 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007179; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this third day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield successfully connect the Russian-made docking module to the Space Shuttle using the shuttle's robot arm. There is a live, in-orbit press interview with the astronauts from inside the Russian docking module regarding the status of the mission thus far. The docking module will remain with Mir after the two spacecraft have undocked.
CASI
Flight Crews; Mir Space Station; Modules; Space Communication; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

19960010209 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 4
Nov 15, 1995; In English; 36 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007180; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, perform a successful docking between the space shuttle and the Mir space station using the Russian-made docking module that had been previously installed on the third day of the mission. The astronauts and the Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Gergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, are shown greeting each other

from inside the docking module and an in-orbit interview between the crews and NASA is conducted in both English and Russian.
CASI
Flight Crews; Mir Space Station; Orbital Maneuvers; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

19960010210 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 5
Nov 16, 1995; In English; 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007181; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, were awakened to the theme from the movie 2001: A Space Odyssey'. The Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, and shuttle astronauts are shown giving each other plaques and presents to commemorate their historic docking event and the start towards the development of the International Space Station. There is a press conference from Moscow by a one of the officers of the Russian Space Agency with both flight crews and an additional separate press interview of the crews by Canadian reporters. There is video footage of the two docked spacecraft taken from various angles.
CASI
Conferences; Flight Crews; Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

19960010211 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 6
Nov 17, 1995; In English; 31 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007182; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-74 mission, the flight crew, Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield and the Mir 20 cosmonauts, Cmdr. Yuri Gidzenko, Flight Engineer Sergei Avdeyev, and Cosmonaut-Researcher (ESA) Thomas Reiter, were greeted and briefly interviewed by the Secretary General of the United Nations, Boutros Boutros-Ghali, on the 50th anniversary of the United Nations via a radio satellite hookup. An additional interview with other journalists from different areas of the USA and Canada was also presented.
CASI
Mir Space Station; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Space Shuttles; Space Transportation System; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Docking

19960010212 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–74 flight day 7
Nov 18, 1995; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996007183; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this the seventh day of the STS-74 mission, the flight crew Cmdr. Kenneth Cameron, Pilot James Halsell, and Mission Specialists William McArthur, Jerry Ross, and Chris Hatfield, filmed the Mir-shuttle separation maneuver. After separation, the shuttle performed a fly-around of the Mir space station , during which, a variety of views of the Mir station were taken. Earth views include cloud cover.
CASI
Mir Space Station; Space Rendezvous; Space Transportation System; Space Transportation System Flights; Spacecraft Docking

19960025955 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 2
Mar. 23, 1996; In English; Videotape: 19 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039903; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown checking out one of the leaking hydraulic systems onboard the Space Shuttle Atlantis. There was an in-orbit interview with the astronauts by the host of the NBC show, 'Nightside'. The construction of the SPACEHAB unit also was started.
CASI
Space Transportation System; Space Shuttles; Hydraulic Equipment

19960025956 NASA Johnson Space Center, Houston, TX USA
STS–75 Post Flight Presentation
Mar. 28, 1996; In English; Videotape: 38 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-75 Space Shuttle, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), present a post flight analysis of their mission through the use of color slides and video footage. Prelaunch and launch activities are shown along with Earth entry and landing footage. Both middeck and payload bay microgravity experiments are shown and briefly discussed. The deployment and loss of the European Tethered Satellite experiment are presented and discussed. Earth views include the Nile Valley, Chad, the Himalayas and Mount Everest, and China. A unique moonset is also shown.
CASI
Space Transportation System; Tethered Satellites; Postflight Analysis; Space Shuttles; Gravitational Effects; Deployment

19960025957 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 9
Mar. 01, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037044; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown tracking the free-orbiting tethered satellite and performing various experiments from the USA Microgravity Payload-3 (USMP-3). An in-orbit interview with Allen, Cheli, and Guidoni by the Italian news media is shown. The astronauts answer a variety of questions concerning the loss of the tethered satellite, and the progress of the other mission experiments. Earth views include a sunset and horizon shots.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Microgravity; Space Shuttle Payloads; Space Shuttle Missions; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Tethered Satellites

19960025958 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 8
Feb. 29, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037043; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing the Advanced Automated Directional Solidification Furnace (AADSF) experiment

which is one part of the USA Microgravity Payload-3 (USMP-3) experiments. Earth views include cloud cover.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Experiments; Earth Observations (From Space); Columbia (Orbiter)

19960025959 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 7
Feb. 28, 1996; In English; Videotape: 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037042; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing several of the USA Microgravity Payload-3 (USMP-3) experiments. There is an in-orbit interview by several of the astronauts with newspaper reporters. An announcement is made by Mission Control that Cmdr. Allen has become the first American Astronaut to log 1000 flight hours in space, with Payload Cmdr. Franklin Chang-Diaz coming in second.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Spaceborne Experiments; Columbia (Orbiter)

19960025960 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 5
Feb. 26, 1996; In English; Videotape: 18 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037040; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown viewing the tethered satellite and performing experiments, both onboard the shuttle and with the TSS. An accident occurs in which the tether breaks and the satellite is shown floating away from the shuttle. There is an in-orbit interview with reporters from Johnson Space Center after the accident occurred, in which they discuss the reasons for the accident and how the experiment can be salvaged.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Tethered Satellites; Columbia (Orbiter); Spaceborne Experiments; Space Communication; Space Shuttle Missions; Space Shuttle Payloads

19960025961 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 4
Feb. 25, 1996; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037039; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown unlatching and deploying the Tethered Satellite System Reflight (TSS-1R) and activating several of the middeck experiments from the USA Microgravity Payload-3 (USMP-3). There is more imaging of the Space Shuttle's exhaust system using vented water vapor and Earth views, which include horizon shots.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Tethered Satellites; Microgravity; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Payload Delivery (STS); Columbia (Orbiter)

19960025962 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 3
Feb. 24, 1996; In English; Videotape: 15 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037038; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, with Mission Control's help, still trying to correct the problems with the 'Smart Flex' computer system which is delaying the deployment of the Tethered Satellite System Reflight (TSS-1R). There is imaging shown of the shuttle's exhaust system using water vapor.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spacecraft Electronic Equipment; Space Shuttle Missions; Space Shuttle Payloads; International Cooperation; Columbia (Orbiter)

19960025963 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 1
Feb. 22, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037036; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), were shown performing pre-launch and launching activities. This international space mission's primary objective is the deployment of the Tethered Satellite System Reflight (TSS-1R) to a 12 mile length from the shuttle, a variety of experiments, and the satellite retrieval. These experiments include: Research on Orbital Plasma Electrodynamics (ROPE); TSS Deployer Core Equipment and Satellite Core Equipment (DCORE/SCORE); Research on Electrodynamic Tether Effects (RETE); Magnetic Field Experiments for TSS Missions (TEMAG); Shuttle Electrodynamic Tether Systems (SETS); Shuttle Potential and Return Electron Experiment (SPREE); Tether Optical Phenomena Experiment (TOP); and Observations at the Earth's Surface of Electromagnetic Emissions by TSS (OESSE). The missions's secondary objectives were those experiments found in the USA Microgravity Payload-3 (USMP-3), which include: Advanced Automated Directional Solidification Furnace (AADSF); Material pour l'Etude des Phenomenes Interessant la Solidification sur Terre et en Orbite (MEPHISTO); Space Acceleration Measurement System (SAMS); Orbital Acceleration Research Experiment (OARE); Critical Fluid Scattering Experiment (ZENO); and Isothermal Dendritic Growth Experiment (IDGE).
CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Tethered Satellites; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Payload Delivery (STS); Payload Retrieval (STS); Columbia (Orbiter); International Cooperation; Earth Observations (From Space)

19960025964 NASA Johnson Space Center, Houston, TX USA
STS–72 Post Flight Presentation
Peterson, Glen, Editor, NASA Johnson Space Center, USA; Feb. 1996; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996036745; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this post flight presentation video for the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent Jett, and Mission Specialists Daniel T. Barry, Winston E. Scott, Leroy Chiao, and Koichi Wakata (NASDA), discuss their mission using flight footage and slides. The pre-launch and launching activities are shown. Using the robot arm inside the space shuttle's cargo bay, the Japanese Space Flyer Unit (SFU) is retrieved and berthed and the Office of Aeronautics and Space Technology (OAST) Flyer satellite is deployed, retrieved, and reberthed. Chiao and Barry performed the first of the two 6 1/2 hour EVAs and Chiao and Scott performed the second. In both EVAs, the thermal properties of the new space suits were tested, along with new tools and equipment that will eventually be used to build the International Space Station. Space shuttle landing

activities are also shown. Earth views include cloud shadows, Africa, Brazil, Australia, and Mt. Kilimanjaro.
CASI
Extravehicular Activity; Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Missions; Space Shuttle Payloads; Scientific Satellites; Japanese Spacecraft; Spaceborne Experiments; Space Shuttle Orbiters; Payload Delivery (STS); Payload Retrieval (STS)

19960025965 NASA Johnson Space Center, Houston, TX USA
STS–74 Post Flight Presentation
Dec. 08, 1995; In English; Videotape: 39 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996031303; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Th flight crew of the STS-74 Space Shuttle Orbiter Atlantis (Cmdr. Ken Cameron, Pilot Jim Halsell, and Mission Specialists Chris Hadfield, Jerry Ross, and William McArthur) present an overview of their flight mission, whose primary objective was the rendezvous and space docking with the Russian Mir Space Station. Video film footage includes: prelaunch and launch activities; shuttle launch; installation of the Russian-made docking module to the orbiter; in-orbit rendezvous; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection of Mir thruster firings; undocking maneuvers and Mir fly around; pre-return checkout of flight systems; and reentry and landing of the orbiter. Earth views include horizon sunsets, atmospheric boundary layers, and a variety of geographical location footage (New Orleans; Atlanta; James Bay, Canada; Poland; Turkey; Mt. Pinatubo, Philippines; Salt Lake City, Utah; and Colorado).
CASI
Atlantis (Orbiter); Manned Space Flight; Space Transportation System; Spacecraft Docking; Spacecraft Launching; Orbital Rendezvous; Mir Space Station; Spaceborne Experiments; Flight Crews; Cosmonauts; Astronauts

19960025966 NASA Johnson Space Center, Houston, TX USA
Challenger Anniversary Resource Tape
1996; In English; Videotape: 32 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996031302; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This commemorative video marks the tenth anniversary, January 28, 1986, of the ninth Challenger flight and the seven astronauts onboard who died when the Challenger exploded 73 seconds into flight. The flight crew was comprised of Cmdr. Francis R. Scobee, Pilot Michael J. Smith, and Mission Specialists Judith A. Resnik, Ellison S. Onizuka, Ronald E. McNair, Gregory Jarvis (Hughes Aircraft representative), and S. Christie McAuliffe (teacher). The flight crew is shown performing preflight training, physiological tests, environmental tests, press conferences, prelaunch activities, and launch activities. The Challenger explosion is shown from both the launch site and from the control center. Various rescue operations, news coverage, and shots of the wreckage after salvage are also presented. President Ronald Reagan is shown giving a tribute at the memorial service for the flight crew. The video ends with a flyby salute and pictures of each of the members of the Challenger.
CASI
Challenger (Orbiter); Space Shuttle Missions; Space Transportation System Flights; Flight Crews; Aerial Explosions; Spacecraft Launching; Astronauts; Space Transportation System

19960025990 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 15
Mar. 07, 1996; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037070; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing various experiments. Chang-Diaz gives a short presentation about the importance of protein crystals and their use in research. A water vapor exhaust test is performed with the shuttle's exhaust jets. Earth views include land and water masses, the horizon, and there are views of the shuttle's cargo bay.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Earth Observations (From Space); Space Communication; Microgravity

19960025991 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 13
Mar. 05, 1996; In English; Videotape: 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037048; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion and burn experiments. The flight crew is interviewed by news reporters from USA and Europe via a satellite hookup. Earth views include clouds and storm systems. A view of the lost, free-flying tethered satellite is shown.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Tethered Satellites; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Space Communication; Spaceborne Experiments; Earth Observations (From Space)

19960025992 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 12
Mar. 04, 1996; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037047; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown being interviewed via satellite hookup by reporters. Cheli, through the demonstration of a simple experiment, explains a simple acceleration physics concept. Middeck Glovebox burn and combustion experiments are also shown. Earth views include Italy, other land masses, some cloud cover, a sunrise, and horizon shots.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Spaceborne Experiments; Microgravity; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter)

19960025993 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 11
Mar. 03, 1996; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037046; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting combustion experiments in the Middeck Glovebox station, conducting physiological tests, and performing a variety of daily activities (eating, exercising, etc.). Horowitz, Cheli, and Guidoni are interviewed by Voice of America via satellite hookup and they answered general questions regarding the mission, experiments, and the lost tethered satellite. Earth views include a sunrise and some cloud cover.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Columbia (Orbiter); Spaceborne Experiments; Space Shuttle Missions; Space Shuttle Payloads; Earth Observations (From Space); Space Communication; Voice of America

19960025994 NASA Johnson Space Center, Houston, TX USA
STS–69 Mission Highlights Resource Tape
Dec. 19, 1995; In English; Videotape: 55 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996036744; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-69 mission of the Endeavour Space Shuttle and crew are highlighted in this video. The 'Dog Crew', as they called themselves, Cmdr. Dave Walker, Pilot Ken Cockrell, and Mission Specialists Mike Gernhardt, Jim Voss, and Jim Newman, are shown performing pre-launch and launch activities; the SPARTAN-201 and the Wake Shield Facility (WSF) deployments, retrievals, and berthings; physiological and other Middeck experiments; and jet thruster firing tests on the WSF. A 6 1/2 hour EVA was conducted to test the thermal properties of the new space suits and to test the tools and equipment to be used in the construction of the International Space Station. General crew activities are also shown and Earth views include cloud cover and the WSF with the Earth as the background.
CASI
Spartan Satellites; Spacecrews; Space Transportation System; Endeavour (Orbiter); Extravehicular Activity; Spaceborne Experiments; Space Transportation System Flights; Space Shuttle Missions; Space Shuttle Payloads; Rocket Engines

19960025995 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 2
Jan. 12, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034086; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to music from the motion picture 'Stars Wars'. The crew performed a systems checkout, prepared for the retrieval of the Japanese Space Flyer Unit (SFU), tested the spacesuits for the EVA, and activated some of the secondary experiments. An in-orbit news interview was conducted with the crew via satellite downlinking. Questions asked ranged from the logistics of the mission to the avoidance procedures the Endeavour Orbiter performed to miss hitting the inactive Air Force satellite, nicknamed 'Misty' (MSTI). Earth views included cloud cover, several storm systems, and various land masses with several views of the shuttle's open cargo bay in the foreground.
CASI
Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter); Flight Crews; Space Shuttle Missions; Earth Observations (From Space); Computer Systems Performance; Checkout; Space Communication

19960026002 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 3
Mar. 24, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039900; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-76 mission, the flight crew, Cmdr Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, and Ronald M. Sega, are shown performing the docking maneuvers for the Mir Space Station and the Atlantis in-orbit rendezvous. The Atlantis crew is shown greeting the Mir cosmonaut crew, Cmdr. Yuri Onufrienko and Flight Engineer Yuri Usahev. The docking procedure is shown from both outside and inside the Atlantis. An interview with Mission Control is shown from inside Mir with both crews present. There is footage of the Mir, both docked with Atlantis and free flying. Not shown is the EVA by Clifford and Godwin to attach several experimental packages to the exterior of the Mir docking module, although their packing preparation is shown.
CASI
Space Transportation System Flights; Space Transportation System; Spacecraft Docking; Mir Space Station; Spacecraft Maneuvers

19960026003 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 5
Mar. 29, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039898; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, pay tribute to the late astronaut Bob Overmeyer with views from the Atlantis/Mir configuration with the Earth in the background. Atlantis astronauts, interviewed by reporters from NASA Centers and Russia during an in-orbit press conference, describe their observations of Comet Hyakutake as it continues its close pass by Earth, remarking on the comet's brilliance and visibility. The astronauts and cosmonauts also took time out from their transfer and resupply activities to talk with Charlie Gibson of 'Good Morning America'.
CASI
Space Transportation System Flights; Space Transportation System; Comets; News Media

19960026004 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 6
Mar. 30, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039896; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown preparing for Godwin and Clifford's extra vehicular activity (EVA). The two astronauts are shown egressing from the Shuttle and performing activities during the EVA with the Earth in the background. Godwin and Clifford spent six hours spacewalking in Atlantis' cargo bay and on the exterior of the Mir's docking module. They are shown completing all of the objectives planned for the spacewalk, the most important of which was to install on the exterior of Mir four experiments to monitor the space environment for the next year and a half. This marks the first time that a spacewalk was conducted from a docked Space Shuttle. A variety of new tools capable of being used on both US and Russian spacecraft were evaluated during the spacewalk.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttles; Extravehicular Activity

19960026005 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 7
Mar. 31, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039895; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown bidding the Mir crew and Shannon W. Lucid an emotional farewell, Chilton calling it 'a bittersweet moment.' The Atlantis and Mir commanders, Chilton and Onufrienko, along with spacewalkers Godwin and Clifford took time out to talk with CBS' 'Up to the Minute.' The space flyers discussed the success of their joint mission and the 6-hour spacewalk. The astronauts and cosmonauts exchanged handshakes and hugs in the Mir core module, and then praised both mission control centers, Houston and Kaliningrad for their support throughout the joint phase of the mission.
CASI
Space Transportation System Flights; Space Transportation System; Crew Procedures (Inflight); News Media

19960026017 NASA Johnson Space Center, Houston, TX USA
STS–73 Post Flight Presentation
Dec. 15, 1995; In English; Videotape: 28 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996031304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The post flight presentation of the STS-73 Space Shuttle's USA Microgravity Lab. (USML) mission was presented by the flight crew, Cmdr. Kenneth Bowersox, Pilot Kent Rominger, Payload Specialists Albert Sacco and

Fred Gregory, and Mission Specialists Kathryn Thornton, Catherine 'Cady' Collman, and Michael Lopez-Alegria, using color video and slides. Film footage includes the prelaunch and launch activities, the USML and Middeck experiments (Advanced Protein Crystallization Facility (APCF), the Astroculture(tm) (ASC) hardware and experiment, the Commercial Generic Bioprocessing Apparatus (CGBA), the Crystal Growth Furnace (CGF), the Drop Physics Module (DPM), the Geophysical Fluid Flow Cell (GFFC), the Glovebox (GBX), the Zeolite Crystal Growth (ZCG) experiment, the Surface Tension Driven Convection Experiment (STDCE), the Protein Crystal Growth (PCG) experiment, three Measuring Microgravity experiments (the Space Acceleration Measurement System (SAMS), the Three Dimensional Microgravity Accelerometer (3DMA), and the Orbital Acceleration Research Experiment (OARE)), and the High-Packed Digital Television (HI-PAC) demonstration system), pre-return flight systems checkout, reentry, and space shuttle landing. The USML experiments were monitored via the HI-PAC system downlink. Earth views included mostly geographical locations (Mediterranean Sea; Turkey; Lake Powell, Arizona/Utah area; San Francisco Bay; Baltimore, Maryland; Washington, DC; India; Tibet; China; Bhutan; Philadelphia; and the Himalayas).
CASI
Space Shuttle Orbiters; Space Transportation System Flights; Flight Crews; Space Shuttle Missions; Spacelab; Microgravity; Spaceborne Experiments; Earth Observations (From Space); Digital Television; Downlinking; Television Systems; Space Transportation System

19960026028 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 2
Feb. 23, 1996; In English; Videotape: 10 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037037; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown, via satellite-downlinking, online with Dan Golden, the Director of NASA, discussing the mission and performing system set-ups. A problem with the 'Smart Flex' computer system develops and the crew spends most of the day trying to fix the problem with the help of Mission Control. Earth views include cloud cover, various land and water masses, and Earth's Arctic regions.
CASI
Space Transportation System; Space Transportation System Flights; Columbia (Orbiter); Spacecrews; International Cooperation; Spaceborne Experiments; Space Shuttle Missions; Spacecraft Electronic Equipment

19960026029 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 1
Jan. 11, 1996; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034087; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), were shown in prelaunch and launch activities. This was the tenth flight of the Space Shuttle Orbiter Endeavour. The primary objectives of this mission were the retrieval of the Japanese Space Flyer Unit (SFU) spacecraft, the deployment and retrieval of the NASA Office of Aeronautics and Space Technology Flyer (OAST-FLYER) spacecraft, and two 6 1/2 hour spacewalks to test hardware and tools that will be used to assemble the International Space Station. Secondary objectives included the Shuttle Solar Backscatter Ultraviolet (SSBUV-8), the Shuttle Laser Altimeter GAS(5) (SLA-01/GAS(5)), the National Institutes of Health-R3 (NIH-R3), the Space Tissue Loss (STL/NIH-C), and Thermal Energy Storage (TES-2) experiments. Get-Away-Specials (GAS) included the USAF Academy G-342 Flexible Beam Experiment (FLEXBEAM-2), the Society of Japanese Aerospace Companies G-459 Protein Crystal Growth Experiments, and the Jet Propulsion Laboratory (JPL) GAS Ballast Can with Sample Return Experiment. This night launch was shown at various angles and distances from the launching pad.
CASI
Get Away Specials (STS); Endeavour (Orbiter); Space Transportation System; Flight Crews; Space Transportation System Flights; Spaceborne Experiments; Spacecraft Launching; Payload Retrieval (STS); Japanese Spacecraft; Scientific Satellites

19960026030 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 3
Jan. 13, 1996; In English; Videotape: 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034085; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this third day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koichi Wakata (NASDA),awakened to a traditional Japanese song, 'Sea in Springtime'. Wakata, using the shuttle's robot arm, successfully retrieved the Japanese Space Flyer Unit (SFU) satellite and berthed it in the shuttle's cargo bay. Duffy and Wakata were interviewed, via satellite, by Japanese journalists and reporters in Houston, Texas. Earth views include cloud cover, storm systems, Africa and several other land masses.
CASI
Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter); Space Shuttle Missions; Payload Retrieval (STS); Remote Manipulator System; Earth Observations (From Space); Space Communication; Flight Crews

19960026035 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 1
Mar. 22, 1996; In English; Videotape: 22 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039905; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing prelaunch and launch activities for the night launch of the Space Shuttle Atlantis. The primary objective of this mission is the third docking between the Mir Space Station and Atlantis and a crew transfer. Lucid will remain onboard the Mir for about four months. Other activities include an EVA by Godwin and Clifford, logistics operations, and scientific research with a SPACEHAB module, some middeck experiments, and a Get Away Special (GAS) canister. Also, almost a ton of equipment and supplies will be transferred to the Mir. Experiments include the Mir Electric Field Characterization (MEFC), European Space Agency (ESA) Biorack life sciences experiment, Queens University Experiment in Liquid Diffusion (QUELD), Optizone Liquid Phase Sintering Experiment (OLIPSE), and a Naval Research Laboratory (NRL) GAS payload Trapped Ions in Space (TRIS), which will measure low-energy particle radiation in the inner magnetosphere. This mission also will include a KidSat, a prototype of Earth viewing cameras and instruments, that allow students in grades K-12 to see and direct the capture of pictures from space. Footage from Mission control is also included.
CASI
Space Transportation System Flights; Space Shuttles; Spacecrews; Spacecraft Docking; Spacelab Payloads; Mir Space Station

19960026036 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 14
Mar. 06, 1996; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037049; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourteenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown conducting material burn tests and physiological experiments. Earth views include cloud cover, sunrise, atmospheric boundary layer, Florida, Amazon River, Brazil coast line, and the Pacific Ocean.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Physiological Tests; Spaceborne Experiments; Combustion Physics; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Earth Observations (From Space)

19960026037 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 10
Mar. 02, 1996; In English; Videotape: 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037045; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Missions Specialists Jeffrey Hoffman, Maurizio Cheli (ESA), and Claude Nicollier (ESA), are shown performing middeck and Microgravity lab experiments, including the Material pour l'Etude des Phenomenes Interessant la Solidification sur Terre et en Orbite (MEPHISTO) experiment, as well as some material burn tests. Earth views include cloud cover and horizon shots.
CASI
Space Transportation System Flights; Spacecrews; Space Transportation System; Microgravity; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Spaceborne Experiments; Earth Observations (From Space)

19960026038 NASA Johnson Space Center, Houston, TX USA
STS–75 Flight Day 6
Feb. 27, 1996; In English; Videotape: 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996037041; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-75 mission, the flight crew, Cmdr. Andrew Allen, Pilot Scott Horowitz, Payload Cmdr. Franklin Chang-Diaz, Payload Specialist Umberto Guidoni (Italy), and Mission Specialists Jeffrey Hoffman, Maurizio Cheli (ESA) and Claude Nicollier (ESA), are shown performing experiments from the USA Microgravity Payload-3 (USMP-3). Mission Control continues to update the flight crew regarding the status of the free orbiting tethered satellite and the few experiments that they were able to start-up onboard the satellite. There is an in-orbit question and answer interview with the astronauts by a group of sixth graders from a West Virginia school. Earth views include water masses and horizon shots.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Tethered Satellites; Microgravity; Space Communication; Space Shuttle Missions; Space Shuttle Payloads; Columbia (Orbiter); Spaceborne Experiments

19960026039 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 4
Mar. 25, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039899; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, are shown performing various experiments on the Middeck and transferring supplies to the Mir Space Station. Godwin explains the European Space Agency (ESA) Biorack investigations. Chilton, Lucid and Mir Cmdr. Yuri Onufnenko talk with NASA Administrator Dan Goldin via satellite link. Lucid will be joining the cosmonauts, Onufnenko and Flight Engineer Yuri Usachev, for a 140 day mission on the Mir.
CASI
Space Transportation System; Space Transportation System Flights; Mir Space Station; Spaceborne Experiments

19960026040 NASA Johnson Space Center, Houston, TX USA
STS–76 Flight Day 8
Apr. 01, 1996; In English; Videotape: 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996039881; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-76 mission, the flight crew, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega are shown undocking from the Mir Space Station. With Mir some 60 nautical miles behind them, the Atlantis astronauts prepared for the return to Earth. Chilton, Searfoss and Clifford perform a routine checkout of Atlantis' flight control surfaces and a hotfire test of the orbiter's reaction control system jets. Views include the undocking maneuver; Atlantis as seen from the Mir Space Station; Atlantis' fly-round of Mir; and the firing of the Reaction Control System (RCS) primary thrusters.
CASI
Space Transportation System Flights; Space Transportation System; Mir Space Station; Crew Procedures (Inflight); Flight Control; Maneuverable Spacecraft

19960028531 NASA Johnson Space Center, Houston, TX USA
STS–72 Mission Highlights Resource Tape
Mar. 01, 1996; In English; Videotape: 54 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047711; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-72 Space Shuttle Orbiter Endeavour Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists; Leroy Chiao, Daniel T. Barry, Winston E. Scott, and Koichi Wakata (NASDA) present an overview of their mission, whose primary objective is the retrieval of two research satellites. The major activities of the mission will include retrieval of the Japanese Space Flyer Unit (SFU), which was launched aboard a Japanese H-2 rocket to conduct a variety of microgravity experiments. In addition, the STS-72 crew will deploy the AST-Flyer, a satellite, that will fly free of the Shuttle for about 50 hours. Four experiments on the science platform will operate autonomously before the satellite is retrieved by Endeavour's robot arm. Three of Endeavour's astronauts will conduct a pair of spacewalks during the mission to test hardware and tools that will be used in the assembly of the Space Station. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; retrieval of the Japanese Space Flyer Unit (SFU); suit-up and EVA-1; EVA-2; crew members performing various physical exercises; various earth views; and the night landing of the shuttle at KSC.
CASI
Space Transportation System; Endeavour (Orbiter); Physical Exercise; Microgravity; Gravitational Effects; Extravehicular Activity

19960028533 NASA Johnson Space Center, Houston, TX USA
STS–76 Post Flight Press Conference
Apr. 15, 1996; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047714; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-76 Space Shuttle Orbiter Atlantis; Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega present an overview of thier mission. Highlights STS-76 include the first spacewalk by U.S. astronauts while the shuttle is attached to the Russian Space Station Mir, and the transfer of Shannon W. Lucid to the Mir-21 crew, the first American woman to serve as a Mir station researcher. She will remain aboard the orbiting station until Atlantis again docks with Mir in early August. Video footage includes the following: prelaunch and launch activities; shuttle launch; in-orbit rendezous; in-orbit docking between Mir and the orbiter; general crew activities; tranfer of supplies; Godwin and Clifford's EVA; undocking maneuvers; and the re-entry and landing of the orbiter.
CASI
Space Transportation System Flights; Spacecraft Launching; Spacecraft Docking; Mir Space Station; Extravehicular Activity

19960028548 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 10
May 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060599; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., perform a routine check of the shuttle's flight control surfaces and reaction control system jets, wrap up work with a number of scientific investigations, and begin securing the cabin for the trip back to Earth. Most experiments aboard the shuttle have been completed and stowed away, although a few will operate throughout the night and be deactivated once the crew wakes. Crew members Andy Thomas, a native of Australia, and Marc Garneau, a Canadian, each receive special greetings today as STS-77 nears its end. South Australia Premier Dean Brown called Thomas with congratulations early this morning as the shuttle passed

above Brown's office in Adelaide, Australia, Thomas' hometown. Later, Canadian Prime Minister Jean Chretien called Garneau to congratulate him on the mission and the joint Canadian Space Agency and NASA experiments that were conducted.
CASI
Space Transportation System Flights; Flight Control; Jet Control; Control Surfaces

19960028549 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 9
May 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060598; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., make the third rendezvous with the small aerodynamically stabilized satellite. Commander John Casper and Pilot Curt Brown guided Endeavour to just under 2,000 feet from the cylindrically shaped Passive Aerodynamically Stabilized Magnetically Damped Satellite Satellite Test Unit (PMS-STU). It was deployed from a small canister in Endeavour's payload bay earlier in the mission in an unstable, slightly tumbling attitude to observe how or whether it could stabilize itself without using satellite lifetime-limiting propellants. Casper was scheduled to take time out during the final phase of the rendezvous to talk to fellow astronaut Shannon Lucid and her two cosmonaut crewmates aboard the Russian Space Station Mir. Various views of the Earth can be seen.
CASI
Space Transportation System Flights; Aerodynamic Stability; Attitude (Inclination); Mir Space Station

19960028570 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 7
May 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060596; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., return to the small, cylindrical PAMS-STU satellite and begin eight hours of station-keeping about 1,800 feet away. The second rendezvous with the Passive Aerodynamically Stabilized Magnetically Damped Satellite (PAMS) begins shortly after the crew is awakened by the song 'Down Under' performed by Men At Work, in honor of Australian-born Mission Specialist Andy Thomas. For several hours Commander John Casper and Pilot Curt Brown perform a series of thruster firings which allow Endeavor to close in on the 2 foot by 3 foot satellite. The rendezvous takes place as other crewmembers monitor ongoing science experiments in the Spacehab module and on the middeck of the orbiter.
CASI
Space Transportation System Flights; Stationkeeping

19960028571 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 3
May 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060592; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen focusing their attention on retrieving the Spartan satellite and returning it to the Shuttle's payload bay. Commander John Casper, Pilot Curt Brown and Mission Specialist Dan Bursch prepared for the rendezvous while Mission Specialists Andy Thomas, Mario Runco and Marc Garneau continued work on the orbiter's middeck and in the Spacehab module. The Inflatable Antenna Experiment (I.A.E) was jettisoned later in the morning and is expected to enter the Earth's atmosphere. This morning's rendezvous is the first of four planned during the mission. Following a series of jet firings, Endeavor approachs within a distance of about 30 feet from Spartan, where Garneau can be seen extending the ship's robot arm to grapple the satellite for its berthing back on its payload bay platform.
CASI
Space Transportation System Flights; Inflatable Spacecraft; Inflatable Structures; Deployment

19960028572 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 1
May 19, 1996; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060590; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.
CASI
Space Transportation System Flights; Spacecrews; Launching; Ignition

19960028575 NASA Johnson Space Center, Houston, TX USA
STS–74 Mission Highlights Resource Tape
Apr. 08, 1996; In English; Videotape: 59 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047713; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-74 Space Shuttle Orbiter Atlantis Cmdr. Ken Cameron, Pilot Jim Halsell, and Mission Specialists Chris Hadfield, Jerry Ross, and William McArthur present an overview of their flight mission, whose primary objective is the rendezvous and space docking with the Russian Mir Space Station. Video film footage includes the following: prelaunch and launch activities; shuttle launch; in-orbit rendezvous; installation of the Russian-made docking module; in-orbit docking between Mir and the orbiter; general crew activities; transfer of supplies, equipment, and a crystal growth experiment to Mir; data collection from Mir thruster firings; undocking maneuvers and a Mir fly around; pre-return checkout of flight systems; and the reentry and landing of the orbiter. Earth views include horizon sunsets, atmospheric boundary layers, and a variety of geographical location footage (New Orleans; Atlanta; James Bay, Canada; Poland; Turkey; Mt. Pinatubo, Philippines; Salt Lake City, Utah; and Colorado).
CASI
Space Transportation System Flights; Spacecraft Launching; Orbital Rendezvous; Mir Space Station; Spacecraft Docking

19960028598 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 8
May 30, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., take time out from their schedule to discuss the progress of the mission with reporters. Casper said the flight has been highly successful so far, having accomplished all of the goals. Mission Specialists Dan Bursch and Andy Thomas described protein crystal growth and plant growth experiments being conducted throughout the flight in the Spacehab module. and Mario Runco discussed testing soft drink samples in the Fluids Generic Bioprocessing Apparatus.
CASI
Space Transportation System Flights; Protein Crystal Growth; Vegetation Growth

19960028599 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 6
May 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., spend some time relaxing, then go back to working in the Spacehab module and preparing to revisit a small cylindrical satellite that they deployed on the mission's third day. Commander John Casper and Pilot Curt Brown monitor Endeavor's systems. Mission Specialist Mario Runco tests an attitude determination system using the GPS attitude and navigation experiment called GANE. The remaining crew members Mission Specialists Andy Thomas, Dan Bursch and Marc Garneau monitor the health of experiments ongoing in the Spacehab and on the middeck of the orbiter. The crew also conduct a health check of the Aquatic Research Facility (ARF) which contains starfish, mussels and sea urchins.
CASI
Space Transportation System Flights; Sea Urchins; Global Positioning System; Attitude Control; Attitude (Inclination); Spacelab

19960028600 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 5
May 23, 1996; In English; Videotape: 14 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060594; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., spend the first half of their workday assisting payload controllers with investigations into materials processing of samples and the growth of crystals. The progress of starfish and mussel development in a spaceborne aquarium in the Spacehab module in the Shuttle's cargo bay is seen. The crew then move off in different directions to support work with many of the experiments that make up the fourth mission of the Spacehab pressurized module. Endeavor is about 64 miles away from the Passive Aerodynamically Stabilized Magnetically Damped Satellite-Satellite Test Unit, or PAMS-STU, which was deployed from a canister in the payload bay on day four. Since mission day five coincided with Memorial Day , the crew started the 'Indy 500' from earth orbit.
CASI
Space Transportation System Flights; Deployment; Crystal Growth; Earth Orbits; Inflatable Spacecraft

19960028601 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 4
May 22, 1996; In English; Videotape: 14 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060593; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., turned their attention to the deployment of a small technology demonstration satellite known as PAMS. The Passive Aerodynamically Stabilized Magnetically-damped Satellite uses aerodynamic stabilization to orient itself properly and demonstrates a technique that could prolong the lifetime of a satellite by reducing or eliminating the requirement for attitude control propellants. After Mission Specialist Mario Runco deploys the satellite from a canister in the rear of Endeavor's payload bay, it drifts away from the orbiter in a rotating, unstable attitude by design to evaluate how quickly and effectively the spacecraft can stabilize itself using the aerodynamic stabilization method rather than by thrusters. Later in the day the crew is seen being interviewed by Canadian Television.
CASI
Space Transportation System Flights; Deployment; Payloads; Attitude (Inclination); Attitude Control

19960028602 NASA Johnson Space Center, Houston, TX USA
STS–77 Flight Day 2
May 20, 1996; In English; Videotape: 14 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060591; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-77 mission, the flight crew, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., are seen deploying the Spartan satellite for its 24 hour free flight away from Endeavor to test new inflatable antenna technology. The inflation procedure begins as the shuttle and antenna pass over New Mexico, Southern California, the Grand Canyon, Appalachian Mountains, and coast of Virginia. The inflation takes about 5 minutes, bringing the antenna to its full size of 90 feet by 50 feet. After an hour and a half, the antenna was to be jettisoned from the Spartan.
CASI
Space Transportation System Flights; Deployment; Inflatable Structures; Inflatable Spacecraft

19960028622 NASA Johnson Space Center, Houston, TX USA
STS–73 Mission Highlights Resource Tape
Apr. 11, 1996; In English; Videotape: 59 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047712; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-73 Space Shuttle Orbiter Columbia Cmdr. Kenneth D. Bowersox, Pilot Kent V. Rominger, Payload Commander Kathryn C. Thornton, Mission Specialists Catherine G. Coleman Ph.D, and Michael E. Lopez-Alegria, and Payload Specialists Fred W. Leslie Ph.D, Albert Sacco Jr Ph.D, David H. Matthiesen Ph.D, and R. Glynn Holt Ph.D present an overview of their mission. This, the second USA Microgravity Laboratory (USML) Spacelab mission, is the centerpiece of the STS-73 Space Shuttle mission. Some of the experiments being carried on the USML-2 payload cover a variety of scientific disciplines including fluid physics, materials science, biotechnology and combustion science. Video footage includes the following: prelaunch and launch activities; various Spacelab experiments; and reentry and the landing of the Columbia at KSC.
CASI
Space Transportation System Flights; Spacelab; Space Missions; Biotechnology; Combustion; Fluid Dynamics; Microgravity

19960028623 NASA Johnson Space Center, Houston, TX USA
STS–47 Post Flight Press Conference
[1992]; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996047710; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-47 Space Shuttle Orbiter Endeavour Cmdr. Robert L. Gibson, Pilot Curtis L. Brown, Payload Cmdr. Mark C. Lee, Mission Specialists, N. Jan Davis, Jay Apt, Mae C. Jemison, and Payload Specialist, Mamoru Mohri, present an overview of their mission. This the 50th Shuttle flight marks the first NASA mission devoted primarily to Japan. Endeavour carries into Earth orbit Spacelab-J (SL-J), a 23-foot long pressurized laboratory built by the European Space Agency specifically for conducting experiments in a shirt-sleeve environment. SL-J contains 43 experiments, 34 provided by Japan, 7 from the USA and 2 joint experiments. Jemison becomes the first African American woman to fly in space and Mohri first Japanese to fly in space. Video footage includes the following: prelaunch and launch activities; various experiments including protein crystal growth, electronic materials, fluids, glasses and ceramics, metals and alloys, and the effects of microgravity on plants and animals; earth views of Japan, Tokyo Harbor, and Hurricane Bonnie; and the re-entry and landing of the orbiter.
CASI
Space Transportation System Flights; Spacelab; Space Shuttle Orbiters; Protein Crystal Growth; Microgravity; Ceramics

19960029041 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 4
Jan. 14, 1996; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996034084; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), deployed the OAST-Flyer satellite which well perform two days of scientific investigations, checked out the space tools that they will be testing during their two planned spacewalks, and conducted the secondary middeck experiments. The host, Tom Miller, from NBC's Nightside' show, interviewed the astronauts from Charlotte, NC via satellite link. Views include the Japanese Space Flyer Unit (SFU) satellite in its berth in the shuttle's cargo bay with the Earth in the background, Earth cloud cover , and various shots of the shuttle's cargo bay.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Flight Crews; Scientific Satellites; Deployment; Spaceborne Experiments; Checkout; Earth Observations (From Space)

19960049980 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 3
Jun. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085865; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown performing human physiology tests that include the Direct Measurement of the Initial Bone Response to Space Flight. Various members of the crew can be seen exercising on the bicycle ergometer cardiovascular system.
CASI
Space Transportation System Flights; Physical Exercise; Ergometers; Cardiovascular System; Bones

19960049981 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 14
Jul. 03, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085854; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown communicating with two cosmonauts and fellow astronaut Shannon Lucid on Russia's Space Station Mir. During this communication link the two crews participate in a special event surrounding the celebration of the Olympics, including a conversation with Billy Payne, a member of the Atlanta Olympic Organizing Committee. Payne congratulated the crews of Mir and Columbia.
CASI
Space Transportation System Flights; Communication Networks; Communicating; Space Flight; Space Missions; Spacelab

19960049982 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 13
Jul. 02, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085855; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., begin another day of scientific investigations on board Columbia as the Life and Microgravity Spacelab mission continues its endurance record. The seven crew members continue supporting a variety of experiments investigating the effects of microgravity on the human body. Studies looking at muscle strength and energy expenditure and pulmonary function continue throughout the day, as well as the processing of advanced semiconductor materials and alloys in the Advanced Gradient Heating Facility. In an interview with the NBC News, Mission Commander Tom Henricks is shown discussing Columbia's flight and the varied experiments that are being conducted on board. Crew members are shown participating in tests that measure their performance.
CASI
Space Transportation System Flights; Spacelab; Semiconductors (Materials); Pulmonary Functions; Microgravity; Human Body

19960049983 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 11
Jun. 30, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085857; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown conducting a news conference to discuss the progress of the international mission with media from the USA, Canada and Europe. During the press conference, the crew explained the relevance of the experiments conducted aboard the Life Sciences and Microgravity mission, and praised support crews and researchers on Earth who are involved in the mission. Payload Specialist Dr. Robert Thirsk told Canadian journalists of how the research will not only benefit astronauts as they conduct long-term space missions, but also people on Earth. Some of the research will aid studies on osteoporosis and the affects steroids have on bones, and also may help doctors on Earth develop treatments for muscle diseases like muscular dystrophy, Thirsk told reporters in Toronto.
CASI
Space Transportation System Flights; Microgravity; Muscles; Diseases; Bioastronautics; Pulmonary Functions; Human Body; Human Behavior; Bones

19960050035 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 7
Jun. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085861; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., continue as test subjects in a series of investigations that seek to understand the effects of microgravity on the human musculoskeletal system. As they approach the half-way mark of a possible record-setting Space Shuttle mission, the crew of Columbia continues its full schedule of life science and microgravity experiments.
CASI
Space Transportation System Flights; Space Missions; Musculoskeletal System; Microgravity; Life Sciences; Gravitational Effects

19960050036 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 6
Jun. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085862; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown performing status checks on the life and microgravity experiments and conducting a brief maintenance procedure to correct an electrical circuit problem in the Bubble Drop Particle Unit. On this day, the crew is given four hours off to relax after five days of work with the life and microgravity science investigation being conducted on board.
CASI
Space Transportation System Flights; Microgravity; Gravitational Effects

19960050038 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 10
Jun. 29, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085858; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-78 mission, the flight crew, Cmdr. Terence T.

Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., continue to perform in a nearly flawless fashion. The crew is shown completing another of four tests focusing on the effects of microgravity on the vestibular system in the inner ear. In space, the vestibular system sometimes becomes confused as to which way is up and down, leading to nausea and disorientation. Using specially designed head gear to monitor head movement and eye coordination, Linnehan, Brady, Favier, Thirsk and Helms performed tests throughout their shifts to determine how the head and eyes track visual and motion targets in microgravity. The study, is providing scientists with important information about the crews' ability to adapt to microgravity.
CASI
Space Transportation System Flights; Eye (Anatomy); Coordination; Disorientation; Head Movement; Microgravity; Nausea; Spacelab

19960050039 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 9
Jun. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–199685859; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., continue to serve as test subjects for a host of human health and microgravity investigations. The tests concentrate on measurements of lung capacity and muscle strength. In addition, the crew is shown continuing to operate and maintain the experiment equipment.
CASI
Space Transportation System Flights; Muscles; Microgravity; Lungs; Spacelab

19960050047 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 4
Jun. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085864; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., discuss the flight during an interview with the Cable News Network (CNN). The crew then continues research concentrated on the Torque Velocity Dynamometer measurements of leg and arm muscle power, the Astronaut Lung Function Experiment, and effects of microgravity exercise with the bicycle ergometer and its associated instruments.
CASI
Space Transportation System Flights; Physical Exercise; Muscles; Microgravity; Lungs; Ergometers; Dynamometers

19960050092 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 15
Jul. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085853; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-78 mission, the forth of July, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are awakened with Bruce Springsteen's Born in the USA,' and Lee Greenwood's I'm Proud to be an American' to begin another a day on orbit. Mission Commander Tom Henricks responded to Mission Control's wake up call by saying that the five US-born crew members were very proud to be Americans, particularly on the day America celebrates its 220th anniversary. Work in the Spacelab module will continue with investigations into the effects of microgravity on muscle strength and endurance, lung function, and adaptation of the neurovestibular system to a microgravity environment. Henricks and Pilot Kevin Kregel will complete work with a laptop computer designed to test the crew's critical thinking skills and reaction time. They also will test a voice control system that allows them to reposition Columbia's closed-circuit television cameras with verbal cues, keeping their hands free to perform other tasks.
CASI
Space Transportation System Flights; Spacelab; Spacecrews; Microgravity; Lungs

19960050095 NASA Johnson Space Center, Houston, TX USA
STS–78 Post Flight Presentation
Jul. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085850; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The flight crew of the STS-78 mission, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., back from their seventeen day mission, offer a video and still photo presentation of their journey. Included in the presentation are pre-launch, launch, and post-launch activities; experiments performed in the Spacelab; and re-entry; and the landing at KSC. Each of the STS-78 crew members discuss particular aspects of the mission including the 22 LMS life science and microgravity experiments. The experiments address human physiology, metallic alloys and protein crystal growth, and the study of the behavior of fluids and materials processing in the near-weightless environment of space.
CASI
Space Transportation System; Spacelab; Protein Crystal Growth; Microgravity; Gravitational Effects; Life Sciences; Space Flight; Space Missions

19960050096 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 17
Jul. 06, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085851; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventeenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown conducting routine firings of the orbiter's reaction control system jets and checking out its flight control systems and aero surfaces in anticipation of the planned landing at the Kennedy Space Center. Commander Tom Henricks and Pilot Kevin Kregel successfully fire Columbia's 44 reaction control system jets and then tests the aero surfaces that will be used during Columbia's high speed re-entry. This firings procedure is part of a test to prove a concept that may be used on Space Shuttle Discovery's next mission -- STS-82 -- to service the Hubble Space Telescope. The vernier jet firings should raise the orbit without disturbing any payloads on board, or in the case of the Hubble Space Telescope, without placing any force on the telescope's fragile solar arrays.
CASI
Space Transportation System Flights; Space Missions; Space Shuttles; Jet Control; Flight Control

19960050097 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 1
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085867; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Henricks shares a unique view of Columbia's climb to orbit with flight controllers from a small camera that was mounted on the flight deck. The video follows Columbia's flight from just before main engine start

through main engine cutoff, showing the force of main engine and solid booster ignition as experienced by the astronauts.
CASI
Space Transportation System Flights; Launching; Flight Control; Countdown; Climbing Flight; Astronauts

19960050098 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 2
Jun. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085866; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-78 flight, mission controllers wake the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., with 'Free Falling' a song by Tom Petty. Crew members are then shown working with various neurological and cardiovascular experiments inside the Spacelab.
CASI
Space Transportation System Flights; Cardiovascular System; Flight Control; Neurology; Spacelab

19960050102 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 5
Jun. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–199685863; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown in the Spacelab conducting microgravity research. They concentrate on the use of the gradient furnace and the Bubble Drop Particle Unit to study process of manufacturing materials in microgravity , and on studies of human muscles and balance mechanisms. Also, Brady, Thirsk, Linnehan, and Favier conduct musculoskeletal tests that measure arm and hand-grip strength.
CASI
Space Transportation System Flights; Spacelab; Musculoskeletal System; Muscles; Microgravity; Manufacturing; Furnaces

19960050104 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 16
Jul. 05, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–199685852; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are shown continuing their scientific investigations in the Spacelab module. Todays work focuses on how the astronauts' bodies are responding to the microgravity environment after more than two weeks in orbit. The payload crew will continue studies in the adaptation of the neurovestibular system and the musculoskeletal system during spaceflight.
CASI
Space Transportation System Flights; Spacelab; Space Flight; Musculoskeletal System; Microgravity

19960050105 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 8
Jun. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085860; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., continue to conduct experiments primarily focusing on the effects of weightlessness on human physiology. Results from the studies of muscle activity, task performance, and sleep will help future mission planners organize crew schedules for greater efficiency and productivity. For a second consecutive day, Henricks, Kregel, Thirsk, and Favier continue to enter responses to a battery of problem-solving tasks on the Performance Assessment Work Station, a laptop computer.
CASI
Space Transportation System Flights; Sleep; Productivity; Problem Solving; Payloads; Muscular Function; Human Performance; Activity (Biology)

19960050106 NASA Johnson Space Center, Houston, TX USA
STS–78 Flight Day 12
Jul. 01, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996085856; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this twelfth day of the STS-78 mission, the flight crew, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., are awakened by the Canadian national anthem Oh Canada'. This morning, Thirsk is shown delivering a holiday message to Prime Minister Jean Chretien and other dignitaries gathered at Parliament Hill in Ottawa. The crew is than shown celebrating Canada Day' aboard the Space Shuttle. Also this morning, Mission Specialist Susan Helms discusses the progress of Columbia's flight with WBBM Radio in Chicago.
CASI
Space Transportation System Flights; Space Shuttles; Microgravity; Human Body; Human Behavior

19970000500 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 9
Sep. 24, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093676; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz having completed five days of joint operations between the American astronauts and the Russian cosmonauts are seen flying solo once again after undocking from the Mir Space Station. As Atlantis/Mir flew over the Ural Mountains of central Asia, the docking hooks and latches that joined the vehicles together were commanded open and Atlantis drifted slowly away from Mir. Wilcutt then initiated a tail-forward fly-around of the Russian space station. After one and one-half revolutions around Mir, Atlantis' jets were fired in a separation maneuver to enable Atlantis to break away from Mir. On board Atlantis, the six-member crew is settling back into its normal routine with a fairly light schedule for the remainder of the day. Early in the morning as Atlantis flew over the USA, the crew took time to talk with anchors for the CBS Up to the Minute' network news broadcast.
CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Flight; Space Missions

19970000502 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 6
Sep. 21, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093680; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, continue activities aboard Atlantis/Mir as the nine astronauts and cosmonauts work in their second full day of docked operations. The continuing transfer of logistical supplies and scientific hardware can be seen proceeding smoothly. Apt and Walz once again worked with the Active Rack Isolation System experiment to replace a broken pushrod. With that complete, Apt monitors the ARIS experiment as Readdy and Korzun fire small maneuvering jets on their spacecraft to test the ability of ARIS to damp out any disturbances created by the firings. Walz also is continuing his work with the Mechanics of Granular Materials experiment in Atlantis' double Spacehab module. The astronauts used the large format IMAX camera to conduct a photographic survey of Mir from the Shuttle's flight deck windows while Akers shot IMAX movie scenes of Readdy, Wilcutt, and Korzun in the Spektr module.
CASI
Space Transportation System Flights; Supplying; Maneuvers; Mir Space Station; Space Flight; Space Shuttle Missions

19970000503 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 4
Sep. 19, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093682; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John Blaha, Jay Apt, and Carl E. Walz, are seen docking with the Mir Space Station. After two hours of pressure and leak checks, the hatches between the two spacecraft is than opened. The two crews are seen greeting one another to begin five days of joint operations. The rendezvous and docking went flawlessly as Readdy flew the orbiter manually through the final 2,000 feet. Docking occurred within seconds of the pre-planned time and flight controllers reported that only slight oscillations were felt through the Orbiter Docking System as the two spacecraft locked together. Within hours of the hatch opening, crew members John Blaha and Shannon Lucid formally swapped places before going to bed with Blaha becoming a member of the Mir-22 crew and Lucid joining the STS-79 crew to wrap up 179 days as a member of the Mir station. Blaha joins Mir 22 Commander Valery Korzun and Flight Engineer Alexander Kaleri on Mir for the next four months. Soon after the crew members completed their welcoming ceremony, they went to work, hauling bags of water and other supplies from the Shuttle's Spacehab module into the Mir. More than 4000 pounds of equipment and logistical supplies will be transferred to the Mir before Atlantis undocks from the space station.
CASI
Space Transportation System Flights; Spacecraft Docking; Supplying; Mir Space Station; Orbital Rendezvous; Space Shuttle Missions; Space Flight

19970000557 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 11
Sep. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–96–1996093674; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz aboard the Space Shuttle Atlantis glided into the Kennedy Space Center to mark the ending of the fourth docking flight with Mir and the end of Shannon Lucid's record setting 188 day stay on board the Russian space station.
CASI
Space Transportation System Flights; Space Transportation System; Landing

19970000558 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 10
Sep. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093675; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz spent the day stowing equipment and deactivating experiments in preparation for the planned landing at Kennedy Space Center (KSC) in Florida. All systems aboard the orbiter were checked out overnight in preparation for landing day, including testing the flight control surfaces and thruster jets that will be used to maneuver the spacecraft through the atmosphere.
CASI
Space Transportation System Flights; Space Shuttle Missions; Space Flight

19970000559 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 8
Sep. 23, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093677; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, are seen bidding the crew of Mir farewell and then closing the hatches between their two spacecraft in preparation for undocking. The nine astronauts and cosmonauts gathered in the Core Module of the Russian space station for a formal goodbye. With the official ceremony complete, the crewmembers shared a final meal together and exchanged private farewells as Shannon Lucid prepared to return home in Atlantis and her replacement on Mir, John Blaha, began a four month stay on the station. Walz and Apt and Mir 22 Commander Valery Korzun with assistance from Flight Engineer 2 John Blaha, swung the hatches between their spacecraft closed concluding five days of joint operations. The vestibule between Atlantis and Mir was depressurized and leak checks were performed in readiness for undocking.
CASI
Space Transportation System Flights; Mir Space Station; Space Flight; Space Missions

19970000560 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 1
Sep. 16, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093678; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, and Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Shuttle Missions; Space Missions; Space Flight; Launching; Space Transportation System Flights

19970000585 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 3
Sep. 18, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093683; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, start another busy day on orbit activating experiments in the Spacehab module. Readdy and Wilcutt are seen conducting two rendezvous burns while other crew members are seen working in the Spacehab module. The Active Rack Isolation System, or ARIS, is tended to by Walz, who performs a minor maintenance procedure on one of ARIS' vibration-damping pushrods while Akers works with an inventory management system using a bar code reader to more effectively keep track of items that will be transferred back and forth between the Shuttle and the Mir. Apt continues work with a furnace which heats to nearly 1,600 degrees centigrade to melt metal samples for study after the flight. Apt also provides a television tour of the Spacehab, which is twice its normal size for this flight to allow extra room for science experiments and logistical items slated for transfer to Mir.
CASI
Space Transportation System Flights; Vibration Damping; Inventory Management; Space Flight; Space Shuttle Missions

19970000586 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 5
Sep. 20, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–1996093681; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, in the first full day of joint Shuttle/Mir operations begin in with the transfer of a biotechnology investigation and logistical supplies from Atlantis to Mir. The Biotechnology System, an investigation that will study the long-term development of cartilage cells in microgravity, was transported to Mir early this morning. During his planned four-month stay on Mir, John Blaha will take weekly samples of the culture which may provide researchers with information on engineering cartilage cells for possible use in transplantation. They also took time out of their schedules to

talk with Good Morning America's Elizabeth Vargas in a brief interview. Prior to beginning the day's transfer activities, all nine astronauts and cosmonauts participated in a joint planning session to outline the day's schedule.
CASI
Space Transportation System Flights; Supplying; Biotechnology; Microgravity; Space Flight; Space Missions; Space Navigation; Mir Space Station

19970000587 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 7
Sep. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996093679; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz, share a brief video tour of the Mir Space Station with flight controllers, taking a break from the transfer activities that has occupied the astronauts' time during three days of docked operations. Readdy and Apt floated through several of Mir's modules and back into Atlantis' double Spacehab module during the tour pointing out the numerous transfer items stowed on both spacecraft. Readdy, Wilcutt, Lucid and Blaha are seen discussing their mission in an interview with CNN's John Holliman.
CASI
Space Transportation System Flights; Mir Space Station; Flight Control; Space Flight; Space Missions

19970000590 NASA Johnson Space Center, Houston, TX USA
STS–79 Flight Day 2
Sep. 17, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–DK–96–1996093684; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-79 mission, the flight crew, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, are seen in activating the double Spacehab module in the shuttle's payload bay, packing materials and supplies and filling the first four containers of water which will be delivered to the Mir Space Station. Apt and Walz set up the Active Rack Isolation System experiment in the Spacehab, a prototype of an International Space Station payload system designed to eliminate vibrations or disturbances caused by crew activity or engine firings. The double-rack which houses ARIS also contains almost 400 pounds of Russian food which is being used to simulate the weight and mass of a scientific investigation for this first test.
CASI
Space Transportation System Flights; Water; Supplying; Payloads; Space Shuttle Missions

19970005008 NASA Johnson Space Center, Houston, TX USA
STS–78 Mission Highlights Resource Tape
Oct. 09, 1996; In English; Videotape: 57 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005934; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-78 mission, Cmdr. Terence T. Henricks, Pilot Kevin R. Kregel, Payload Cmdr. Susan J. Helms, Mission Specialists Richard M. Linnehan, Charles E. Brady, Jr., and Payload Specialists Jean-Jacques Favier, Pd.D. and Robert B. Thirsk, M.D., present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.
CASI
Space Transportation System Flights; Space Shuttle Orbiters; Spacecrews

19970005009 NASA Johnson Space Center, Houston, TX USA
STS–75 Mission Highlight Resource Tape
Oct. 09, 1996; In English; Videotape: 56 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005930; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-75 mission, Cmdr. Andrew M. Allen, Pilot Scott J. Horowitz, Payload Cmdr. Franklin R. Chang-Diaz, Mission Specialists Maurizio Cheli, Jeffrey A. Hoffman, and Claude Nicollier, and Payload Specialist Umberto Guidoni, present a video over-view of their mission. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters (SRB). Also included are views of activities inside the Firing Control Room at KSC.
CASI
Space Transportation System; Spacecrews; Flight Crews; Countdown; Video Tapes

19970005032 NASA Johnson Space Center, Houston, TX USA
STS–79 Post Flight Presentation
Oct. 09, 1996; In English; Videotape: 43 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005935; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-79 mission, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, and Mission Specialists, Thomas D. Akers, John E. Blaha, Jay Apt, and Carl E. Walz, present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission.
CASI
Space Transportation System; Spacecrews; Space Flight; Space Missions; Space Shuttle Missions; Space Transportation System Flights

19970005042 NASA Johnson Space Center, Houston, TX USA
STS–76 Mission Highlights Resource Tape
Oct. 09, 1996; In English; Videotape: 1 hr. 1 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005931; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-76 mission, Cmdr. Kevin P. Chilton, Pilot Richard A. Searfoss, and Mission Specialists Shannon W. Lucid, Linda M. Godwin, Michael R. Clifford, and Ronald M. Sega, present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, various view of the Mir Space Station can be seen as the shuttle begins its approach and docking. There several views of Godwin and Clifford as they spent six hours spacewalking in Atlantis's cargo bay and on the exterior of the Mir's docking module. The mission ending re-entry and landing can also be seen.
CASI
Space Transportation System; Spacecrews; Spacecraft Docking; Mir Space Station; Flight Crews; Video Tapes

19970005043 NASA Johnson Space Center, Houston, TX USA
STS–77 Post Flight Presentation
Oct. 09, 1996; In English; Videotape: 59 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005932; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-77 mission, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission. Also seen is the deployment and inflation of the Spartan Satellite, experiments being conducted in the Spacehab module, thruster firing to stabilized the shuttle, and the mission ending re-entry and landing of the shuttle Endeavor. The crew than answers questions from the press.
CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Launching; Flight Crews

19970005044 NASA Johnson Space Center, Houston, TX USA
STS–77 Mission Highlights Resource Tape
Oct. 09, 1996; In English; Videotape: 37 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997005933; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-77 mission, Cmdr. John H. Casper, Pilot Curtis L. Brown, Jr., and Mission Specialists Andrew S.W. Thomas, Ph.D., Daniel W. Bursch, Mario Runco, Jr., and Marc Garneau, Ph.D., present a video mission over-view of their space flight. Images include: pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Following an on-time launch, the crew of Endeavor are shown setting up a variety of experiments that will operate for much of the mission. Also seen is the deployment and inflation of the Spartan Satellite, experiments being conducted in the Spacehab module, thruster firing to stabilized the shuttle, and the mission ending re-entry and landing of the shuttle Endeavor.
CASI
Space Transportation System Flights; Spacecrews; Space Missions; Flight Crews

19970012038 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 7
Jan. 18, 1997; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021179; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh first day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Russian Space Station Mir continue to transfer hundreds of pounds of water, supplies, and logistical items to each other's spacecraft. More than 1,300 pounds of water have now been transferred from Atlantis to the Mir to resupply the Russian outpost, along with equipment that will be used by astronaut Jerry M. Linenger during his four-month research mission. A bioprocessing device and an experiment used to grow cartilage cells during astronaut John Blaha's four month stay on the Mir is also transferred to Atlantis for the trip back to Earth. Linenger spends most of the day collecting water samples from the Mir for analysis back on Earth and Blaha continues to exercise on a treadmill on the Mir to stay in shape for his return to Earth and a readaptation to gravity after four months of weightlessness.
CASI
Space Transportation System Flights; Bioprocessing; Adaptation; Gravitation; Mir Space Station; Physical Exercise; Spacecrews; Supplying; Weightlessness

19970012039 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 5
Jan. 16, 1997; In English; Videotape: 16 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021180; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, and the Mir cosmonauts including astronaut Jerry M. Linenger continue with the transfer of food, water and supplies between the two spacecrafts for a second day of joint operations. With both spacecraft in excellent shape, the nine crewmembers float back and forth between Atlantis and the Mir, hauling bags of water, satchels of logistical supplies and experiment hardware. The supplies and hardware will be used by cosmonauts and Linenger during his four months of scientific research aboard the Mir. Linenger, who officially became a Mir crewmember earlier, spends time with his precedessor; John Blaha to get familiar with his new home.
CASI
Space Transportation System Flights; Spacecrews; Supplying; Mir Space Station

19970012041 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 3
Jan. 14, 1997; In English; Videotape: 14 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021182; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, spend most of their workday completing preparations for the rendezvous and linkup of the Space Shuttle with the Mir Space Station. Pilot Brent Jett finishes the checkout of navigation tools that will be used during the rendezvous. Later he joins John Grunsfeld and they install a camera in the Orbiter Docking System to provide television views of the docking target on the Mir. Commander Mike Baker will use this later as he flies Atlantis to its docking with Mir.
CASI
Space Transportation System Flights; Spacecraft Docking; Mir Space Station; Space Missions

19970012042 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 14
Dec. 03, 1996; In English; Videotape: 15 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021157; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, spend this day working with tools inside the crew cabin. The astronauts answer questions on the status of their mission from reporters at the Johnson Space Center in Houston and the Kennedy Space Center in Florida during a news conference.
CASI
Space Transportation System Flights; Astronauts; Space Exploration; Space Flight; Space Missions

19970012043 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 6
Jan. 17, 1997; In English; Videotape: 9 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021155; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, and the cosmonauts of the Mir Space Station continue to transfer hundreds of pounds of food, water and supplies

between each other's spacecraft for a third day. Jerry M. Linenger spent several hours continuing to familiarize himself with his new orbital home, unpacking experiment hardware and helping astronaut John Blaha transfer biomedical samples back to Atlantis for Blaha's trip back to Earth. Blaha is wrapping up his four-month tour of duty in space.
CASI
Space Transportation System Flights; Mir Space Station; Supplying; Space Flight; Space Missions

19970012048 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Post Flight Presentation
Dec. 05, 1996; In English; Videotape: 40 min. 45 sec. playing time, in color, with color
Report No.(s): NONP–NASA–VT–97–1997021172; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The flight crew of STS-80, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave give a post flight presentation of their mission. This presentation is divided into two parts first a slide presentation of still shots, and the second is a video presentation.
CASI
Space Exploration; Manned Space Flight; Space Shuttle Missions; Space Shuttles

19970012049 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–79 Mission Highlight Presentation
Dec. 05, 1996; In English; Videotape: 1 hr. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021171; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The flight crew of STS-79, Cmdr. William F. Readdy, Pilot Terrence W. Wilcutt, Mission Specialists, Thomas D. Akers, Shannon Lucid, Jay Apt, and Carl E. Walz can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. STS-79 is the second Shuttle-Mir mission to carry a SPACEHAB module on board, and the first to carry a double module. The forward portion of the double module will house experiments conducted by the crew before, during and after Atlantis is docked to the Russian space station. The aft portion of the double module primarily houses the logistics equipment to be transferred to the Russian space station. Logistics include food, clothing, experiment supplies, and spare equipment for Mir.
CASI
Space Transportation System Flights; Supplying; Space Missions; Mir Space Station; Spacecrews; Logistics; Launching

19970012050 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 2
Nov. 21, 1996; In English; Videotape: 12 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021169; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this second day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, complete the first major objective of the mission with the deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrometer (ORFEUS) on the reusable Shuttle Pallet Satellite. Release of ORFEUS from Columbia's robot arm came at 8 hours 15 minutes mission elapsed time. Three hours after the release, ground controllers inform the crew that the instrument package appears to be working properly. This begins two weeks of gathering data on the origin and makeup of stars.
CASI
Space Transportation System Flights; Shuttle Pallet Satellites; Spacecrews; Deployment

19970012051 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 3
Nov. 22, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021168; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this third day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen preparing for two spacewalks which are to be performed by Jernigan and Jones. Jernigan, Jones and Musgrave inspect the suits, finding everything in excellent condition for the upcoming spacewalks, which will test techniques and equipment that may be used for future construction of the International Space Station.
CASI
Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight; Space Missions

19970012052 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 12
Dec. 01, 1996; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021159; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this twelfth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, spend the day discussing the failed hatch with ground controllers. The failure of the hatch to properly open causes the cancellation of the second planned spacewalk by Jernigan and Jones. NASA engineers and managers continue to collect and analyze data on what may be causing the failure. The leading candidate is a misalignment of the hatch against the airlock seal.
CASI
Space Transportation System Flights; Misalignment; Hatches; Failure; Air Locks

19970012053 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 13
Dec. 02, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–199721158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this thirteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are notified that the remaining spacewalks for the mission are to be canceled following extensive ground analysis and testing of the airlock hatch. Mission managers could not conclusively identify the problem that was causing the hatch to jam, and decided not to risk unnecessary damage to the hatch or seals.
CASI
Space Transportation System Flights; Hatches; Air Locks; Risk; Space Flight; Space Missions

19970012092 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 10
Jan. 20, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021175; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this tenth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, prepare for the return back to earth. The shuttle's key flight control systems are checked for entry and landing phase of the mission. Commander Mike Baker and Pilot Brent Jett activate one of

Atlantis' three hydraulic power units to test the shuttle's aerosurfaces. Baker and Jett fire Atlantis' steering jets in a routine prelanding checkout. The astronauts also test a medical restraint system in the Spacehab module, placing two crewmembers in the device. Crewmembers then begin to stow items away in the crew cabin, initiate the scheduled deactivation of Spacehab systems and associated hardware.
CASI
Space Transportation System Flights; Spacecrews; Landing

19970012093 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
Galileo Science Update Europa Unveiled
Jan. 17, 1997; In English; Videotape: 49 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021170; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A five person panel discuss newly imaged photographs of the surface of Jupiter's satellite Europa. In the discussion the topics that are covered are: surface features, ice and water formation, erosion, volcanism, thermal dissipation, crustal spreading, plate tectonics, impact sites, exobiology, and life.The run time on this video is 49:48 the air date is 1/17/97.
CASI
Europa; Plates (Tectonics); Volcanology; Exobiology; Ice Formation; Surface Water; Space Exploration

19970012094 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 9
Nov. 28, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this ninth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, begin preparations for two planned spacewalks with the depressurization of the shuttle's cabin from 14.7 pounds per square inch to 10.2 pounds per square inch. This reduces the amount of time Jernigan and Jones will have to prebreath pure oxygen before beginning the spacewalk. The first spacewalk will allow the astronauts to evaluate assembly and maintenance techniques that will be used for construction of the International Space Station.
CASI
Space Transportation System Flights; International Space Station; Pressure Reduction

19970012095 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 15
Dec. 04, 1996; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021156; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fifteenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are seen performing routine mission operations including monitoring experiments and discussing their mission during a news conference. The crewmembers again conduct small engine firings to maintain that distance prior to the retrieval of the satellite.
CASI
Space Transportation System Flights; Engine Design; Conferences; Crews

19970012098 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 4
Jan. 15, 1997; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, prepare for the fifth linkup of the Space Shuttle and the Mir Space Station. The Atlantis docks with Mir at a point 210 nautical miles above the Earth southeast of Moscow, culminating a three-day rendezvous. Two hours after docking, the hatches between Atlantis and Mir are opened and Baker and Mir 22 Commander Valery Korzun share a hug to mark the start of five days of joint operations between the two crews. After an informal welcoming ceremony in the Mir's core module, the STS-81 crewmembers receive a station safety briefing. Linenger becomes the fourth American to occupy a position on the Russian Space Station following the docking of Atlantis to the outpost. During the docked phase of the mission, the two crews transfer nearly three tons of food, water and supplies to Mir.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Mir Space Station; Supplying

19970012099 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 4
Nov. 22, 1996; In English; Videotape: 13 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fourth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, busily begin final preparations for the release of Wake Shield. Jones powers up the shuttle's Canadian-built robot arm and grapples the satellite, while Jernigan powers up the Orbiter Space Vision System, which will be used to track precisely the Wake Shield's location. Cockrell places Columbia in a gravity gradient attitude to minimize disturbances during the release. Jones uses the robot arm to hold Wake Shield in position for a two-and-a-half hour cleansing by atomic oxygen molecules before moving the arm to the deploy position.
CASI
Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight; Space Missions

19970012101 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 8
Jan. 19, 1997; In English; Videotape: 15 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021178; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, bid farewell to Jerry Linenger and cosmonauts of Mir. Prior to hatch closure, the astronauts and cosmonauts conduct a formal farewell ceremony in the Mir Core Module. They then field questions from Russian and U.S. reporters in a joint news conference. Commander Mike Baker, Pilot Brent Jett and Mission Specialists Jeff Wisoff, John Grunsfeld, Marsha Ivins and John Blaha say goodbye to Mir 22 Commander Valery Korzun, Flight Engineer Alexander Kaleri and the newest Mir crewmember, astronaut Jerry Linenger. The hatches on the two spacecraft are closed.
CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Missions

19970012103 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 11
Nov. 30, 1996; In English; Videotape: 13 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, attempt the first of three planned

spacewalks. Jernigan and Jones can be seen in the airlock attempting to open a stuck hatch. After several attempts at trying to open the hatch, the mission management team cancels the spacewalk.
CASI
Space Transportation System Flights; Air Locks; Hatches; Space Flight; Space Missions

19970012104 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 10
Nov. 29, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021161; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, conduct a thorough check of the tools that Jernigan and Jones will be using for their spacewalk. The astronauts also prepare the middeck for the first spacewalk. The first extravehicular activity will test a telescoping crane which will be used during the assembly of the International Space Station to move large components from module to module. The two astronauts will use the crane to move a simulated space station battery back and forth around the cargo bay.
CASI
Space Transportation System Flights; Spacecrews; Extravehicular Activity; International Space Station

19970012105 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 8
Nov. 27, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, focus on additional science investigations with the Wake Shield Facility while it is attached to the shuttle's robot arm. Jones unberths the Wake Shield, and returns it to its resting place in the payload bay after using its instruments to characterize the environment around the shuttle.
CASI
Space Transportation System Flights; Robot Arms; Payloads

19970012106 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 7
Nov. 26, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, retrieve the Wake Shield Facility, completing a successful mission by the free-flying satellite, which was able to grow all seven of its planned thin semi-conductor films over a period of three days. Cockrell flawlessly takes the shuttle to within 35 feet of the satellite and Jones latches the mechanical arm onto the Wake Shield, as the shuttle flies 220 miles above South America.
CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Missions

19970012107 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 6
Nov. 25, 1996; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, are awakened to news from Mission Control that the ORFEUS-SPAS astronomy satellite may be closing in on the Wake Shield Facility satellite slightly faster than originally predicted. The Orbiting and Retrievable Far and Extreme Ultraviolet Spectrometer, or ORFEUS-SPAS satellite, has conducted 77 different astronomical observations since being deployed on launch day. Jernigan reports that the VIEW-CAPL experiment, designed by students at the University of Maryland, is working well. The experiment tests capillary pumped loop technology that one day may be used for more reliable spacecraft cooling systems. The crew also sends down television pictures of the flight deck and address half a dozen questions posed via the NASA Shuttle Web on the Internet.
CASI
Space Transportation System Flights; Astronomy; Launching; Ultraviolet Spectrometers

19970012108 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 5
Nov. 24, 1996; In English; Videotape: 27 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021166; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-80 mission, the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, focus on maintaining formation and working with in-cabin microgravity experiments. Jernigan and Rominger work with the Visualization in an Experimental Water Capillary Pumped Loop (VIEW-CAPL) experiment. Later in the day Musgrave is interviewed by CBS News.
CASI
Space Transportation System Flights; Supplying; Spacecrews; Microgravity; Gravitational Effects

19970012110 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 1
Jan. 12, 1997; In English; Videotape: 15 min. playing time, in color, with sound Report No.(s): NONP–NASA–VT–97–1997021176; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This first day of the STS-81 mission begins with the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.
CASI
Space Transportation System Flights; Countdown; Launching; Ignition; Space Missions

19970012111 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 2
Jan. 13, 1997; In English; Videotape: 15 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021177; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger, continue to close in on The Mir Space Station. Payload work involves activating a radiation monitor in addition to the Biorack multipurpose facility which is designed to investigate the effects of microgravity and radiation on plant, tissue, cell and fungus growth. Mission

Specialists Jeff Wisoff and John Grunsfeld spend much of their work day setting up and performing initial work in the experiment's glove box.
CASI
Space Transportation System Flights; Spacelab Payloads; Mir Space Station; Spacecrews; Exobiology

19970012159 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–81 Flight Day 9
Jan. 20, 1997; In English; Videotape: 15 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021174; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-81 mission, the flight crew, Cmdr. Michael A. Baker, Pilot Brent W. Jett, Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John Blaha, are flying on their own after undocking the Mir Space Station. Following the separation Pilot Brent Jett initiates a two-revolution flyaround of the Russian complex at a distance of about 560 feet. Jett fires maneuvering jets to separate Atlantis from Mir for the final time until May, when the shuttle will return on STS-84 to deliver astronaut Mike Foale to the outpost as Jerry M. Linenger's replacement.
CASI
Space Transportation System Flights; Mir Space Station; Spacecrews; Space Flight; Space Missions

19970012160 National Aeronautics and Space Administration. Lyndon B. Johnson Space= Center, Houston, TX USA
STS–80 Flight Day 1
Nov. 20, 1996; In English; Videotape: 15 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–97–1997021173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This first day of the STS-80 mission, begins with the flight crew, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave, performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, and launch. The film ends with the separation of the Solid Rocket Boosters (SRB) from the shuttle.
CASI
Space Transportation System Flights; Launching; Space Flight

19970017650 NASA Johnson Space Center, Houston, TX USA
STS–80 Mission Highlights Resource Tape
Feb. 27, 1997; In English; Videotape: 50 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026055; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-80, Cmdr. Kenneth D. Cockrell, Pilot Kent V. Rominger, Mission Specialists, Tamara E. Jernigan, Thomas D. Jones, and F. Story Musgrave are seen performing pre-launch activities such as eating the traditional breakfast, being suited-up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including the countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters (SRB) from the shuttle. The crew completes the first major objective of the mission with the deployment of the Orbiting Retrievable Far and Extreme Ultraviolet Spectrometer (ORFEUS) on the reusable Shuttle Pallet Satellite. The crew than begins final preparations for the release of Wake Shield. Jones powers up the shuttle's Canadian-built robot arm and grapples the satellite, while Jernigan powers up the Orbiter Space Vision System, which will be used to track precisely the Wake Shield's location. Cockrell places Columbia in a gravity gradient attitude to minimize disturbances during the release. Jones uses the robot arm to hold Wake Shield in position for a two-and-a-half hour cleansing by atomic oxygen molecules before moving the arm to the deploy position. The failure of the hatch to properly open causes the cancellation of all EVA's planned for this mission by Jernigan and Jones. The mission ends with the shuttle landing at the Kennedy Space Center.
CASI
Space Transportation System Flights; Space Shuttle Orbiters; Space Shuttle Payloads; Spacecrews; Flight Crews; Far Ultraviolet Radiation; Extravehicular Activity; Deployment

19970017656 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 05 Highlights
Feb. 15, 1997; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026063; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fifth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley completing the checkout of spacesuits well ahead of schedule, allowing them to start the second spacewalk of the flight. Harbaugh and Tanner went right to work, replacing a degraded Fine Guidance Sensor and a failed Engineering and Science Tape Recorder with new spares. The astronauts also installed a new unit known as the Optical Control Electronics Enhancement Kit, which will further increase the capability of the new Fine Guidance Sensor. During the spacewalk, the astronauts and flight controllers took note of cracking and wear incurred by thermal insulation which protects several areas of the telescope.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Flight Control; Guidance Sensors; Spacecrews; Thermal Insulation

19970017657 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 07 Highlights
Feb. 17, 1997; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026061; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The seventh day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing their third spacewalk of the mission by emerging from Discovery's airlock. Their first task is the replacement of a Solar Array Drive Electronics package which is used to control the positioning of Hubble's solar arrays. Harbaugh and Tanner next venture to the top of the telescope where they replaced covers over Hubble's magnetometers, which are used to sense the telescope's position in relation to the Earth through data acquired from the Earth's magnetic field. The spacewalking astronauts then place thermal blankets of multi-layer material over two areas of degraded insulation around the light shield portion of the telescope just below the top of the astronomical observatory.
CASI
Space Transportation System; Astronomical Observatories; Geomagnetism; Magnetometers; Solar Arrays; Thermal Insulation; Spacecrews; Hubble Space Telescope

19970017658 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 08 Highlights
Feb. 18, 1997; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026060; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The eighth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing the final spacewalk of the mission. Lee and Smith attach several thermal insulation blankets to three equipment compartments at the top of the Support Systems Module section of Hubble which contain key data processing, electronics and scientific instrument telemetry packages. Following the completion of that work, Lee and Smith briefly return to the airlock while flight controllers evaluated a possible glitch with one of four Reaction Wheel Assembly units in Hubble used to maneuver the telescope for its scientific observations. A spare Reaction Wheel Assembly was available aboard Discovery for a swap out during an additional spacewalk had it been

necessary, but a few hours later, after further analysis, payload controllers reported that the Reaction Wheel Assembly was in excellent shape and operating at the proper speed.
CASI
Space Transportation System; Air Locks; Spacecrews; Thermal Insulation; Hubble Space Telescope; Space Shuttle Missions; Space Shuttle Payloads; Space Transportation System Flights

19970017659 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 09 Highlights
Feb. 19, 1997; In English; Videotape: 18 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026059; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The ninth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley placing the Hubble Space Telescope back into its own orbit to continue its investigation of the far reaches of the universe. At the time of deployment, the Shuttle was at an altitude of 334 nautical miles over the southwest coast of Africa. Hubble is now operating at the highest altitude it has ever flown, a 335 by 321 nautical mile orbit. A few hours after Hubble's deployment, the crew receives a congratulatory phone call from NASA Administrator Daniel Goldin. The four spacewalking crewmembers also answered questions from several news networks regarding their work over the past week to upgrade the telescope.
CASI
Space Transportation System; Hubble Space Telescope; Deployment; Spacecrews; Space Exploration; Space Shuttle Missions; Space Transportation System Flights

19970017664 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 06 Highlights
Feb. 16, 1997; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026062; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The sixth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley conducting the third spacewalk of the mission. Lee and Smith are seen removing and replacing a Data Interface Unit which provides command and data interfaces between Hubble's data management system and other subsystems. They also replace an old reel-to-reel style Engineering and Science Tape Recorder with a new digital Solid State Recorder (SSR) that will allow simultaneous recording and playback of data. The final task for Lee and Smith is the change out of one of four Reaction Wheel Assembly units that use spin momentum to move the telescope toward a target and maintain it in a stable position.
CASI
Space Transportation System; Space Shuttle Missions; Space Transportation System Flights; Spacecrews; Reaction Wheels

19970017665 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 10 Highlights
Feb. 20, 1997; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026058; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The tenth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley checking out Discovery's flight control systems in preparations for returning to Earth. The seven astronauts stow equipment and prepare for the planned landing at the Kennedy Space Center. Before wrapping up what is expected to be their final day in orbit, the astronauts held a press conference to discuss the flight, which set a record five spacewalks conducted to service the Hubble Space Telescope for the second time.
CASI
Space Transportation System; Hubble Space Telescope; Spacecrews; Space Flight; Space Shuttle Missions; Space Transportation System Flights

19970017672 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 01 Highlights
Feb. 11, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026068; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The first day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley performing pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch, and arm retraction, launch activities are shown including the countdown, engine ignition, launch, shuttle roll maneuver, and then the separation of the Solid Rocket Boosters (SRB) from the shuttle. Once in orbit the cargo bay doors are seen opening.
CASI
Space Transportation System Flights; Space Shuttle Missions; Space Shuttle Payloads; Countdown; Spacecrews; Launching; Ignition

19970017673 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 02 Highlights
Feb. 12, 1997; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026066; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On the second day of the STS-82 mission, the crew Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley survey the payload bay with the Shuttle's 50-foot remote manipulator system (RMS). Hawley puts the arm through its paces to verify it's ability to capture the Hubble Space Telescope (HST). to prepare for the up coming spacewalks, the astronauts assemble on the middeck to checkout tools they will use while servicing the telescope.
CASI
Space Transportation System Flights; Space Shuttle Payloads; Spacecrews; Remote Manipulator System; Hubble Space Telescope

19970017674 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 03 Highlights
Feb. 13, 1997; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The third day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley successfully retrieving the Hubble Space Telescope. Hawley than lowers the 12-ton observatory onto the Flight Support System berthing platform in Discovery's cargo bay, where it is latched in place for servicing. The astronauts are then seen in the mid-deck preparing for the first of four spacewalks designed to service and upgrade the scientific capabilities of the Hubble Space Telescope.
CASI
Space Shuttle Missions; Space Transportation System Flights; Hubble Space Telescope; Spacecrews; Space Flight

19970017683 NASA Johnson Space Center, Houston, TX USA
STS–82 Post Flight Presentation
Mar. 11, 1997; In English; Videotape: 33 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026056; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-82 crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley present a video and still picture over-view of their mission. Included in the presentation are the following: the pre-launch activities such as eating the traditional breakfast, being suited up, and riding out to the launch pad, various panoramic views of the shuttle on the pad, the countdown, engine ignition, launch, shuttle roll maneuver, separation of the Solid Rocket Boosters (SRB) from the shuttle,

survey of the payload bay with the Shuttle's 50-foot remote manipulator system (RMS), the successful retrieve of the Hubble Space Telescope (HST), EVA's to repair HST, release of HST, and the shuttle's landing.
CASI
Space Shuttle Payloads; Space Transportation System Flights; Space Shuttle Missions; Spacecrews; Flight Crews; Hubble Space Telescope; Extravehicular Activity

19970017684 NASA Johnson Space Center, Houston, TX USA
STS–82 Day 04 Highlights
Feb. 14, 1997; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997026064; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fourth day of the STS-82 mission begins with the crew, Commander Kenneth D. Bowersox, Pilot Scott J. Horowitz, Payload Commander Mark C. Lee, and Mission Specialists Gregory J. Harbaugh, Steven L. Smith, Joseph R. Tanner, and Steven A. Hawley in preparations for conducting the second servicing mission of the Hubble Space Telescope. The first spacewalk was slightly delayed to enable ground controllers to assess the unexpected movement of one of Hubble's solar arrays, which slewed from a horizontal to a vertical position as Discovery's airlock was depressurized. Astronauts Mark Lee and Steve Smith are seen working in the cargo bay of the Shuttle Discovery. Their spacewalk to upgrade the Hubble Space Telescope lasts six hours and 42 minutes. At the conclusion of their EVA, HST has graded science instruments for an expanded view of the universe.
CASI
Space Transportation System Flights; Space Transportation System; Space Missions; Spacecrews; Astronauts

19970021175 NASA Johnson Space Center, Houston, TX USA
STS–83 Postflight Presentation
Jun. 09, 1997; In English; Videotape: 21 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997033261; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-83 mission, Cmdr James D. Halsell, Pilot Susan S. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Donald Thomas and Michael Gernhardt, and Payload Specialists Roger Crouch and Greg Linteris, offer a video and still photo presentation of their journey. Included in the presentation are an introduction of the crew and a short briefing by Cmdr. Halsell, the launch and ascent narrated by Still, Spacelab Module narration by Voss, mission control narrated by Cmdr. Halsell, experiment narration by Thomas and Crouch. Also included are video views of the Baja Penninsula, Sinai Penninsla, pivot-point irrigation circles, Comet Hale-Bopp, and the cross-wind landing. The crew poses outside the shuttle for photos. Crew members discuss still photos taken during the mission, including shots of sunsets, the Grand Bahamas Island, Nile River, Baja Penninsula, Indis River of India, and Guadalupe Island.
CASI
Space Transportation System Flights; Spacelab; Spacecrews; Photographs; Launching; Comets

19970022115 NASA Johnson Space Center, Houston, TX USA
STS–82 Mission Highlight Presentation
Jun. 02, 1997; In English; Videotape: 59 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997032904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-82 is the second in a series of planned service missions to the Hubble Space Telescope (HST). The flight crew of STS-82, Cmdr. Kenneth D. Bowersox, Pilot Scott J. Horowitz, Mission specialists, Mark C. Lee, Steven A. Hawley, Gregory J. Harbaugh, Steven L. Smith, and Joseph R. Tanner can be seen performing pre-launch activities preparing for the night launch. The crew meets the press for pre-launch photos before being transported to the launch pad. Several views can be seen of the final inspection team on the O level and the crew being readied in the 'white room'. Launch activities such as the oxygen vent hood retraction, liftoff, SRB separation, and personnel activities in the Houston Integrated Mission Control room are viewed. Subsequent footage is provided of the crew's activities during the HST rendezvous and docking, Extravehicular Activities (EVA's) preparation and EVA numbers 1, 3 and 5. During the first EVA the earth can be seen clearly in a reflection off of HST's offshroud during its 60th orbit crossing the equator. The HST deployment and views of the Hale-Bopp comet are clearly seen before Discovery's reentry and landing. After reentry a beautiful view of Discovery moving at 10,400 mph can be seen looking east from Mission Control. The ususal twin sonic boom precedes Discovery's touchdown on runway 15 at Kennedy Space Center. This second HST service mission orbited Earth 150 times and traveled 1.4 million miles.
CASI
Extravehicular Activity; Hubble Space Telescope; Launching; Space Transportation System Flights; Space Maintenance

19970027209 NASA Johnson Space Center, Houston, TX USA
STS–81 Mission Highlights Resources Tape
Sep. 25, 1997; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047950; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-81 Space Shuttle Orbiter Atlantis Commander Michael A. Baker, Pilot Brent W. Jett Jr., and Mission Specialists, John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and John M. Linenger present an overview of their mission. Video footage includes the following: prelaunch and launch activities, the crew eating breakfast, shuttle launch, on orbit activities, rendezvous with Mir, Shuttle/Mir joint activities, undocking, and the shuttle landing.
CASI
Space Transportation System Flights; Space Shuttle Orbiters; Mir Space Station; Flight Crews; Spacecraft Docking

19970027210 NASA Johnson Space Center, Houston, TX USA
STS–83 Day 02
Jul. 02, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047945; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr, Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen setting up experiments for studying the properties of combustion and the behavior of metals, materials, and fluids in the absence of gravity. The astronauts are split into red and blue teams, each working a 12-hour shift, to allow around-the-clock operations in the pressurized Spacelab science module in Columbia's cargo bay. Thomas is seen activating the Large Isothermal Furnace (LIF) experiment and the Expedite the Processing of Experiments to the International Space Station (EXPRESS) Rack while Linteris continues the activation of Protein Crystal Growth experiments.
CASI
Space Transportation System Flights; Spacelab; Space Processing; Spacelab Payloads; Spaceborne Experiments; Low Gravity Manufacturing

19970027211 NASA Johnson Space Center, Houston, TX USA
Pressure Wave Propagation in a Screech Cycle
Sep. 25, 1997; In English; Videotape: 6 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047951; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The screech noise generation process from supersonic under expanded jets, issuing from a sonic nozzle pressure ratio of 2.4 and 3.3 (expanded Mach number, M(sub j) = 1.10 and 1.42), is investigated experimentally. Spark Schlieren visualization at different phases of the screech cycle are clearly shown. The rms pressure fluctuation at the screech frequency is measured in the near field region by a traversing microphone.
CASI
Supersonic Jet Flow; Sonic Nozzles; Nozzle Flow; Noise Generators; Wave Propagation; Elastic Waves; Gas Jets; Sound Waves; Sound Pressure; Oscillating Flow; Jet Aircraft Noise; Noise Reduction

19970027233 NASA Johnson Space Center, Houston, TX USA
STS–71 Mission Highlights Resources Tape
Sep. 25, 1997; In English; Videotape: 1 hour 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047949; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-71 Space Shuttle Orbiter Atlantis Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists, Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, and Payload Specialists, Norman E. Thagard, Vladimir Dezhurov, and Gennadiy Strekalov present an overview of their mission. It's primary objective is the first Mir docking with a space shuttle and crew transfer. Video footage includes the following: prelaunch and launch activities; the crew eating breakfast; shuttle launch; on orbit activities; rendezvous with Mir; Shuttle/Mir joint activities; undocking; and the shuttle landing.

CASI

Space Transportation System Flights; Flight Crews; Spacecraft Docking; Space Shuttle Orbiters; Mir Space Station

19970027234 NASA Johnson Space Center, Houston, TX USA

STS–83 Mission Highlights Resources Tape

Jun. 08, 1997; In English; Videotape: 44 min. 36 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997047948; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-83 mission flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch present an overview of their mission. The primary payload is the Microgravity Science Laboratory (MSL), which is a collection of microgravity experiments housed inside a European Spacelab Long Module (LM). MSL features 19 materials science investigations in 4 major facilities. These facilities are the Large Isothermal Furnace, the EXpedite the PRocessing of Experiments to the Space Station (EXPRESS) Rack, the Electromagnetic Containerless Processing Facility (TEMPUS), and the Coarsening in Solid-Liquid Mixtures (CSLM) Facility, the Droplet Combustion Experiment (DCE); and the Combustion Module-1 Facility. Additional technology experiments will be performed in the Middeck Glovebox (MGBX) developed by the Marshall Space Flight Center (MSFC) and the High-Packed Digital Television (HI-PAC DTV) system will be used to provide multi-channel real-time analog science video. Pre-flight, launch, and orbital footage is followed a discussion of the spaceborne experiments aboard the MSL. The end footage shows the shuttle's prelanding checkout, reentry, and landing.

CASI

Space Transportation System Flights; Spaceborne Experiments; Spacelab; Space Processing; Low Gravity Manufacturing; Spacelab Payloads

19970027235 NASA Johnson Space Center, Houston, TX USA

STS–83 Day 04

Jul. 04, 1997; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997047947; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr, Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris, and Roger K. Crouch complete science work aboard Spacelab module and begin deactivating experiments in preparations for an early return to Earth.

CASI

Space Transportation System Flights; Spacelab; Spaceborne Experiments; Space Processing; Low Gravity Manufacturing; Spacelab Payloads

19970027236 NASA Johnson Space Center, Houston, TX USA

STS–83 Day 03

Jul. 03, 1997; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997047946; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch continue to conduct experiments. The crew of the Microgravity Science Laboratory mission has successfully activated all Spacelab facilities with help from the science teams on the ground.

CASI

Space Transportation System Flights; Spacelab; Space Processing; Spacelab Payloads; Spaceborne Experiments

19970027237 NASA Johnson Space Center, Houston, TX USA

STS–83 Day 01

Jul. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997047944; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Michael L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.

CASI

Space Transportation System Flights; Spacecraft Launching; Spacelab; Spaceborne Experiments; Astronauts; Space Processing; Preflight Operations

19970027679 NASA Johnson Space Center, Houston, TX USA

STS–84 Day 09 Highlights

May 23, 1995; In English; Videotape: 15 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997053793; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this the ninth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) spend the morning testing Atlantis' flight control surfaces and thruster jets to ensure they are ready to support the Shuttle's high speed return to Earth. The astronauts' final day on orbit is devoted to stowing equipment and finishing experiment work in the Spacehab module in the cargo bay. In addition to 2,600 pounds of items being brought back from the Mir Space Station, Atlantis is ferrying home astronaut Jerry Linenger, who is returning to Earth after 122 days on the Mir. If Atlantis lands as planned Saturday, Linenger will have logged 132 days in space on this flight, the second longest single spaceflight by a U.S. astronaut behind the record 188-day stay in orbit by Shannon Lucid last year.

CASI

Space Transportation System Flights; Spacecrews; Space Flight; Mir Space Station; Control Surfaces; Bays (Structural Units); Astronauts

19970027680 NASA Johnson Space Center, Houston, TX USA

STS–84 Post Flight Presentation

May 24, 1995; In English; Videotape: 55 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997053794; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-84 mission flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu; Carlos I. Noriega; Elena V. Kondakova; Jerry M. Linenger, present a post flight analysis of their mission through the use of color slides and video footage. Prelaunch and launch activities are shown and briefly discussed. The astronauts take turns talking about different aspects of their specific roles during the mission.

CASI

Space Transportation System Flights; Spacecrews; Postflight Analysis; Payloads; Astronauts

19970027685 NASA Johnson Space Center, Houston, TX USA

STS–84 Day 05 Highlights

May 19, 1995; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997053789; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue their work through the overnight hours, transferring water, hardware and logistical supplies to and from each other's spacecraft. It is the third day of joint operations between the Shuttle and the Russian Space Station crewmembers. As planned, the newest member of the Mir 23 crew, Mike Foale, and astronaut Jerry Linenger continue their handover activities to prepare Foale for his 4 month stay on Mir. Foale will serve aboard the Russian outpost until he is replaced by astronaut Wendy Lawrence during Atlantis' next visit to Mir in September.
CASI
Space Transportation System Flights; Spacecrews; Space Stations; Payloads; Astronauts

19970027686 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 06 Highlights
May 20, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053790; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continue the transfer supplies In all they moved about 3 tons of supplies and items earmarked for use by U.S. astronaut Mike Foale during his four month stay on the Mir as well as those designated for return to Earth for researchers and officials of the Russian Space Agency.
CASI
Space Transportation System Flights; Spacecrews; Payloads; Astronauts

19970027687 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 07 Highlights
May 21, 1995; In English; Videotape: 21 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053791; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu; Carlos I. Noriega; Elena V. Kondakova; Jerry M. Linenger (download) and C. Michael Foale (upload) are seen saying their final farewells and closing the hatches on their two spacecraft. This wrap up five days of joint operations in which about 7,000 pounds of supplies, experiments and water were transferred between the two vehicles, as well as astronaut Mike Foale, who swapped places with Jerry Linenger for the start of a four-month research mission on the Russian outpost. The final handshakes by Commanders Charlie Precourt and Vasily Tsibliev came moments before the hatches between Atlantis and Mir swung shut.
CASI
Space Transportation System Flights; Spacecrews; Payloads; Astronauts

19970027701 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 08 Highlights
May 22, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053792; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) sing The Cosmonauts' Song' to Mir-23 crew members Vasily Tsibliev, Alexander Lazutkin and astronaut Mike Foale, who is beginning his four-month research mission on Mir. Foale and his new crewmates played music as Atlantis departed following the joint phase of the flight. Atlantis' undocking from Mir was modified from previous joint missions in that a flyaround of the station for photographic purposes was not conducted. Instead, Pilot Eileen Collins guided Atlantis below the Mir after the two spacecraft completed their physical separation, stopping three times at distances of 90, 300 and 1,500 feet to collect data from a European sensor device designed to assist future rendezvous of a proposed European Space Agency resupply vehicle with the International Space Station. Once the data collection was completed, the shuttle took advantage of natural orbital mechanics to drift beneath and out in front of Mir.
CASI
Space Transportation System Flights; Spacecrews; Orbital Mechanics; International Space Station; Astronauts; Cosmonauts

19970027702 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 04 Highlights
May 18, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053788; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) spend their first full day of work together conducting science investigations and transferring equipment from one spacecraft to the other. The Spacehab double module at the rear of Atlantis' payload bay was the focus of activity today as crew members conducted science experiments in the Biorack facility and transferred items to and from the Mir Space Station. In an interview with CBS News, Precourt and Tsibliev praise the sixth joint docking mission between the U.S. and Russia, indicating it is serving as a worthwhile exercise to prepare for the assembly of the International Space Station. Precourt also said the Mir appears to be in good condition despite recent systems problems, and said Mir will be a perfectly safe home for Foale for his stay on orbit.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Spacelab Payloads; Mir Space Station

19970027716 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 03 Highlights
May 17, 1995; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053787; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) guide Atlantis to its docking with the Mir to cap off a 42-hour chase. Precourt greets Mir 23 Commander Vasily Tsibliev and, after embraces and handshakes, the crew members make their way into the Mir Core Module for a brief welcoming ceremony. During the ceremony, the Shuttle crew give Tsibliev and Flight Engineer Alexander Lazutkin baseball caps emblazoned with the STS-84 crew insignia as well as the traditional Russian offering of bread, tea and salt. Then, the ten astronauts and cosmonauts get down to business, first conducting a joint safety briefing to familiarize themselves with each other's craft.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Cosmonauts; Astronauts

19970027717 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 02 Highlights
May 16, 1995; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053786; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) continues to close on the Mir Space Station in anticipation of the sixth linkup between the Shuttle and the Russian space complex. Preparations for the docking are nearly complete as Atlantis' seven astronauts worked around the clock to

check out the rendezvous tools that will be used during the final phase of the approach to Mir.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Mir Space Station; Astronauts

19970027718 NASA Johnson Space Center, Houston, TX USA
STS–84 Day 01 Highlights
May 15, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997053785; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-84 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr, Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, Jerry M. Linenger (download), and C. Michael Foale (upload) can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Payloads; Launching; Ignition; Spacecrews

19970028433 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 08 Highlights
Jul. 08, 1995; In English; Videotape: 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch conduct status checks and perform video documentation of some of the Microgravity Science Laboratory experiments and activities in the Spacelab. The first part of Pilot Susan Still's day involves monitoring orbiter systems and working an in-flight maintenance procedure with the Shuttle Amateur Radio Experiment (SAREX).
CASI
Space Transportation System Flights; Spaceborne Experiments; Spacelab; Microgravity

19970028439 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 02 Highlights
Jul. 02, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051156; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are seen continuing the payload activation process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing.
CASI
Space Transportation System Flights; Spacecrews; Payloads

19970028440 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 03 Highlights
Jul. 03, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051157; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are seen in the Microgravity Science Laboratory aboard Space Shuttle Columbia activating the final experiment facility and beginning additional experiments, among the more than 30 investigations to be conducted during the 16-day mission.
CASI
Space Transportation System Flights; Spacecrews; Space Shuttles; Payloads

19970028441 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 04 Highlights
Jul. 04, 1995; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch have settled into a comfortable pace in their on-orbit home, Columbia. They continue their around-the-clock efforts with the experiments being flown as part of the Microgravity Science Laboratory payload. With no significant Shuttle system issues being worked, the crew is able to devote all of its efforts toward the science objectives of the flight.
CASI
Space Transportation System Flights; Payloads; Spacecrews

19970028442 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 06 Highlights
Jul. 06, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch continue their around-the-clock work with the Microgravity Science Laboratory experiments. During the morning period, Thomas works with the Large Isothermal Furnace experiment and the Glovebox unit. Columbia's systems continue to operate properly, providing a stable platform for microgravity science operations.
CASI
Space Transportation System Flights; Spacecrews; Payloads; Gravitational Effects

19970028458 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 05 Highlights
Jul. 05, 1995; In English; Videotape: 10 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051159; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue their around-the-clock science efforts.
CASI
Space Transportation System Flights; Payloads; Space Flight; Space Shuttles

19970028460 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 01 Highlights
Jul. 01, 1995; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-94 mission, the flight crew (the orginial crew of mission STS-83), Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm

retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Space Shuttle Boosters; Launching; Booster Rocket Engines

19970028466 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 14 Highlights
Jul. 14, 1995; In English; Videotape: 14 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr, Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue to focus on Columbia's Microgravity Science Laboratory mission. The seven astronauts work around the clock on two shifts supporting the more than 30 experiments in the Spacelab module. Work in the laboratory includes plant experiment and protein crystal growth status checks as well as work in the glovebox on the Coarsening in Solid-Liquid Mixtures experiment.
CASI
Space Transportation System Flights; Spacecrews; Spacelab; Protein Crystal Growth; Microgravity

19970028467 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 09 Highlights
Jul. 09, 1995; In English; Videotape: 13 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch spend their morning in the Spacelab module working on several experiments. Thomas has been working with the Large Isothermal Furnace (LIF), a vacuum-heating furnace designed to heat large samples uniformly; the Middeck Glovebox (MGBX) unit; and the Internal Flows in a Free Drop Experiment (IFFD). The IFFD experiment involves containerless processing of materials using acoustic positioning techniques.
CASI
Space Transportation System Flights; Spacelab; Spacecrews; Payloads; Acoustic Levitation

19970028468 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 12 Highlights
Jul. 12, 1995; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051166; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch focus on developing better methods for the efficient use of fossil fuels while reducing emissions and air pollutants. The seven-astronaut crew - divided into two teams - provides on-orbit assistance to ground controllers throughout the mission conducting these, and as many as 30 other, experiments in the Spacelab pressurized module. The goal is to emulate what laboratory work will be like on the future International Space Station.
CASI
Space Transportation System Flights; Spacecrews; Spacelab; International Space Station

19970028469 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 11 Highlights
Jul. 11, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-83 mission, the flight crew, Cmdr. James D. Halsell, Jr. Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialist Gregory T. Linteris and Roger K. Crouch conduct an interview with CBS' Up to the Minute' program during which they discuss the activities and progress that has been made so far on the flight.
CASI
Space Transportation System Flights; Spacecrews; Microgravity Applications; Space Flight

19970028470 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 10 Highlights
Jul. 10, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch are more than one week into mission. The seven crewmembers aboard Columbia are continuing their around-the-clock science investigations in the Spacelab module, focusing on how various materials and liquids change and behave in a microgravity environment.
CASI
Space Transportation System Flights; Spacecrews; Spacelab; Microgravity

19970028507 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 07 Highlights
Jul. 07, 1995; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051161; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch continue their around-the-clock scientific effort to examine how various materials and liquids change and behave in the weightless environment of space. With Columbia providing a stable platform for scientific activity, the seven-member crew has been able to devote its full attention to the more than 30 Microgravity Science Laboratory (MSL) experiments on board.
CASI
Space Transportation System Flights; Spacecrews; Payloads; Microgravity

19970028512 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 15 Highlights
Jul. 15, 1995; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051168; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifteenth day of the STS-94 mission the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch express thanks to all those on the ground who prepared the shuttle, crew, and payload for an unprecedented repeat launch to complete work with the Microgravity Science Laboratory. The first flight of Columbia with the laboratory, then designated mission STS-83, was cut short due to a faulty fuel cell.
CASI
Space Transportation System Flights; Spacecrews; Space Shuttle Orbiters; Microgravity

19970028513 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 16 Highlights
Jul. 16, 1995; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997051169; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission

Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch begin closing up shop in preparation for return to the Kennedy Space Center in Florida.
CASI
Space Transportation System Flights; Spacecrews; Astronauts; Microgravity; Space Flight

19970029326 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 01 Highlights
Aug. 07, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047849; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Spacecrews; Countdown; Launching; Space Exploration; Space Flight

19970035946 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 06 Highlights
Aug. 12, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047847; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason today continue their work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason, today continues his work with the Microgravity Vibration Isolation Mount which uses magnets to levitate a platform and protect sensitive microgravity processing experiments from vibrations.
CASI
Space Transportation System Flights; Space Transportation System; Microgravity; Bioreactors

19970035947 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 05 Highlights
Aug. 11, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047848; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason once again test the small robotic arm serving as a prototype for one that will fly as part of the Japanese Experiment Module on the International Space Station. Simulated orbital replacement unit detachment and reattachment will be the focus. Bob Curbeam discusses the progress of the flight with a television station in St Louis, before continuing his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Immediately after Curbeam's interview, Canadian Payload Specialist Bjarni Tryggvason is set to talk to elementary and high school students at a summer camp in SASkatchewan, Canada.
CASI
Space Transportation System Flights; Space Transportation System; Robot Arms; Japanese Space Program; International Space Station

19970035948 NASA Johnson Space Center, Houston, TX USA
STS–84 Mission Highlights Resource Tape
Jun. 24, 1997; In English; Videotape: 58 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996047850; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-84 mission flight crew, Cmdr. Charles J. Precourt, Pilot Eileen M. Collions, Payload Cmdr. Jean-Francois Clervoy (ESA), Mission Specialists Edward T. Lu, Carlos I. Noriega, Elena V. Kondakova, and Jerry M. Linenger can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The rendezvous with the Mir Space Station, along with onboard activities, and landing are included. Also included are shuttle-to-ground transmission between the crew and Mission Control and various earthviews.
CASI
Space Transportation System Flights; Mir Space Station; Launching; Ignition; Countdown

19970035955 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 10 Highlights
Aug. 16, 1997; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047840; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason watch over an experiment designed to study how cooling systems operate in space. With operating problems resolved on the Two-Phase Fluid Loop Experiment, or TPFLEX (teepee flex), investigators expect to get all the data planned for the mission. Robinson later assisted, where necessary, with the CRISTA-SPAS rendezvous activities.
CASI
Space Transportation System Flights; Space Transportation System; Payloads

19970035956 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 11 Highlights
Aug. 17, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047841; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason finish packing up the last of the loose items in the crew cabin, and the shuttle's payload bay doors will be closed. Returning to Earth with the astronauts will be the German-built Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere-Shuttle Pallet Satellite-2 (CRISTA-SPAS-2), which spent nine days flying in formation with Discovery and recording data about the composition of the Earth's atmosphere, and the Technology Applications and Science-1 (TAS-01) and International Extreme Ultraviolet Hitchhiker-2 (IEH-02) instruments, which scanned the Earth and the solar system from the payload bay. Also aboard will be the Japanese-built Manipulator Flight Demonstration (MFD) experiment, which tested a small robotic arm destined for use on the future International Space Station.
CASI
Space Transportation System Flights; Space Transportation System; Shuttle Pallet Satellites; Robot Arms; Manipulators; International Space Station; Astronauts

19970035957 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 08 Highlights
Aug. 14, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047843; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission

Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason entered the final portion of its flight. The new Mir 24 crew of Commander Anatoly Solovyev and Flight Engineer Pavel Vinogradov, who arrived on the station the same day Discovery was launched, bid farewell to Mir 23 Commander Vasily Tsibliev and Flight Engineer Alexander Lazutkin who are returning home after 185 days in space. The Soyuz vehicle carrying the Mir 23 crew home undocked from the station. Robinson again used the Southwest Ultraviolet Imaging System (SWUIS), a 7-inch imaging telescope that is pointed out of the orbiter's middeck hatch window, to observe the Hale-Bopp comet. Curbeam continued his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason spent part of his time troubleshooting a computer hard drive system that support the Microgravity Vibration Isolation Mount experiment.
CASI
Space Transportation System Flights; Space Transportation System; Bioreactors; Microgravity; Gravitational Effects

19970035958 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 09 Highlights
Aug. 15, 1997; In English; Videotape: 15 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047844; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason watch over the Manipulator Flight Demonstration (MFD) experiment while Japanese investigators again maneuvere the Small Fine Arm remotely from a control room near Mission Control. It is the final planned work with the arm during this mission. While MFD operations are ongoing, Robinson again uses the Southwest Ultraviolet Imaging System's ultraviolet imaging telescope to observe Comet Hale-Bopp and Curbeam continue his work with the Bioreactor Demonstration System designed to perform cell biology experiments under controlled conditions. Tryggvason spends his day supporting data gathering with the Microgravity Vibration Isolation Mount experiment. Before the crew's workday began, they discussed the mission's progress with reporters in the U.S. and Canada as part of the traditional crew news conference. Questions ranged from life in space for the first time space travelers to providing a report card on the more than 24 experiments being conducted throughout the mission.
CASI
Space Transportation System Flights; Space Transportation System; Microgravity; Manipulators; Ground Based Control; Gravitational Effects; Flight Tests

19970035959 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 03 Highlights
Aug. 09, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047845; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason continue to conduct and monitor experiments that will help some researchers measure atmospheric phenomena while other crew members gather data on experiments and hardware that will be used on the International Space Station (ISS). Serving as a testbed for those ISS evaluations, the orbiter is functioning in excellent fashion while the crew gathers data using the Space Vision System.
CASI
Space Transportation System Flights; Space Transportation System; International Space Station

19970035992 NASA Johnson Space Center, Houston, TX USA
STS–94 Mission Highlights Resource Tape
Aug. 18, 1997; In English; Videotape: 54 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997056808; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-94, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The crew is seen continuing the payload activation process, as the research efforts of the Microgravity Science Laboratory (MSL) mission get into full swing. The crew is seen in the Microgravity Science Laboratory aboard Space Shuttle Columbia activating the final experiment facility and beginning additional experiments, among the more than 30 investigations to be conducted during the 16-day mission. The tape concludes with the re-entery and landing of the Shuttle.
CASI
Solid Propellant Rocket Engines; Space Shuttle Boosters; Space Shuttles; Microgravity; Launching; Ignition; Flight Crews; Countdown; Booster Rocket Engines

19970035993 NASA Johnson Space Center, Houston, TX USA
STS–94 Day 13 Highlights
Jul. 13, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997049514; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-94 mission, the flight crew, Cmdr. James D. Halsell, Jr., Pilot Susan L. Still, Payload Cmdr. Janice E. Voss, Mission Specialists Micheal L. Gernhardt and Donald A. Thomas, and Payload Specialists Gregory T. Linteris and Roger K. Crouch resume work on the Droplet Combustion Experiment, burning a drop of heptane fuel at one-quarter of the atmospheric pressure on Earth. The payload controllers collect volumes of data from experiments being conducted by the seven astronauts on the Microgravity Science Laboratory mission. Halsell, Still Thomas and Linteris are seen being interviewed by the ABC Radio Network and discussing mission objectives.
CASI
Space Transportation System Flights; Microgravity; Drops (Liquids); Combustion; Astronauts

19970035994 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 07 Highlights
Aug. 13, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047846; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason continue to test the Manipulator Flight Demonstration experiment, or Small Fine Arm, supplied by the National Space Development Agency of Japan, which was powered up for a final day of operations. The tests today, however, center on the ability of the arm to be remotely operated from the ground instead of onboard by the crew. The ground-commanded maneuvers of the arm demonstrated the usefulness of conducting work in space even while the crew is asleep or busy with other tasks.
CASI
Space Transportation System Flights; Space Transportation System; Manipulators; Flight Tests

19970035995 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 02 Highlights
Aug. 08, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047842; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason activated instruments of the Technology Applications and Science (TAS), including the Shuttle Laser Altimeter, the Infrared Spectral Imaging Radiometer (ISIR), the Cryogenic On-Orbit Long Life Active Refrigerator (COOLAR), Two Phase Flow (TPF), Critical Viscosity of Xeonon (CVX) and were initializing the Solar Constant

Experiment (SOLCON) and preparing for its first observation. Work with the Japanese-built Manipulator Flight Demonstration (MFD) experiment l begins when Davis begins checkout of its Small Fine Arm, destined for use outside the International Space Station's Japanese Experiment Module. Brown is seen being interviewed by WBTV-TV, Charlotte, N.C., and WTVD-TV, Raleigh-Durham, N.C.
CASI
Space Transportation System Flights; Space Transportation System; Japanese Space Program; Manipulators; Spacecrews; Flight Tests

19970035996 NASA Johnson Space Center, Houston, TX USA
STS–85 Day 04 Highlights
Aug. 10, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997047839; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourth day of the STS-85 mission, the flight crew, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr., and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason focus their attention on testing a small, robotic arm serving as a prototype for use on the future International Space Station. They also and conduct experiments on the Shuttle's middeck.
CASI
Space Transportation System Flights; Space Transportation System; International Space Station; Robot Arms

19970036139 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 9
Jan. 19, 1996; In English; Videotape: 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034079; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to music from the movie Star Wars'. The astronauts conducted a news conference via satellite and answered questions from both Japanese and U.S. reporters at the Kennedy Space Center and the Johnson Space Center. The preparation for the scheduled night landing continues from the previous day's activities.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Flight Crews; Astronauts; Endeavour (Orbiter)

19970036140 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 6
Jan. 16, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034082; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), successfully retrieved the OAST-Flyer satellite and berthed it in the shuttle's cargo bay with Wakata using the shuttle's robot arm. Dr. Barry conducted an interview with a radio station in Houston via satellite link. He answered general questions concerning the spacewalks, the equipment, and the planned International Space Station. Earth views include cloud cover, water masses, and land masses.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); Payload Retrieval (STS); Scientific Satellites; Space Communication; Remote Manipulator System

19970036142 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 5
Jan. 15, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034083; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to music from the television show, Star Trek: The Next Generation'. Chiao and Barry are shown suiting up for the first of the two scheduled 6 1/2 hour spacewalks and, later, conducting tests with various tools and materials from the shuttle's cargo bay during the spacewalk. The new heating and cooling units in the spacesuits will be tested during these EVAs.
CASI
Space Transportation System; Space Transportation System Flights; Extravehicular Activity; Endeavour (Orbiter); Space Shuttle Missions; Flight Crews; Spaceborne Experiments

19970036184 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 8
Jan. 18, 1996; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034080; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to the Alanis Morisette song, All I Really Want'. Secondary middeck experiments were completed along with the crew having some free personal time. Duffy, Scott, and Wakata were interviewed via satellite by students from Johannesburg, South Africa as part of the U.S. Information Agency's Worldnet' program. They answered general questions from the students regarding their mission, the spacewalks, and the International Space Station. Earth views included cloud cover, land masses, a close-up of a storm system over Houston, Texas, and various other night time shots of the Earth.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Flight Crews; Spaceborne Experiments; Communication Networks; Space Communication; Endeavour (Orbiter); Downlinking

19970036185 NASA Johnson Space Center, Houston, TX USA
STS–72 Mission Update Flight Day 9
Jan. 19, 1996; In English; Videotape: 9 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034077; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video clip, the NASA Television show, Mission Update,' hosted by Pat Ryan, provides a synopsis of the ninth day of the STS-72 Space Shuttle mission. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips showing different aspects of the mission.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); News Media; Television Systems

19970036251 NASA Johnson Space Center, Houston, TX USA
STS–72 Flight Day 7
Jan. 17, 1996; In English; Videotape: 26 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034081; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-72 mission, the flight crew, Cmdr. Brian Duffy, Pilot Brent W. Jett, and Mission Specialists Leroy Chiao, Daniel T. Berry, Winston E. Scott, and Koichi Wakata (NASDA), awakened to music from the Walt Disney movie, Snow White and the Seven Dwarfs'. Chiao and Scott performed the second spacewalk of the mission where they tested equipment and work platforms that will be used in building the planned International Space Station. This space walk was almost seven hours long. Wakata conducted an interview with and answered questions from six graders from a Japanese school in Houston, Texas.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Flight Crews; Spaceborne Experiments; Extravehicular Activity; Space Communication; Endeavour (Orbiter)

19970036252 NASA Johnson Space Center, Houston, TX USA
STS–72 Mission Update Flight Day 8
Jan. 18, 1996; In English; Videotape: 7 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1996034078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The NASA Television show, Mission Update,' hosted by Pat Ryan, provides a synopsis of the eighth day of the STS-72 Space Shuttle mission in this video clip. The scheduled activities, their times, and who will be conducting them are highlighted along with various film clips from the beginning of the mission to date.
CASI
Space Transportation System; Space Transportation System Flights; Space Shuttle Missions; Endeavour (Orbiter); News Media; Television Systems

19980004688 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 01 Highlights
Sep. 26, 1997; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077152; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and David A. Wolf can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Countdown; Launching; Space Shuttles; Liftoff (Launching); Spacecraft Launching; Launch Vehicles; Ignition; Astronauts

19980006562 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 02 Highlights
Sep. 26, 1997; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077153; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and David A. Wolf discuss the mission's progress with reporters as part of the traditional crew news conference. Also included are various panoramic views of the earth as viewed from cameras mounted in the payload bay.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Payloads; Space Shuttles; Space Shuttle Orbiters; Space Shuttle Missions

19980006563 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 03 Highlights
Sep. 27, 1997; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077154; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and David A. Wolf conduct a series of engine firings that are designed to refine Atlantis' approach to Mir. With his crewmates providing range rate and closure data obtained from a variety of tools on board, Wetherbee manually flys Atlantis up toward Mir. After docking, the hatches between the two vehicles are swung open allowing Wetherbee and Mir Commander Anatoly Solovyev to greet each other in the airlock. Wetherbee hands Solovyev a new computer for the Mir which was brought into orbit by Atlantis for installation following the docking phase of the mission. The ten crewmembers spend a few minutes greeting one another at the start of their joint work which will involve the transfer of some four tons of supplies and water from Atlantis to the Mir.
CASI
Space Transportation System Flights; Space Transportation System; Spacecraft Docking; Spacecrews

19980006564 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 04 Highlights
Sep. 28, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and David A. Wolf spend their first full day aboard the Atlantis-Mir space complex. The ten astronauts and cosmonauts begin the transfer of more than four tons of supplies. With that transfer, Mike Foale will conclude 134 days as a Mir crew member and board Atlantis as a member of the STS-86 crew. Foale spends time with Wolf, acquainting him with his new home and showing him the location of experiments and hardware.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying; Payload Delivery (STS); Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

19980006565 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 05 Highlights
Sep. 29, 1997; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077157; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale continue their transfer activities today, moving more supplies and water to the Russian outpost as U.S. astronaut Dave Wolf settles in for his four-month mission on the space station.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying; Space Stations; Payload Retrieval (STS)

19980006566 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 07 Highlights
Oct. 01, 1997; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077158; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale are seen in preparations for a planned five-hour spacewalk to retrieve four experiment packages and to test tools and techniques for construction of the International Space Station. Parazynski and Titov are seen floating out of a hatch on Atlantis' tunnel adapter in front of the Orbiter Docking System to begin their spacewalk. They then affix a 121-pound instrument called a Solar Array Cap to the Docking Module for future use by Russian cosmonauts to seal off a suspected breach in the hull of the Spektr Module.
CASI
International Space Station; Solar Arrays; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Spacecrews

19980006567 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 08 Highlights
Oct. 02, 1997; In English; Videotape: 23 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale and the Mir crew take a break from their busy schedules to hold a news conference. They talk with mdeia assembled in the USA, Russia and France.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Remote Manipulator System; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

19980006568 NASA Johnson Space Center, Houston, TX USA
STS–86 Day 10 Highlights
Oct. 04, 1997; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077161; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale are seen talking with four test subjects in an advance life support test underway at Johnson Space Center in Houston. The test team entered a closed chamber in Houston September 19 and will remain sealed inside until late December evaluating the effectiveness of regenerative life support systems that could be used for extended space missions.

CASI

Space Missions; Space Transportation System; Space Transportation System Flights; Spacecrews; Payload Integration Plan; Space Shuttle Main Engine

19980006620 NASA Johnson Space Center, Houston, TX USA

STS–86 Day 09 Highlights

Oct. 03, 1997; In English; Videotape: 18 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997077160; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale are seen undocking from the Mir. There are various external views of the two vehicles as they fly over southeast Russia just north of Mongolia.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttles

19980006621 NASA Johnson Space Center, Houston, TX USA

STS–86 Day 06 Highlights

Sep. 30, 1997; In English; Videotape: 23 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997077156; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-86 mission, the flight crew, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale are seen discussing their mission objectives in an interview with CNN, PBS and the Russian media.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Payload Delivery (STS); Space Shuttle Orbiters; Space Shuttle Payloads; Space Shuttles

19980009787 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 02 Highlights

Nov. 29, 1997; In English; Videotape: 11 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125962; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk are seen conducting experiments involving the effect of weightlessness on materials and fluids. They also work with an experiment to study Earth's protective ozone layers.

CASI

Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Payloads; Space Shuttles; Space Shuttle Missions; Space Shuttle Orbiters; Weightlessness

19980009788 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 03 Highlights

Nov. 21, 1997; In English; Videotape: 12 min. 22 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125963; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this third day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk deploy the Spartan satellite with the shuttle's robot arm.

CASI

Space Transportation System; Space Transportation System Flights; Orbital Servicing; Payload Assist Module; Remote Manipulator System; Space Shuttle Main Engine; Space Shuttle Orbiters; Space Shuttle Missions

19980009789 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 05 Highlights

Nov. 23, 1997; In English; Videotape: 12 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125965; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

On this fifth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue experimental work aboard Columbia. Leonid Kadenyuk focuses on studies of plant growth in weightlessness.

CASI

Space Transportation System; Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

19980009790 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 08 Highlights

Nov. 26, 1997; In English; Videotape: 14 min. 12 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125968; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eigth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk take time out from their duties to be interviewed by CNN. As they reach the one week mark in their 16-day flight, the STS-87 crew shift the focus of their efforts towards the variety of science experiments flying on this mission.

CASI

Space Transportation System; Space Transportation System Flights; Payload Delivery (STS); Payload Integration Plan; Space Shuttles; Space Shuttle Payloads; Space Shuttle Orbiters; Space Shuttle Missions

19980009826 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 04 Highlights

Nov. 22, 1997; In English; Videotape: 15 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125964; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk check out the spacesuits for the EVA planned for later during the mission. Mission Control developed plans that may allow Scott and Doi to recapture the Spartan satellite by hand during that EVA.

CASI

Extravehicular Activity; Space Transportation System; Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Missions; Space Shuttle Orbiters

19980009827 NASA Johnson Space Center, Houston, TX USA

STS–87 Day 15 Highlights

Dec. 03, 1997; In English; Videotape: 14 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1997125960; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk

spend a good part of their day checking out the important space craft systems that are needed to support reentry.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttles

19980009830 NASA Johnson Space Center, Houston, TX USA
STS–86 Mission Highlights Resources Tape
Nov. 21, 1997; In English; Videotape: 1 hr. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997093224; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The flight crew of the STS-86 mission, Cmdr. James D. Wetherbee, Jr., Pilot Michael J. Bloomfield, Mission Specialists Scott E. Parazynski, Jean-Loup Chretien, Vladmir G. Titov, Wendy B. Lawrence and Mike Foale present an overview of their mission, whose primary objective is the rendezvous and space docking with the Russian Space Station Mir. Video film footage includes: prelaunch and launch activities; shuttle launch; in-orbit rendezvous; docking between Mir and the orbiter; general crew activities; transfer of supplies; undocking maneuvers and a Mir fly-around; and the reentry and landing of the orbiter.
CASI
Space Transportation System; Spacecraft Docking; Spacecraft Launching; Spacecrews; Supplying; Mir Space Station

19980009908 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 01 Highlights
Nov. 18, 1997; In English; Videotape: 15 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this first day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk can be seen preforming pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is seen being readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Shuttle Boosters; Space Transportation System; Space Transportation System Flights; Spacecrews; Countdown; Payload Delivery (STS); Payload Retrieval (STS); Space Shuttle Main Engine; Space Shuttle Orbiters; Space Shuttle Payloads

19980009909 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 14 Highlights
Dec. 02, 1997; In English; Videotape: 15 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125959; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk focus on completion of hands-on sample processing in the microgravity glovebox facility. They also prepare the spacesuits and tools that will be used for the EVA by Scott and Doi. The crew take time out from their schedule to discuss the mission with reporters from the U.S., Japan and the Ukraine during the traditional in-flight news conference.
CASI
Extravehicular Activity; Microgravity; Space Transportation System; Space Transportation System Flights; Spacecrews; Ukraine

19980009910 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 12 Highlights
Nov. 30, 1997; In English; Videotape: 13 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125957; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this twelth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue to look at how plant growth and composite materials are affected by microgravity. The astronauts use the globebox facility to process samples for the Particle Engulfment and Pushing by a Solid/Liquid Interface experiment.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980009911 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 11 Highlights
Nov. 29, 1997; In English; Videotape: 9 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eleventh first day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue to look at how plant growth and composite materials are affected by microgravity. The astronauts will use the Middeck Globebox Facility to process samples for the Particle Engulfment and Pushing by a Solid/Liquid Interface experiment. PEP is studying the formation of composite materials, attempting to accurately map the roles of gravity-induced convection and sedimentation in the process by removing the gravity from the equation.
CASI
Microgravity; Space Transportation System; Space Transportation System Flights; Spacecrews; Vegetation Growth

19980009912 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 10 Highlights
Nov. 28, 1997; In English; Videotape: 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk receive a call from Ukrainian President Leonid Kuchma and answer questions from media in Kiev. The conversations focus on Kadenyuk's first flight into space and the work ongoing to support the mission objectives.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Main Engine; Space Shuttles

19980014807 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 09 Highlights
Nov. 27, 1997; In English; Videotape: 14 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125954; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work with the microgravity science investigations in a special glovebox facility on the middeck. The autonomous operations with the mission's prime payload continue in the payload bay of Columbia with no interaction by the crew required.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Shuttle Orbiters; Space Shuttle Missions

19980015095 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 07 Highlights
Nov. 25, 1997; In English; Videotape: 8 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125967; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott,

Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk turn their attention to a variety of experiments inside the Shuttle's cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia's middeck; the experiment called PEP, which involves heating samples and then recording the mixture as it resolidifies; and the study of plant growth in space.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Flight; Space Shuttles

19980015096 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 06 Highlights
Nov. 24, 1997; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk begin the final preparations for the EVA by Scott and Doi. They are to manually capture the SPARTAN Satellite. After this is accomplished they are to test tools and techniques that will be required for the assembly of the International Space Station.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Procedures (Inflight); Space Shuttles; Space Flight

19980015097 NASA Johnson Space Center, Houston, TX USA
STS–87 Day 13 Highlights
Dec. 01, 1997; In English; Videotape: 15 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997125958; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this thirteenth day of the STS-87 mission, the flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk continue work in the mini laboratory called the microgravity glovebox facility. This facility allows crew members to interactively work with two different experiments today studying the formation of composite materials in an attempt to accurately map the roles of gravity-induced convection and sedimentation on the samples.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity; Crew Procedures (Inflight)

19980032333 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 01 Highlights
Jan. 23, 1998; In English; Videotape: 15 min. 7 sec. in playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074671; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Spacecrews; Launching; Booster Rocket Engines; Space Flight; Space Missions; Space Shuttles

19980032959 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 09 Highlights
Jan. 30, 1998; In English; Videotape: 13 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074670; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare for the reentry phase of their mission. Bonnie Dunbar than gives a tour of the space shuttle.
CASI
Space Shuttle Missions; Space Transportation System Flights; Space Transportation System; Spacecrews; Microgravity

19980032960 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 03 Highlights
Jan. 24, 1998; In English; Videotape: 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074673; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, can be seen performing a flawless docking with the Mir. The linkup occurred while the two spaceships flew over southeastern Russia, west of Kazakhstan. After the docking the two crews open the entry hatch and great each other.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Space Rendezvous; Mir Space Station; Crew Experiment Stations

19980033342 NASA Johnson Space Center, Houston, TX USA
STS–85 Mission Highlights Resources Tape
Nov. 12, 1997; In English; Videotape: 57 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997087432; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. During the pre-launch activities the shuttle is shown being mated to the external tank and Solid Rocket Boosters (SRBs). Also included: is the arrival of the crew at the Kennedy Space Center (KSC), their suit-up, the crew being transported to the pad, being strapped in, and launch control activities. The launch includes the count down, main engine start-up, SRB start-up, the launch, the roll maneuver and SRB separation. Once the crew is in orbit, they deploy the CRISTA-SPAS payload and conduct various micro-gravity experiments. In the last part of the video the crew is seen preparing for the landing phase of the mission.
CASI
Space Shuttle Missions; Space Shuttle Orbiters; Space Transportation System Flights; Solid Propellant Rocket Engines; Payload Retrieval (STS); Payload Delivery (STS)

19980033343 NASA Johnson Space Center, Houston, TX USA
STS–85 Postflight Presentation
Sep. 20, 1997; In English; Videotape: 52 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997058833; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of STS-85, Cmdr. Curtis L. Brown, Jr., Pilot Kent V. Rominger, Payload Cmdr. N. Jan Davis (Ph.D.), Mission Specialists Robert L. Curbeam, Jr. and Stephen K. Robinson (Ph.D.), and Payload Specialist Bjarni V. Tryggvason, present an overview of their mission. Events shown include pre-launch preparations, launch activities, on orbit activation of various experiments, and the return and landing of the shuttle at Kennedy Space Center

(KSC). In the second part of the presentation the astronauts describe the still pictures that were taken during the mission.
CASI
Space Shuttle Missions; Space Shuttle Orbiters; Space Transportation System; Space Shuttle Payloads; Space Transportation System Flights

19980033933 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 08 Highlights
Jan. 29, 1998; In English; Videotape: 12 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074669; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, prepare to conclude their joint mission with the crew of the Mir. Endeavour separates from the Russian Space Station with a gentle push from springs in the docking mechanism attaching it to the Space Station. Following a flyaround of the station to gather additional photography of the outpost, Pilot Joe Edwards conducts a final separation maneuver to allow Endeavour to drift away from the Mir.
CASI
Space Transportation System Flights; Spacecraft Docking; Spacecrews; Space Shuttle Missions; Mir Space Station; Earth Observations (From Space)

19980034852 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 02 Highlights
Jan. 23, 1998; In English; Videotape: 14 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074672; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, take time from their schedule to discuss with radio station KNX of Los Angeles the STS-89 mission and Thomas' transfer to the Mir Space Station.
CASI
Space Transportation System Flights; Mir Space Station; Space Flight; Spacecrews; Orbital Maneuvers; Orbital Rendezvous

19980073213 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 04 Highlights
Jan. 25, 1998; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074674; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. Most of the questions are directed at Wolf and his experiences on Mir.
CASI
Space Transportation System Flights; Space Transportation System; Mir Space Station; Space Flight; Space Mechanics; Space Missions; Space Rendezvous; Orbital Mechanics; Orbital Maneuvers

19980073409 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 05 Highlights
Jan. 26, 1998; In English; Videotape: 14 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074666; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fifth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by an unnamed news agency. The main focus of the interview was on international cooperation in outer space.
CASI
Space Transportation System Flights; International Cooperation; Space Shuttles; Payload Retrieval (STS); Payload Transfer; Orbital Rendezvous; Crew Procedures (Inflight); Mir Space Station; Spacecraft Docking

19980076018 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 06 Highlights
Jan. 27, 1998; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074667; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas, are interviewed by John Holorman of Cable News Network (CNN) and Russian news media. The crew discuss the progress of the mission and activities that lie ahead for Mir crew member Andy Thomas.
CASI
Space Transportation System Flights; Mir Space Station; Spacecraft Docking; Space Stations; Space Rendezvous; Orbital Rendezvous; News Media; Spacecrews

19980111106 NASA Johnson Space Center, Houston, TX USA
STS–89 Day 07 Highlights
Jan. 28, 1998; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998074668; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-89 mission, the flight crew, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf and Andrew S.W. Thomas are interviewed by an unnamed news agency.
CASI
Space Transportation System Flights; Space Transportation System; Space Shuttles; Payload Delivery (STS); Payload Retrieval (STS); Space Shuttle Missions; Space Shuttle Orbiters

19980137397 NASA Johnson Space Center, Houston, TX USA
STS–89 Post Flight Presentation
Mar. 11, 1998; In English; Videotape: 20 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998070594; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-89 Space Shuttle Orbiter Endeavour, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf, and Andrew S.W. Thomas present an overview of their mission. It's whose primary objective was the rendezvous and space docking with the Mir Space Station. Video film footage includes prelaunch and launch activities; shuttle launch; in-orbit docking between Mir and Endeavour; general crew activities; transfer of supplies, equipment, and microgravity experiments to Mir; undocking maneuvers and Mir fly around; pre-return checkout of flight systems; and reentry and landing of the orbiter.
CASI
Endeavour (Orbiter); Mir Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Spacecrews; Orbital Servicing; Payload Delivery (STS); Payload Retrieval (STS)

19980137398 NASA Johnson Space Center, Houston, TX USA
STS–89 Mission Highlights Resource Tape
Mar. 11, 1998; In English; Videotape: 1 hour 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998082123; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-89 Space Shuttle Orbiter Endeavour, Cmdr. Terrence W. Wilcutt, Pilot Frank Edwards, and Mission Specialists Michael P. Anderson, James F. Reilly, Bonnie J. Dunbar, Salizhan Shakirovich Sharipov, David A. Wolf, and Andrew S.W. Thomas, present an overview of their mission. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew is readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are

shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters (SRBs). Once in orbit, there are various views of the Mir Space Station as the shuttle begins its approach and docks. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir. The astronauts prepare for the reentry phase of their mission. Endeavour separates from the Russian Space Station with a gentle push from springs in the docking mechanism that attaches it to the Space Station. The final view shows the crews' preparations for reentry and landing.
CASI
Space Transportation System; Endeavour (Orbiter); Mir Space Station; Space Shuttle Orbiters; Spacecraft Docking; Spacecrews

19980218846 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 13 Highlights
Apr. 23, 1998; In English; Videotape: 17 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998166378; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this thirteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once agian take part in a variety of human autonomic experiments designed to examine blood pressure regulation in microgravity. Crew members repeat an experiment in which they use an innovative technique called microneurography. This involves placing a very fine needle in a nerve just below the knee, allowing nerve signals traveling from the brain to the blood vessels to be measured directly while the cardiovascular system is challenged using the Lower Body Negative Pressure device. LBNP is a hi-tech canister that pulls bodily fluids into the lower extremities, simulating the effect of standing on Earth.
CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Microgravity; Lower Body Negative Pressure; Cardiovascular System; Autonomic Nervous System

19980218847 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 09 Highlights
Apr. 22, 1998; In English; Videotape: 20 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998166379; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-90 mission, the sleep period of the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk, is interrupted due to problems with equipment that removes carbon dioxide from the cabin atmosphere. Because of this, Columbia's crew went to bed about two hours later than scheduled.
CASI
Space Transportation System; Flight Crews; Cabin Atmospheres; Space Flight

19980218848 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 08 Highlights
Apr. 21, 1998; In English; Videotape: 21 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348921; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue to operate the 26 individual experiments designed to provide insight into the operation of the nervous system, the most complex and least well-known part of the human body. The STS-90 crew members have used themselves as test subjects in a variety of experiments associated with studying functions such as blood pressure regulation , balance, coordination and sleep patterns. They also have studied a variety of animals to gain additional insight into the effects of the weightless environment of space on the development and performance of the nervous system.
CASI
Space Transportation System Flights; Space Transportation System; Environmental Tests; Space Exploration; Space Flight

19980218855 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 07 Highlights
Apr. 20, 1998; In English; Videotape: 17 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348210; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue experiments that looks at the autonomic nervous system, the part of the nervous system that automatically controls blood pressure. These investigations are designed to uncover changes that take place in blood pressure control during space flight. Crewmembers use the Lower Body Negative Pressure (LBNP) device which places a stress on the cardiovascular system similar to what is experienced when standing in Earth's gravity environment.
CASI
Space Transportation System Flights; Space Transportation System; Lower Body Negative Pressure; Crews; Spacecrews

19980218868 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 08 Highlights
Jun. 08, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358189; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin focus on science investigations and participate in several special interviews and phone calls. Following yesterday's undocking with the Russian Mir space station, crew members are given a couple of hours off duty during the day to provide a brief rest break from the hectic pace of their flight.
CASI
Space Transportation System; Space Transportation System Flights; Mir Space Station; Crew Workstations

19980218869 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 07 Highlights
Jun. 08, 1998; In English; Videotape: 19 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358188; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin awaken to 'Manic Monday' performed by The Bangles, played the crew by Mission Control in honor of an historic Monday for the U.S. and Russian space programs. Today's schedule includes television feed from the Mir of a final crew farewell and hatch closing. After undocking, the shuttle backs away from the Mir until it reaches a distance of approximately 240 feet below the station. Pilot Dom Gorie then performs a nose forward flyaround of Mir.
CASI
Space Transportation System; Space Transportation System Flights; Scientists

19980218870 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 06 Highlights
Jun. 07, 1998; In English; Videotape: 30 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358187; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch

Ryumin are awakened to the sounds of 'You Really Got Me' by The Kinks, Discovery's astronauts begin another day of transfer activities as they move into their second full day of docked operations. Working side-by-side, the astronauts and cosmonauts continue to move experiment hardware, logistical supplies and water between the two vehicles.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Supplying

19980218871 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 05 Highlights
Jun. 06, 1998; In English; Videotape: 23 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358185; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin and cosmonauts continue to move experiment hardware, logistical supplies and water between the two vehicles. They transfer additional bags of water from Discovery to Mir, bringing the total amount of water transferred to 683 pounds. Just over half of the 317 items scheduled to be transferred have now been moved between the two craft. Mission Specialists Wendy Lawrence and Janet Kavandi spend some time today checking out the shuttle's 50-foot long robot arm. This checkout evaluates new electronics and software for use on upcoming assembly missions for the new International Space Station. Today's checkout also tests the arm's dexterity in maneuvering around components of an orbiting space station.
CASI
Robot Arms; Space Stations; Space Transportation System; Space Transportation System Flights; Cosmonauts

19980218901 NASA Johnson Space Center, Houston, TX USA
STS–87 Post Flight Presentation
Aug. 18, 1998; In English; Videotape: 18 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998359751; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew, Cmdr. Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk present an overview of their mission. In the first part they can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is seen being readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turn their attention to a variety of experiments inside the Shuttle's cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia's middeck; the experiment called PEP, which involves heating samples and then recording the mixture as it resolidifies; and the study of plant growth in space.
CASI
Space Transportation System; Spacecrews; Booster Rocket Engines; Flight Crews; Space Flight; Space Missions

19980218917 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 04 Highlights
Jun. 05, 1998; In English; Videotape: 4 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358184; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this forth day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin are awakened to the sounds of 'South Australia,' honoring Thomas who is a native of Adelaide in South Australia. The nine astronauts and cosmonauts aboard Discovery-Mir are spending their first full day of joint operations continuing the transfer of about four tons of logistical supplies and equipment. Much of the day is spent transferring water, scientific gear and other hardware between the two spacecraft. The crew members had transferred five bags of water to the Mir by the end of the day.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Cosmonauts; Astronauts

19980218918 NASA Johnson Space Center, Houston, TX USA
STS–91 Day 03 Highlights
Jun. 04, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358183; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin prepare for docking with the Mir Space Station and a reunion with U.S. Astronaut Andy Thomas, who is about to conclude his more-than-four-month mission to the Russian outpost. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir.
CASI
Space Transportation System; Spacecraft Docking; Space Transportation System Flights; Mir Space Station

19980218920 NASA Johnson Space Center, Houston, TX USA
STS–91 Mission Highlights Resource Tape
Jun. 03, 1998; In English; Videotape: 1 hour 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998357051; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew STS-91 mission, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie and Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch Ryumin can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once in orbit, there are various views of the Mir Space Station as the shuttle begins its approach and docks. After the docking the two crews open the entry hatch and greet each other. The astronauts and cosmonauts transfer supplies from the shuttle to Mir. The astronauts prepare for the reentry phase of their mission. The Shuttle separates from the Russian Space Station with a gentle push from springs in the docking mechanism that attaches it to the Space Station. The final view shows the crews' preparations for reentry and landing.
CASI
Space Transportation System; Spacecraft Docking; Space Stations; Space Shuttle Boosters; Solid Propellant Rocket Engines; Mir Space Station; Launching; Booster Rocket Engines

19980218921 NASA Johnson Space Center, Houston, TX USA
STS–90 Post Flight Presentation
Apr. 14, 1998; In English; Videotape: 17 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998357050; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turns its attention to a variety of experiments inside the Shuttle's cabin. These experiments include the processing of several samples of materials in the glovebox facility in Columbia's middeck; the experiment called

PEP, which involves heating samples as they resolidify; and the study of plant growth in space.
CASI
Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Flight Crews; Booster Rocket Engines; Countdown

19980218925 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 15 Highlights
Apr. 27, 1998; In English; Videotape: 17 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348939; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifteeth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk turns its attention to dexterity tests and dissections of rats neonates and the ball-catch experiment. Mission Specialists Rick Linnehan and Dave Williams and Payload Specialist Jim Pawelczyk will dissect the newborn rats. The dexterity test will test the response of young rats as they are tilted and turned while walking and climbing on a special apparatus with various surfaces. Later, all four payload crew members will repeat the ball-catch experiment. This experiment studies the ability of the central nervous system to accept and interpret new stimuli in space. The astronauts have performed this test at various points in the mission so scientists can compare their responses as their bodies adapt to weightlessness.
CASI
Space Transportation System; Space Transportation System Flights; Astronauts; Crews

19980218926 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 14 Highlights
Apr. 26, 1998; In English; Videotape: 11 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this fourteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk focus on the efforts of Neurolab's Neuronal Plasticity Team to better understand how the adult nervous system adapts to the new environment of space. Columbia's science crew -- Mission Specialists Rick Linnehan and Dave Williams and Payload Specialists Jay Buckey and Jim Pawelczyk -- perform the second and final in-flight dissections of the adult male rats on board. The crew euthanizes and dissects nine rats and remove the vestibular or balance organs of the inner ear; the cerebellum, the part of the brain critical for maintaining balance and for processing information from the limbs so they can be moved smoothly; and the cerebrum, one part of which controls automatic functions such as body temperature regulation and the body's internal clock, and the cortical region that controls cognitive functions such as thinking. The first dissection, which was performed on the second day of the flight, went extremely well, according to Neurolab scientists.
CASI
Space Transportation System Flights; Space Transportation System; Neurophysiology; Nervous System

19980218927 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 16 Highlights
Apr. 28, 1998; In English; Videotape: 10 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348936; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixteenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk begin a busy day preparing for their return to the Kennedy Space Center later in the day.
CASI
Space Transportation System; Space Transportation System Flights; Space Exploration; Space Flight

19980218928 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 12 Highlights
Apr. 24, 1998; In English; Videotape: 21 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348935; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue their investigations into how the human nervous system adapts to the weightlessness of space. Buckey and Pawelczyk take part in a variety of autonomic experiments designed to examine blood pressure regulation in microgravity. The test uses a special device resembling a hi-tech sack to place a stress on the cardiovascular system similar to that experienced when standing in Earth's gravity.
CASI
Space Transportation System Flights; Space Transportation System; Microgravity; Cardiovascular System; Autonomic Nervous System

19980218929 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 10 Highlights
Apr. 22, 1998; In English; Videotape: 20 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–348934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk have a relatively light day of scientific activity on board Columbia. The science crew of Mission Specialists Rick Linnehan and Dave Williams, along with Payload Specialists Jay Buckey and Jim Pawelczyk, continue investigations into how the human nervous system adapts to the weightlessness of space. All four serve as subjects in a vestibular experiment that uses an on-board rotating chair. The Visual and Vestibular Integration System (VVIS) correlates eye movements with balance. Developed by the European Space Agency, the chair stimulates the human balance system with both spinning and tilting sensations. Infrared video cameras observe and capture the eye movements that accompany the exercise.
CASI
Physical Exercise; Space Transportation System; Space Transportation System Flights; Spacecrews; Eye Movements

19980218930 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 04 Highlights
Apr. 17, 1998; In English; Videotape: 23 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348926; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue work with the Escher Staircase Behavior Testing of Adult Rats experiment. This is the first of two behavior testing sessions with the adult rats being used for this experiment. The rats will have a 'hyper drive' unit placed on their head which has recording electrodes made of microscopic wires that are positioned in the brain to record activity in the hippocampus. The hippocampus is that portion of the brain used to develop spatial maps to help us navigate from one place to the other. With the 'hyper drive' units in place, the rats will then be put through a maze or on a track. While the rat is maneuvering on the maze or track, the cell activity of the hippocampus will be measured and recorded.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Space Exploration; Space Flight

19980218931 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 03 Highlights
Apr. 16, 1998; In English; Videotape: 19 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998348925; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk continue to conduct both human and animal research experiments in the Spacelab module. During the morning, the payload crew members Linnehan, Williams, Buckey and Pawelczyk performs transfer activities with the Animal Enclosure Module, setting up the General Purpose Work Station (GPWS) and operations with the ball catch experiment. In the afternoon, their attention will be on injections and dissections of some of the research animals and an objects recognition test.

CASI

Space Transportation System Flights; Spacelab; Space Flight; Space Exploration; Spacecrews

19980218932 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 02 Highlights

Apr. 15, 1998; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998348922; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk activate the Bioreactor Demonstration Experiment, an investigation that grows cell tissue cultures in weightlessness. The device, making its fourth shuttle flight, has the capability to grow more perfect tissue samples in weightlessness than can be achieved on Earth. Cell samples in the bioreactor experiment aboard Columbia include renal tissue and bone marrow, both samples being evaluated for the ability to produce substances useful in a variety of medical treatments on Earth.

CASI

Space Transportation System Flights; Spacecrews; Space Transportation System

19980218933 NASA Johnson Space Center, Houston, TX USA

STS–90 Mission Highlights Resource Tape

Jun. 11, 1998; In English; Videotape: 1 hour 31 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998348208; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The flight crew of the STS-90 mission, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. In the second part of the video the crew turn their attention to a variety of experiments inside the Shuttle's cabin. These experiments include the processing of several samples of materials in the glovebox facility in Shuttle's middeck; the experiment called PEP, which involves heating samples and then recording the mixture as it resolidifies; and the study of plant growth in space.

CASI

Space Transportation System; Solid Propellant Rocket Engines; Space Shuttle Boosters; Launching; Ignition; Countdown

19980219027 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 11 Highlights

Apr. 23, 1998; In English; Videotape: 19 min. 19 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998372739; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk once again take part in an experiment aimed at exploring the influence of gravity on blood pressure. The lower body negative pressure test places a stress on the cardiovascular system similar to that experienced when standing in Earth's gravity. Pawelczyk also takes part in the Valsalva test, which stimulates the pressure receptors in the neck and chest and measures those responses. Both Buckey and Pawelzyk participate as subjects and as operators in tests of the autonomic nervous system. All four science crew members conduct tests of their pulmonary systems as well as additional runs in a rotating chair to measure the response of their eyes and inner ears in maintaining balance in a weightless environment.

CASI

Space Transportation System Flights; Space Transportation System; Lower Body Negative Pressure; Gravitational Effects; Payload Delivery (STS); Space Shuttle Missions; Space Shuttle Orbiters; Space Shuttle Payloads

19980219028 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 06 Highlights

Apr. 19, 1998; In English; Videotape: 27 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998372737; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk are back on the job full-time as they begin the day six of on-orbit research on the human nervous system. Additional work with the Pulmonary Function Test (PFT) equipment which is collecting data on the crew's breathing patterns and blood concentrations of oxygen and carbon dioxide also takes place.

CASI

Space Transportation System; Space Transportation System Flights; Space Exploration; Space Flight; Payload Delivery (STS); Space Shuttle Payloads; Space Shuttle Orbiters

19980219029 NASA Johnson Space Center, Houston, TX USA

STS–90 Day 05 Highlights

Apr. 14, 1998; In English; Videotape: 21 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998372736; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-90 mission, the flight crew, Cmdr. Richard A. Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk perform tests associated with the STS-90 Neurolab Vestibular Team's efforts to gain insight into the balance organs in the ear and all the connections that system has to the eyes, brain, and muscles in adapting to the weightless condition in space and then readapts to the gravity environment found on Earth.

CASI

Space Transportation System; Space Transportation System Flights; Space Shuttle Orbiters; Space Shuttle Payloads; Space Shuttles; Payload Delivery (STS)

19990008745 NASA Johnson Space Center, Houston, TX USA

STS–95 Day 09 Highlights

Nov. 07, 1998; In English; Videotape: 24 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1998408700; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, spend a good part of their day checking out important spacecraft systems for entry and landing. The commander and pilot begin the flight control system checkout by powering up one auxiliary power unit and evaluating the performance of aerodynamic surfaces and flight controls. The

flight crew conducts a reaction control system hot fire, followed by a test of the communications system.
CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Flight Control; Control Surfaces; Auxiliary Power Sources

19990008748 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 07 Highlights
Nov. 05, 1998; In English; Videotape: 41 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998401600; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, again test the Orbiter Space Vision System. OSVS uses special markings on Spartan and the shuttle cargo bay to provide an alignment aid for the arm's operator using shuttle television images. It will be used extensively on the next Space Shuttle flight in December as an aid in using the arm to join together the first two modules of the International Space Station. Specialist John Glenn will complete a daily back-pain questionnaire by as part of a study of how the muscle, intervertebral discs and bone marrow change after exposure to microgravity.
CASI
International Space Station; Space Transportation System Flights; Space Transportation System; Space Shuttle Orbiters; Spacecrews; Bays (Structural Units)

19990008749 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 06 Highlights
Nov. 04, 1998; In English; Videotape: 12 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998401598; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, test a device called the Video Guidance Sensor, a component of an automated docking system being prepared for use on the International Space Station. As Discovery closes in on Spartan, the astronauts will use a laser system that provides precise measurements of how far away the shuttle is from a target and how fast it is moving toward or away from the target.
CASI
International Space Station; Space Transportation System; Space Transportation System Flights; Spacecraft Docking; Astronauts

19990008750 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 04 Highlights
Nov. 01, 1998; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998401597; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, are seen performing an evaluation of bone cell activity under microgravity conditions. Glenn then provides blood samples as part of the Protein Turnover Experiment, which is looking at the balance between the building and breakdown of muscle. He also works with the Advanced Organic Separations (ADSEP) experiment, to provides the capability to separate and purify biological materials in microgravity; and with the Microencapsulation Electrostatic Processing System (MEPS), that studies the formation of anti-tumor capsules containing two kinds of drugs.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Microgravity

19990008751 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 05 Highlights
Nov. 03, 1998; In English; Videotape: 22 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998401596; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, check the status of components of the Hubble Space Telescope Orbital Systems Test (HOST) payload, which provides an on-orbit test bed for hardware that will be used during the third Hubble servicing mission. Then Parazynski and Pilot Steve Lindsey set up some of the tools that will be used during the rendezvous and subsequent capture and reberthing of the Spartan satellite.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Observation Stations; Crew Experiment Stations

19990008752 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 03 Highlights
Oct. 31, 1998; In English; Videotape: 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998397355; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, are seen checking out equipment that will be used for the deployment of the Spartan, a small, Shuttle-launched and retrieved satellite, whose mission is to study the Sun.
CASI
Space Transportation System; Space Transportation System Flights; Spacecraft Launching; Spacecrews

19990008754 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 08 Highlights
Nov. 06, 1998; In English; Videotape: 38 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998408702; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eighth day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, continue to perform microgravity experiments. Specialist John Glenn completes a back-pain questionnaire as part of a study of how the muscle, intervertebral discs and bone marrow change due to microgravity. The results will then be compared with data provided by astronauts during previous missions. Glenn continues blood sample analysis and blood processing that are part of the Protein Turnover (PTO) experiment, which is studying the muscle loss that occurs during space flight.
CASI
Space Transportation System Flights; Space Transportation System; Spacecrews; Microgravity; Gravitational Effects; Chemical Analysis; Bone Marrow

19990008755 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 02 Highlights
Oct. 31, 1998; In English; Videotape: 27 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998397354; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, are seen preparing a glovebox device in the middeck area of Discovery, an enclosed research facility that will support numerous science investigations throughout the mission. Payload Specialist John Glenn, activates the Microgravity Encapsulation Process experiment (MEPS). This experiment will study the formation of capsules containing two kinds of anti-tumor drugs

that could be delivered directly to solid tumors with applications for future chemotherapy treatments and the pharmaceutical industry.
Author
Space Transportation System Flights; Space Transportation System; Spacecrews; Gravitational Effects; Chemotherapy

19990008756 NASA Johnson Space Center, Houston, TX USA
STS–95 Day 01 Highlights
Oct. 30, 1998; In English; Videotape: 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998397353; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-95 mission, the flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Space Shuttle Boosters; Launching; Countdown; Booster Rocket Engines; Spacecrews

19990014472 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 08 Highlights
Dec. 11, 1998; In English; Videotape: 33 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435151; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eighth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev enter the International Space Station where Krikalev and Currie install a new battery charging unit. Sturckow and Currie remove launch restraint bolts from some of the panels inside Zarya. Cabana, Ross, and Newman check the communications system's videoconferencing capability. Then Ross, Newman, and Krikalev transfer equipment and supplies from Endeavour for future inhabitants of the Space Station. The crew then participates in an interview with KNX Radio in Los Angeles and KARE-TV in Minneapolis, Minnesota.
CASI
Space Transportation System Flights; Zarya Control Module; Space Stations; International Space Station; Unity Connecting Module; International Cooperation

19990014473 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 07 Highlights
Dec. 10, 1998; In English; Videotape: 28 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435150; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are seen preparing for a 6-1/2 hour space walk. During this walk Newman and Ross install two box-like antennas on the outside of the Unity module. In addition they remove launch restraints over four hatchways, install insulating covers on the trunnion pins, and free one of two balky antennas on Zarya's backup rendezvous navigation system.
CASI
Space Transportation System Flights; Manned Space Flight; Crew Procedures (Inflight); Flight Crews; International Space Station; Zarya Control Module; Unity Connecting Module

19990014474 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 11 Highlights
Dec. 14, 1998; In English; Videotape: 20 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435149; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song "Goodnight, Sweetheart, Goodnight". Pilot Rick Sturckow undocks Endeavour from the station and backs the shuttle away to a distance of 450 feet above the station before beginning a nose-forward fly-around. Later Cabana, Sturckow and Ross deploy the SAC-A satellite from Endeavour's payload bay. SAC-A is a small, self-contained, non-recoverable satellite built by the Argentinean National Commission of Space Activities. The cube-shaped, 590-pound satellite will test and characterize the performance of new equipment and technologies that may be used in future scientific or operational missions. The payload includes a differential global positioning system, a magnetometer, silicon solar cells, a charge-coupled device Earth camera and a whale tracker experiment.
CASI
Space Transportation System Flights; Endeavour (Orbiter); International Space Station; Zarya Control Module; Unity Connecting Module

19990014475 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 06 Highlights
Dec. 09, 1998; In English; Videotape: 13 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435148; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this sixth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by Dwight Yokum's "Streets of Bakersfield," requested by the wife of Pilot Rick Sturckow, a California native. Cabana and Sturckow fire Endeavour's primary reaction control jets to raise the altitude of the International Space Station by about 5-1/2 statute miles. Later on Cabana, Sturckow and Currie are interviewed by the ABC News/Discovery Channel and MSNBC.
CASI
Space Transportation System Flights; International Space Station; Unity Connecting Module; Zarya Control Module; Endeavour (Orbiter); Manned Space Flight

19990014476 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 05 Highlights
Dec. 08, 1998; In English; Videotape: 25 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435147; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song "Jerry the Rigger," in honor of Mission Specialist Jerry Ross. Ross and Newman are then seen being readied for the first EVA. This space walk, which will last 6-1/2 hours, will focus on connecting computer and electrical cables between Unity, the two mating adapters attached to either end of Unity, and Zarya. In all, Ross and Newman will make about 40 connections during the spacewalk. This will enable power to flow to Unity for the first time in orbit and will permit Unity's avionics, computers and heaters to be activated.
CASI
Space Transportation System Flights; Zarya Control Module; Extravehicular Activity; Spacecrews; Space Flight; International Space Station; Unity Connecting Module; Manned Space Flight

19990014491 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 04 Highlights
Dec. 07, 1998; In English; Videotape: 27 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435146; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this forth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei are awakened to the sounds of "Somewhere Over the Rainbow," requested by Commander Bob Cabana's daughter, Sarah. With the three-story-high Unity connecting module

latched upright in the shuttle's payload bay, Cabana takes manual control of the shuttle as it moves to within about a half-mile of Zarya. Cabana and Sturckow execute a sequence of maneuvers that will bring Endeavour directly above the module. Currie uses the robotic arm to capture the module. She then positions Zarya above Unity's docking mechanism.
CASI
Space Transportation System Flights; Zarya Control Module; Unity Connecting Module; Spacecraft Docking; Space Flight; International Space Station

19990014492 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 10 Highlights
Dec. 13, 1998; In English; Videotape: 18 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435145; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of Elvis Presley's "Hound Dog". Today's activities are devoted mostly to tasks that ready the station for future assembly work. The crew's first job is to release some cable ties on four cables connected on an earlier space walk, three located on Unity's upper mating adapter and one on its lower adapter, to relieve tension on the lines. The space walkers also will check an insulation cover on one cable connection on the lower Pressurized Mating Adapter (PMA 2) to make sure it is fully installed. Near the end of the space walk, the astronauts conduct a detailed photographic survey of the space station from top to bottom. Finally, each astronaut test fires the Simplified Aid for Extravehicular Activity Rescue (SAFER) jet backpacks they are wearing, a type of space "lifejacket," that would allow an astronaut to fly back to the station if they should ever become untethered.
CASI
Space Transportation System Flights; Extravehicular Activity; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures

19990014493 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 03 Highlights
Dec. 06, 1998; In English; Videotape: 23 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435144; No Copyright; Avail: CASI; B06, Videotape-Beta; V06, Videotape-VHS

On this third day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev check out the various tools they will use during the three scheduled spacewalks to be conducted later in the flight. They then begin an early set-up of the Shuttle's airlock in preparation for that first spacewalk. Newman and Russian cosmonaut Sergei Krikalev take part in an on-line interview by the New York Times. Currie is seen placing Unity just inches above the extended outer ring on Endeavour's docking mechanism, enabling Commander Bob Cabana to fire downward maneuvering jets to lock the shuttle's docking system to one of two Pressurized Mating Adapters (PMA's) attached to Unity.
CASI
Space Transportation System Flights; Unity Connecting Module; Spacecraft Docking; Zarya Control Module; Maneuvers; Adapters; Air Locks; Space Rendezvous; Orbital Rendezvous

19990014494 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 09 Highlights
Dec. 12, 1998; In English; Videotape: 24 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435143; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by "The Nutcracker" in honor of cosmonaut and Mission Specialist Sergei Krikalev. Currie and Krikalev continue their work removing access panels inside Unity and unstowing hardware that will be used by visiting astronauts on future assembly missions.
CASI
Space Transportation System Flights; International Space Station; Zarya Control Module; Unity Connecting Module; Orbital Assembly; Space Station Structures; Space Erectable Structures

19990014495 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 02 Highlights
Dec. 05, 1998; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435142; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened with the song "Get Ready" by the Temptations. Ross and Newman perform a checkout of the SAFER or Simplified Aid for EVA Rescue unit. SAFER is a mini maneuvering system that can provide self-rescue capability for a spacewalker if they inadvertently become separated from the spacecraft during a spacewalk. The crew then downlinks video taken inside the crew cabin during their ascent to orbit.
CASI
Space Transportation System Flights; Spacecrews; Extravehicular Activity; Aerospace Environments; Manned Maneuvering Units; Space Shuttles; Space Flight

19990014496 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 12 Highlights
Dec. 15, 1998; In English; Videotape: 15 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435141; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelth day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev are awakened by the sounds of James Brown's "I Got You (I Feel Good)". Crew members focus their activities today on preparing for their scheduled return to the Kennedy Space Center. Cabana and Sturckow spend a good part of the day checking out spacecraft systems for entry and landing.
CASI
Space Transportation System Flights; Endeavour (Orbiter); International Space Station; Zarya Control Module; Unity Connecting Module; Space Flight

19990014497 NASA Johnson Space Center, Houston, TX USA
STS–88 Day 01 Highlights
Dec. 05, 1998; In English; Videotape: 19 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998435140; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-88 mission, the flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Space Transportation System Flights; Space Transportation System; Space Shuttle Boosters; Launching; Ignition; Countdown

19990014505 NASA Johnson Space Center, Houston, TX USA
STS–90 Day 01 Highlights
Apr. 14, 1998; In English; Videotape: 18 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998166380; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-90 mission, the flight crew, Cmdr. Richard A.

Searfoss, Pilot Scott D. Altman, and Mission Specialists Richard M. Linnehan, Dafydd Rhys Williams and Kathryn P. Hire, and Payload Specialists Jay C. Buckey and James A. Pawelczyk, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The shuttle's payload bay doors are then opened in anticipation of the 16-day scientific mission. The astronauts then are seen readying the Spacelab module for various experiments.
CASI
Space Transportation System Flights; Spacecrews; Space Flight; Space Shuttles; Space Missions

19990025559 NASA Johnson Space Center, Houston, TX USA
STS–81 Post Flight Presentation
Feb. 16, 1997; In English; Videotape: 41 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–199016919; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-81 mission, Commander Michael A. Baker, Pilot Brent W. Jett Jr, and Mission Specialists John M. Grunsfeld, Marsha S. Ivins, Peter J.K. Wisoff, and Jerry M. Linenger present a video mission over-view of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. During the presentation the astronauts take turns discussing aspects of the mission including: the SPACEHAB a double module that provides additional middeck locker space for secondary experiments. During the five days of docked operations with Mir, the crews is seen transferring water and supplies from one spacecraft to the other.
CASI
Space Transportation System Flights; Space Shuttles; Space Shuttle Payloads; Space Shuttle Orbiters; Space Shuttle Missions; Payload Retrieval (STS); Booster Rocket Engines; Flight Crews; Spacecraft Modules; Spacecrews

19990025579 NASA Johnson Space Center, Houston, TX USA
STS–95 Post Flight Presentation
Dec. 16, 1998; In English; Videotape: 42 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011624; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-95 flight crew, Cmdr. Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn present a video mission over-view of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "whiteroom" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. The primary objectives, which include the conducting of a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the HST Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads are discussed in both the video and still photo presentation.
CASI
Space Transportation System Flights; Spacecrews; Payloads; Launching; Space Flight; Space Shuttles; International Space Station; Manned Space Flight

19990025580 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Frederick "Rick" Sturckow
Dec. 17, 1998; In English; Videotape: 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011623; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Frederick Sturckow discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also disscusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; International Cooperation

19990025592 NASA Johnson Space Center, Houston, TX USA
STS–87 Mission Highlights Resources Tape
Dec. 15, 1998; In English; Videotape: 1 hour 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998062053; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-87 mission the flight crew, Commander Kevin R. Kregel, Pilot Steven W. Lindsey, Mission Specialists Winston E. Scott, Kalpana Chawla, and Takao Doi, and Payload Specialist Leonid K. Kadenyuk present an overview of there mission. STS-87 will fly the USA Microgravity Payload (USMP-4), the Spartan-201, the Orbital Acceleration Research Experiment (OARE), the EVA Demonstration Flight Test 5 (EDFT-05). The objective of the observations are to investigate the mechanisms causing the heating of the solar corona and the acceleration of the solar wind which originates in the corona. While flying separately in the cargo bay, the Orbital Acceleration Research Experiment (OARE) is an integral part of USMP-04. It is a highly sensitive instrument designed to acquire and record data of low-level aerodynamic acceleration along the orbiter's principal axes in the free-molecular flow regime at orbital altitudes and in the transition regime during re-entry. OARE data will support advances in space materials processing by providing measurements of the low-level, low frequency disturbance environment affecting various microgravity experiments. OARE data will also support advances in orbital drag prediction technology by increasing the understanding of the fundamental flow phenomena in the upper atmosphere.
CASI
Space Transportation System Flights; Spacecraft Construction Materials; Payloads; Microgravity; Gravitational Effects; Free Molecular Flow; Extravehicular Activity; Bays (Structural Units); Cargo

19990025624 NASA Johnson Space Center, Houston, TX USA
STS–88 Post Flight Presentation
Dec. 16, 1998; In English; Videotape: 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023680; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The flight crew of the STS-88 mission, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev, present a video mission over-view of their space flight. Images include prelaunch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew can be seen being readied in the "white room" for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once the seven-day mission begins, the astronauts comment on the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which was already in orbit, and two EVAs that were planned to connect power and data transmission cables between the Node and the FGB. The crew can also be seen conducting a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB.
CASI
Space Shuttle Missions; Spacecrews; Flight Crews; Extravehicular Activity; Astronauts

19990025625 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Nancy Currie
Dec. 17, 1998; In English; Videotape: 30 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999023679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Nancy Currie discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also disscusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; International Cooperation; Extravehicular Mobility Units; Space Transportation System Flights

19990025627 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Sergei Krikalev
Dec. 17, 1998; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999016420; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Sergei Krikalev discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Zarya Control Module; Unity Connecting Module; Space Station Modules; Large Space Structures

19990025628 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Robert Cabana
Dec. 17, 1998; In English; Videotape: 37 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011627; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Robert D. Cabana discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also disscusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Unity Connecting Module; Zarya Control Module; Large Space Structures; International Cooperation

19990025629 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Jim Newman
Dec. 17, 1998; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011626; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Jim Newman discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also discusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; Space Transportation System; International Space Station; Large Space Structures; Orbital Workshops; Unity Connecting Module; Zarya Control Module

19990025630 NASA Johnson Space Center, Houston, TX USA
STS–88 Crew Interview: Jerry Ross
Dec. 17, 1998; In English; Videotape: 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999011625; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Jerry Ross discusses the seven-day mission that will be highlighted by the mating of the U.S.-built Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two spacewalks to connect power and data transmission cables between the Node and the FGB. Node 1 will be the first Space Station hardware delivered by the Space Shuttle. He also disscusses the assembly sequence. The crew will conduct a series of rendezvous maneuvers similar to those conducted on other Shuttle missions to reach the orbiting FGB. Once the two elements are docked, Ross and Newman will conduct two scheduled spacewalks to connect power and data cables between the Node, PMAs and the FGB. The day following the spacewalks, Endeavour will undock from the two components, completing the first Space Station assembly mission.
CASI
Space Shuttle Missions; Space Shuttles; International Space Station; Large Space Structures; International Cooperation; Unity Connecting Module; Zarya Control Module

19990025761 NASA Johnson Space Center, Houston, TX USA
STS–95 Mission Highlights Resources Tape
Jan. 06, 1999; In English; Videotape: 1 hour 25 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999032784; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-95 flight crew, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, and Pedro Duque, and Payload Specialists Chiaki Mukai and John H. Glenn present a video overview of their space flight. They are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objectives include conducting a variety of science experiments in the pressurized SPACEHAB module, the deployment and retrieval of the Spartan free-flyer payload, and operations with the Hubble Space Telescope (HST) Orbiting Systems Test (HOST) and the International Extreme Ultraviolet Hitchhiker (IEH) payloads being carried in the payload bay. Throughout the presentation, the astronauts take turns narrating particular aspects of the mission with which they were involved.
CASI
Discovery (Orbiter); Space Flight; Space Shuttle Boosters; Space

Transportation System Flights; Hubble Space Telescope; Payload Retrieval (STS)

19990032584 NASA Johnson Space Center, Houston, TX USA
STS–88 Mission Highlights Resources Tape, Tape C
Mar. 02, 1999; In English; Videotape: 54 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999037061; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-88 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. This is the last of three videos which show the highlights of the mission. This video covers the last four days (day 9 - 12) of the mission. Important images include the closing of the UNITY Connecting Module's hatch, the crew exercising, and the reentry of the spacecraft into Earth's atmosphere.
CASI
Endeavour (Orbiter); Space Flight; Space Transportation System Flights; Manned Space Flight

19990032585 NASA Johnson Space Center, Houston, TX USA
STS–88 Mission Highlights Resources Tape, Tape B
Feb. 26, 1999; In English; Videotape: 1 hour 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999037062; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-88 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. Tape two of three includes the installation of an S-Band to help monitor the UNITY Connecting Module, the opening of UNITY's hatch, the opening of the main compartment hatch to ZARYA Control Module, and the repair of the inflight maintenance system.
CASI
Endeavour (Orbiter); Space Flight; Space Transportation System Flights; Manned Space Flight; International Space Station

19990032586 NASA Johnson Space Center, Houston, TX USA
STS–88 Mission Highlights Resources Tape, Tape A
Feb. 26, 1999; In English; Videotape: 54 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999037063; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-88 flight crew, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Currie, James H. Newman, Jerry L. Ross, and Sergei Krikalev present a video overview of their space flight. This is the first of three videos which show the highlights of the Endeavour mission. Important visual images include pre-launch activities such as the eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also included are various panoramic views of the shuttle on the pad. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit crew members are seen delivering and connecting the UNITY Connecting Module to the ZARYA Control Module.
CASI
Endeavour (Orbiter); Space Flight; Space Shuttle Boosters; Space Transportation System Flights; Manned Space Flight

19990041739 NASA Johnson Space Center, Houston, TX USA
STS–91 Flight Day 1 Highlights and Crew Activities Report
Jun. 03, 1998; In English; Videotape: 20 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998358182; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-91 mission, the flight crew, Cmdr. Charles J. Precourt, Pilot Dominic L. Pudwill Gorie, and Mission Specialists Franklin R. Chang-Diaz, Janet Lynn Kavandi, Wendy B. Lawrence, Valery Victorovitch Ryumin and Andrew S. W. Thomas, can be seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Booster Rocket Engines; Space Transportation System Flights; Spacecrews; Launching; Space Flight; Space Missions; Space Shuttles; Countdown

19990041837 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Training
May 03, 1999; In English; Videotape: 12 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999054988; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The training for the crew members of the STS-96 Discovery Shuttle is presented. Crew members are Kent Rominger, Commander; Rick Husband, Pilot; Mission Specialists, Tamara Jernigan, Ellen Ochoa, and Daniel Barry; Julie Payette, Mission Specialist (CSA); and Valery Ivanovich Tokarev, Mission Specialist (RSA). Scenes show the crew sitting and talking about the Electrical Power System; actively taking part in virtual training in the EVA Training VR (Virtual Reality) Lab; using the Orbit Space Vision Training System; being dropped in water as a part of the Bail-Out Training Program; and taking part in the crew photo session.
CASI
Astronaut Training; Training Simulators; In-Flight Simulation

19990041929 NASA Johnson Space Center, Houston, TX USA
STS–86 Post Flight Presentation
Mar. 22, 1999; In English; Videotape: 19 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999064004; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Crew of STS-86 Atlantis Shuttle, Commander James D. Wetherbee, Pilot Michael J. Bloomfield, Mission Specialists Vladimar G. Titov, Scott E. Parazynski, Jean-Loup J. M. Chretien, Wendy Lawrence, and David Wolf, narrate the footage of their mission to the Mir International Space Station. Scenes include crew suit up, walk out to the transfer vehicle, strap-in into the shuttle, start of the main engine, ignition of the rocket boosters, and separation of the solid rocket boosters. The crew of Atlantis participates in an exchange of gifts with the members of Mir, and a space walk to recover experiments outside the Mir Space Station. A beautiful panoramic view of Mir above South America is seen. Scenes also depict the closing of Mir's hatch, Atlantis' separation from Mir, and the reentry of the Atlantis Space Shuttle into the Earth's atmosphere.
CASI
Atlantis (Orbiter); Manned Space Flight; Spacecrews; Mir Space Station; International Space Station

19990041930 NASA Johnson Space Center, Houston, TX USA
Historical Footage of John Glenn Friendship 7
Feb. 20, 1962; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999064003; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Friendship mission launch on the 20th day of February marked the first time that an American attempts to orbit the Earth. Historical footage of John Glenn's suit up, ride out to the launch pad, countdown, liftoff, booster engine cutoff, and separation of the booster engine escape tower is shown. Views of the Earth, Glenn's manual control of the electrical fly-by wire system, and the recovery of the landing vehicle from the ocean are presented.
CASI
Mercury Ma-6 Flight; Friendship 7; Launch Vehicles; Earth Orbits

19990041931 NASA Johnson Space Center, Houston, TX USA
STS–91 Post Flight Presentation
Jun. 22, 1998; In English; Videotape: 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999064002; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage of the Crew of STS-91 Discovery Shuttle, Commander Charles J. Precourt, Pilot Dominic L. Pudwill Gorie, Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi, and Valery Victorovitch

Ryumin, is shown. Scenes include the crew suit up, walk out to the transfer vehicle, and strap-in into the shuttle. Also presented are scenes of the start of the main engine, ignition of the solid rocket boosters, panoramic views of the Earth as the shuttle takes off, and the separation of the solid rocket boosters. The crew of Discovery opens the payload bay doors to the Mir International Space Station, completes SPACEHAB tunnel leak checks, greets crew in Mir Space Station, and transfers materials to Mir. Beautiful panoramic views of the Moon, and Mir above Cape Canaveral are seen. Scenes also include the crew of Discovery sharing meals, and exercising. The film ends with the reentry of the Discovery Space Shuttle into the Earth's atmosphere.
CASI
Discovery (Orbiter); Manned Space Flight; Spacecrews; Mir Space Station; International Space Station

19990045852 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 05
May 31, 1999; In English; Videotape: 24 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068295; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing logistics transfer activities within the Discovery/International Space Station orbiting complex. The crew transfers supplies, equipment, and water. Payette and Tokarev perform maintenance activities on the storage batteries in the Zarya module. Barry and Tokarev install acoustic insulation around some of the fans inside Zarya. Jernigan and Husband install shelving in 2 soft stowage racks. Husband and Barry troubleshoot and perform maintenance activities on the Early Communications System. At the end of the workday, Rominger, Jernigan, and Barry discussed the progress of the mission with NBC's "Today," CBS "This Morning," and CNN.
CASI
Discovery (Orbiter); Spacecrews; International Space Station; Zarya Control Module; Spacecrew Transfer

19990045853 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 04
May 30, 1999; In English; Videotape: 21 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068294; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing final preparations for their space walk. Views of the crew helping Barry and Jernigan suit up for their mission is also presented. Ochoa uses the robot arm to maneuver Jernigan up to the space station module. During the space walk Barry and Jernigan move two cranes, and three bags containing handrails and tools to the outside of the Unity module. They also install a thermal cover on a Unity trunnion pin, inspect peeling paint on Zarya and one of the two Early Communications System antennas on Unity.
CASI
Discovery (Orbiter); Spacecrews; International Space Station

19990045854 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 03
May 29, 1999; In English; Videotape: 18 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068293; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen executing the very first docking with the International Space Station. Also shown are views of the docking taken from both the Unity and Discovery. Final preparation for the mission's space walk is also presented. Jernigan and Barry check the tools and the emergency rescue backpacks they will need for their space walk. Ochoa and Jernigan perform leak and pressurization checks and open the hatch to the Unity module. Ochoa and Takarev store docking targets and lights and check the hatch seals in the narrow passageway. Rominger and Husband remove and store four electronic boxes around the Unity module.
CASI
Discovery (Orbiter); Spacecrews; International Space Station; Spacecraft Docking; Manned Space Flight; Unity Connecting Module

19990045855 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 02
May 28, 1999; In English; Videotape: 17 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068292; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen preparing for the docking with the International Space Station (Unity and Zarya modules). Ochoa and Payette open the tunnel and hatches leading to the SPACEHAB module in the payload bay. Payette and Tokarev place equipment in the module to create space in Discovery's cabin. Jernigan, Barry, Payette and Husband test three spacesuits. Ochoa and Payette also test a 50-foot robot arm. And Jernigan and Ochoa extend the outer ring of Discovery's Orbiter Docking System.
CASI
Discovery (Orbiter); Spacecrews; International Space Station; Unity Connecting Module; Zarya Control Module; Spacecraft Docking

19990045856 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 01
May 27, 1999; In English; Videotape: 17 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068291; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing pre-launch activities such as eating the traditional breakfast, crew suit-up, and the ride out to the launch pad. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Discovery (Orbiter); Manned Space Flight; Spacecrews

19990046904 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 07
Jun. 02, 1999; In English; Videotape: 27 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068290; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen completing the transfer of material and equipment to the International Space Station. The astronauts install parts of a wireless strain gauge system, clean filters and check smoke detectors. The crew participates in a variety of news conferences with media representatives. Payette accepts a congratulatory call from Canadian Prime Minister Jean Chretien and answers questions from schoolchildren in Ottawa.
CASI
Discovery (Orbiter); International Space Station; Rendezvous Spacecraft; Space Rendezvous; Spacecraft Docking; Manned Space Flight; Conferences; Teleconferencing

19990046905 NASA Johnson Space Center, Houston, TX USA
STS–96 FD Highlights and Crew Activities Report: Flight Day 06
Jun. 01, 1999; In English; Videotape: 25 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999068289; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen performing logistics transfer activities within the Discovery/International Space Station orbiting complex. Ochoa, Jernigan, Husband and Barry devote a significant part of their day to the transfer of bags of different sizes and shapes from the SPACEHAB module in Discovery's cargo bay to resting places inside the International Space Station. Payette and Tokarev complete the maintenance on the storage batteries. Barry and Tokarev complete installation of the remaining sound mufflers over the fans in Zarya. Barry then measures the sound levels at different positions inside the module. Rominger and Tokarev conduct a news conference with Russian reporters from the Mission Control Center in Moscow.

CASI

Discovery (Orbiter); International Space Station; Unity Connecting Module; Zarya Control Module; Spacecraft Docking; Space Rendezvous; Rendezvous Spacecraft; Manned Space Flight; Space Logistics; Stowage (Onboard Equipment); Portable Equipment

19990046906 NASA Johnson Space Center, Houston, TX USA

STS–96 FD Highlights and Crew Activities Report: Flight Day 08

Jun. 03, 1999; In English; Videotape: 16 min. 11 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999068287; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eight day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen closing the hatches of the Space Station. The crew begins its departure from the International Space Station. Ochoa and Payette uses the shuttles robot arms to conduct a survey of the port side antenna for the Early Communications System on Unity. Views of the Orbiter docking system are also seen.

CASI

Discovery (Orbiter); International Space Station; Rendezvous Spacecraft; Spacecraft Docking; Space Rendezvous; Manned Space Flight; Unity Connecting Module

19990053131 NASA Johnson Space Center, Houston, TX USA

STS–96 FD Highlights and Crew Activities Report: Flight Day 10

Jun. 05, 1999; In English; Videotape: 15 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999074605; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen making final preparation for their return to Earth. Rominger Husband, and Ochoa checkout the flight control systems, perform hot-fired tests and verify the performance of Discovery's small steering jets. Jernigan and Tokarev stow all the equipment used in the mission. Payette deploys a small student-built payload called STARSHINE. The crew also tests all the communications channels.

CASI

Discovery (Orbiter); Spacecrews; Manned Space Flight; Crew Procedures (Inflight); Return to Earth Space Flight

19990053264 NASA Johnson Space Center, Houston, TX USA

STS–96 FD Highlights and Crew Activities Report: Flight Day 09

Jun. 04, 1999; In English; Videotape: 14 min. 15 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999068288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-96 Discovery mission, the flight crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev are seen as they prepare to depart from the International Space Station. After the undocking of the spacecraft, Husband navigated the spacecraft around the International Space Station. Images of the crew removing centerline cameras, tracking the solar arrays and beautiful panoramic views of the Station above the Earth are seen.

CASI

Discovery (Orbiter); Spacecrews; Manned Space Flight; Return to Earth Space Flight; Crew Procedures (Inflight)

19990053904 NASA Langley Research Center, Hampton, VA USA

Dan Goldin Presentation: Pathway to the Future

Apr. 05, 1999; In English; Videotape: 87 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999064054; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

In the "Path to the Future" presentation held at NASA's Langley Center on March 31, 1999, NASA's Administrator Daniel S. Goldin outlined the future direction and strategies of NASA in relation to the general space exploration enterprise. NASA's Vision, Future System Characteristics, Evolutions of Engineering, and Revolutionary Changes are the four main topics of the presentation. In part one, the Administrator talks in detail about NASA's vision in relation to the NASA Strategic Activities that are Space Science, Earth Science, Human Exploration, and Aeronautics & Space Transportation. Topics discussed in this section include: space science for the 21st century, flying in mars atmosphere (mars plane), exploring new worlds, interplanetary internets, earth observation and measurements, distributed information-system-in-the-sky, science enabling understanding and application, space station, microgravity, science and exploration strategies, human mars mission, advance space transportation program, general aviation revitalization, and reusable launch vehicles. In part two, he briefly talks about the future system characteristics. He discusses major system characteristics like resiliencey, self-sufficiency, high distribution, ultra-efficiency, and autonomy and the necessity to overcome any distance, time, and extreme environment barriers. Part three of Mr. Goldin's talk deals with engineering evolution, mainly evolution in the Computer Aided Design (CAD)/Computer Aided Engineering (CAE) systems. These systems include computer aided drafting, computerized solid models, virtual product development (VPD) systems, networked VPD systems, and knowledge enriched networked VPD systems. In part four, the last part, the Administrator talks about the need for revolutionary changes in communication and networking areas of a system. According to the administrator, the four major areas that need cultural changes in the creativity process are human-centered computing, an infrastructure for distributed collaboration, rapid synthesis and simulation tools, and life-cycle integration and validation. Mr. Goldin concludes his presentation with the following maxim "Collaborate, Integrate, Innovate or Stagnate and Evaporate." He also answers some questions after the presentation.

CASI

Conferences; NASA Programs; Mission Planning; Technological Forecasting; Systems Engineering; Aerospace Sciences; Space Exploration

19990054654 NASA Johnson Space Center, Houston, TX USA

STS–96 Mission Highlights, Part 1

Jul. 07, 1999; In English; Videotape: 50 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–1999087306; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a three-part video mission-highlights set, the flight of the STS-96 Space Shuttle Orbiter Discovery is reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station (ISS). This is the first flight to dock to the International Space Station. The primary payloads are the Russian cargo crane, known as STRELA, which the astronauts mount to the exterior of the Russian station segment, the SPACEHAB Oceaneering Space System Box (SHOSS), and a U.S. built crane called the ORU Transfer Device (OTD). Other payloads include the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE), the Shuttle Vibration Forces Experiment (SVF), and the Orbiter Integrated Vehicle Health Monitoring - HEDS Technology Demonstration (IVHM HTD). The traditional pre-launch breakfast, being suited up, entry into the Shuttle, and views of the liftoff from several different vantage points are shown. In-flight footage includes views from the robot arm conducting a television survey of Discovery's payload bay and the flawless docking of the Unity module with the International

Space Station. During the docking, camera views from both the ISS and Discovery are presented. These activities make up the first three Flight Days of STS-96.
CASI
Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecraft Docking; Spacecrews

19990054655 NASA Johnson Space Center, Houston, TX USA
STS–96 Mission Highlights, Part 2
Jul. 07, 1999; In English; Videotape: 55 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999087307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this second part of a three-part video mission-highlights set, on-orbit spacecrew activities performed on the STS-96 Space Shuttle Orbiter Discovery and the International Space Station are reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This second part in the mission series features video from Flight Day 4-7 (FD 4-7). FD 4 of STS-96 presents astronauts Tammy Jernigan and Dan Barry completing the second longest space walk in shuttle history. Footage includes Jernigan and Barry transferring and installing two cranes from the shuttle's payload bay to locations on the outside of the station. The astronauts enter the International Space Station delivering supplies and prepare the outpost to receive its first resident crew, scheduled to arrive in early 2000 on FD 5. The video also captures the crew involved in logistics transfer activities within the Discovery/ISS orbiting complex. FD 6 includes footage of Valery Tokarev and Canadian astronaut Julie Payette charging out the final six battery recharge controller units for two of Zarya's power-producing batteries and all crew members' involvement in logistics transfer activities from the SPACEHAB module to designated locations in the International Space Station. With the transfer work of FD 6 all but complete, the astronauts conduct some additional work, installing parts of a wireless strain gauge system that will help engineers track the effects of adding modules to the station throughout its assembly. Moving the few remaining items from Discovery to the ISS, then closing a series of hatches within the station's modules leading back to the shuttle are the primary activities contained in FD 7. Final coverage features Discovery's astronauts finishing their work inside the International Space Station, closing all of the hatches and readying the shuttle's small thrusters to be fired to raise the entire complex's orbit in preparation for the undocking and departure set for FD 8.
CASI
Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Maintenance; Extravehicular Activity; Spacecraft Modules; Space Shuttle Payloads

19990054656 NASA Johnson Space Center, Houston, TX USA
STS–96 Mission Highlights, Part 3
Jul. 07, 1999; In English; Videotape: 41 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999087308; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a three-part video mission-highlights set, spacecrew operations between the STS-96 Space Shuttle Orbiter Discovery and the International Space Station, as well as STS reentry and landing is reviewed. The flight crew consists of Kent V. Rominger, Commander; Rick D. Husband, Pilot; and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette (Canadian), and Valery Ivanovich Tokarev (Russian). The primary goals of this mission were to work on logistics and resupply the International Space Station. This third part of the three part series includes footage from Flight Days 8-11 (FD 8-11) of the mission. FD 8 includes the crew members moving the last items from Discovery into the International Space Station (ISS), closing the final hatch on the orbiting outpost and commanding a series of 17 pulses of Discovery's reaction control system jets to boost the station's orbit. Discovery undocks from the station, performs a 2 1/2 lap flyaround of the station, before Husband fires Discovery's jets in a final burst to move Discovery away from the station, concluding six days of docked operations. After the flyaround, Husband fires Discovery's jets to depart the station's vicinity. Beginning FD 9, as Discovery departs from the station, Mission Specialists Tammy Jernigan and Dan Barry pack away the space suit gear they used during their spacewalk early in the mission, while Commander Kent Rominger and Pilot Rick Husband practice landings on a laptop computer program. Mission Specialists Julie Payette and Valery Tokarev help to stow gear and repressurize the shuttle's cabin to its standard 14.7 pounds per square inch. The crew also readies to deploy a small, student-built payload called STARSHINE (Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment). In and around landing preparations and the STARSHINE deploy, the crew stowe all equipment used throughout the mission. The STARSHINE satellite ejects from a canister in Discovery's payload bay on FD 10. FD 11 is completed as Discovery swoops out of the darkness as Commander Kent Rominger sets the shuttle and his crewmates down on Runway 15 at the Shuttle Landing Facility in Florida to successfully complete the first shuttle mission of the year. Several different views of the landing are highlighted in the video.
CASI
Discovery (Orbiter); Space Shuttle Missions; International Space Station; Spacecrews; Spacecraft Landing; Spacecraft Reentry

19990054914 NASA Johnson Space Center, Houston, TX USA
STS–93 Crew Interview
Jul. 23, 1999; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999089463; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This tape is an interview with Eileen M. Collins. In July 1999, she became the first female shuttle commander in NASA history. It was her third mission to space. She was the pilot of two previous space missions. In this interview she discussed the different telescopes that have been used in prior missions. She also talked about the functions of the new telescope "chandra" that have been used in this mission.
Derived from text
Space Missions; Space Shuttle Missions; Spacecrews

19990056553 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 1 Highlights and Crew Activities
Jul. 23, 1999; In English; Videotape: 23 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-93 Columbia mission, the flight crew, Commander Eileen Collins, Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michael Tognini deployed the Chandra X-Ray Observatory into space. This was done after a full night of work and preparation. Chandra will study the invisible, and often violent mysteries of x-ray astronomy. Commander Collins maneuvered Columbia to a safe distance away from the telescope as an internal timer counted down to the first of a two-phase ignition of the Inertial Upper Stage. After switching to internal battery power until its solar rays are deployed, the telescope reaches an oval orbit one-third the distance to the Moon to conduct its astronomical observations. Since Chandra is safely on its way and the major objective of their mission is successfully completed, the astronauts end their long day and begin an eight hour sleep period.
CASI
Columbia (Orbiter); Manned Spacecraft; Spacecrews; Space Transportation System Flights

19990056554 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 3 Highlights and Crew Activities
Jul. 24, 1999; 22p; In English; Videotape: 22 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088231; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists Cady Coleman, Steve Hawley and Michael Tognini were awakened with the song "Brave New Girls" performed by Teresa. Steve Hawley, the resident astronomer, continued to work with the Southwest Ultraviolet Imaging System (SWUIS) and collected images of targets associated with Mercury, Venus, Jupiter and the Moon. Collins and Ashby maneuvered Columbia in support of various experiments including observations made with the SWUIS telescope or the Midcourse Space Experiment (MSX), which used sophisticated sensors to collect ultraviolet, infrared, and visible light data of firings of the shuttle's orbital maneuvering system engines or primary reaction control system jets. Collins also

conducted a conversation with students at the Harbor View Elementary School in Corona Del Mar, California using the Shuttle Amatuer Radio Experiment (SAREX) system. She also checked experiments associated with the Cell Culture Module (CCM) and the Biological Research in Canister (BRIC) payloads.
CASI
Space Transportation System; Spacecrews; Imaging Techniques; Manned Spacecraft; Spaceborne Experiments; Space Transportation System Flights

19990056555 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 2 Highlights and Crew Activities
Jul. 24, 1999; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088230; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Following an eight hour sleep period, the five member flight crew, Commander Eileen Collins, Pilot Jeff Ashby, and Mission Specialists Cady Coleman, Steve Hawley and Michael Tognini awakened to begin their second day in space. The main focus of Flight Day 2 activities was to activate the secondary payloads and experiments. Among those efforts was the set-up and first observations using the Southwest Ultraviolet Imaging System (SWUIS), which operates from inside the shuttle cabin. The specific targets observed included the Earth's moon, Mercury, Venus and Jupiter. A break was taken at 4:36 a.m. CDT by Collins and Coleman to do interviews with reporters from 4 major networks.
CASI
Flight Crews; Space Transportation System; Space Transportation System Flights; Imaging Techniques; Payloads; Manned Spacecraft

19990056588 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 5 Highlights and Crew Activities
Jul. 26, 1999; In English; Videotape: 20 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088233; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Columbia's crew began packing up experiments and preparing to return to Earth tomorrow with a touchdown planned for Kennedy Space Center at 10:20 p.m. CDT. Commander Eileen Collins and Pilot Jeff Ashby checked out the cockpit instruments, displays and flight control systems. They also test fired the 38 small steering jets. Everything was in good shape and ready for the trip back to Earth. Also, Collins and Ashby were joined by the rest of the crew for a press conference, fielding questions from reporters in Houston, Florida and Massachusetts.
CASI
Space Transportation System; Spacecrews; Space Transportation System Flights; Touchdown; Manned Spacecraft

19990056589 NASA Johnson Space Center, Houston, TX USA
STS–93 Flight Day 4 Highlights and Crew Activities
Jul. 25, 1999; In English; Videotape: 20 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999088232; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The five astronauts aboard the Space Shuttle Columbia began their fourth flight day preparing to make additional celestial observations through the shuttle's windows and continue work with a variety of instruments. Pilot Jeff Ashby and Mission Specialists Steve Hawley and Michael Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS) which measures vibrations and changes in microgravity levels caused by on-orbit workouts. Astronomer Hawley again made observations of Venus, Jupiter and the Moon with the Southwest Ultraviolet Imaging System (SWUIS) as Commander Eileen Collins and Pilot Jeff Ashby put the shuttle in the proper orientation for his observations. Tognini and Coleman checked the bioprocessing experiments, and harvested mouse-ear cress plants as part of the Plant Growth in Microgravity experiment. Collins and Ashby once again fired the shuttle's engines so that the sensors of the Midcourse Space Experiment (MSX) satellite were able to collect ultraviolet, infrared and visible light data. Columbia was orbiting at an altitude of 182 statute miles with all of its systems in excellent condition.
CASI
Space Transportation System; Manned Spacecraft; Imaging Techniques; Spaceborne Experiments; Gravitational Effects; Space Transportation System Flights; Spacecrews

19990095798 NASA Johnson Space Center, Houston, TX USA
STS–96 Post Flight Presentation
Sep. 08, 1999; In English; Videotape: 15 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999129646; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Crew of STS-96 Discovery Shuttle, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, are shown narrating the mission highlights. Scenes include walk out to the transfer vehicle, and launch of the shuttle. Also presented are scenes of the start of the main engine, ignition of the solid rocket boosters, and the separation of the solid rocket boosters. Footage of Payette preparing the on-board camera equipment, while Barry and Jernigan perform routine checks of the equipment is seen. Also presented are various pictures of the shuttle in its orbit, the docking of the shuttle with the Mir International Space Station, and crewmembers during their space walk. Beautiful panoramic views of the Great Lake, Houston, and a combined view of Italy and Turkey are seen. The crew of Discovery is shown performing a juice ball experiment, tumbling, undocking, performing transfer operations, and deploying the STARSHINE educational satellite. The film ends with the reentry of the Discovery Space Shuttle into the Earth's atmosphere.
CASI
Discovery (Orbiter); Manned Space Flight; Mir Space Station; International Space Station; Spacecraft Docking; Unity Connecting Module; Zarya Control Module

19990116268 NASA Johnson Space Center, Houston, TX USA
STS–93 Post Flight Presentation
Nov. 08, 1999; In English; Videotape: 16 min.,18 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–1999202513; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

An overview of Flight STS-93 is presented. The primary objective of the STS-93 mission was to deploy the Advanced X-Ray Astrophysics Facility (AXAF), also known as the Chandra X-ray Observatory. The mission flew on the Columbia Shuttle, on July 22, 1999. This facility is the most sophisticated X-ray observatory ever built. Other payloads on STS-93 were: (1) the Midcourse Space Experiment (MSX), (2) Shuttle Ionospheric Modification with Pulsed Local Exhaust (SIMPLEX), (3) Southwest Ultraviolet Imaging System (SWUIS), (4) Gelation of Sols: Applied Microgravity Research (GOSAMR), Space Tissue Loss-B (STL-B), (5) Light Weight Flexible Solar Array Hinge (LFSAH), (6) Cell Culture Module (CCM), and (7) the Shuttle Amateur Radio Experiment-II (SAREX-II), (8) EarthKam, (9) Plant Growth Investigations in Microgravity (PGIM), (10) Commercial Generic Bioprocessing Apparatus (CGBA), (11) Micro-Electrical Mechanical System (MEMS), and (12) the Biological Research in Canisters (BRIC). The crew was: Eileen M. Collins, Mission Commander, the first female shuttle commander; Jeffrey S. Ashby, Pilot; Steven A. Hawley , Mission Specialist; Catherine G. Coleman, Mission Specialist; Michel Tognini (CNES), Mission Specialist. The video contains views of life aboard the space shuttle. This mission featured both a night launching and a night landing at the Kennedy Space Center.
CASI
Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Missions; Crew Procedures (Inflight)

19990116476 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Training
Nov. 08, 1999; In English; Videotape: 29 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999202514; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Hubble Space Telescope (HST) team is preparing for NASA's third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members are Commander Curtis L. Brown, Pilot Scott J. Kelly, European Space Agency (ESA) astronaut Jean-Francois Clervoy who will join space walkers Steven L. Smith, C. Michael Foale, John M. Grunsfeld, and ESA

astronaut Claude Nicollier. The objectives of the HST Third Servicing Mission (SM3A) are to replace the telescope's six gyroscopes, a Fine-Guidance Sensor, an S-Band Single Access Transmitter, a spare solid-state recorder and a high-voltage/temperature kit for protecting the batteries from overheating. In addition, the crew plans to install an advanced computer that is 20 times faster and has six times the memory of the current Hubble Space Telescope computer. to prepare for these extravehicular activities (EVAs), the SM3A astronauts participated in Crew Familiarization sessions with the actual SM3A flight hardware. During these sessions the crew spent long hours rehearsing their space walks in the Guidance Navigation Simulator and NBL (Neutral Buoyancy Laboratory). Using space gloves, flight Space Support Equipment (SSE), and Crew Aids and Tools (CATs), the astronauts trained with and verified flight orbital replacement unit (ORU) hardware. The crew worked with a number of trainers and simulators, such as the High Fidelity Mechanical Simulator, Guidance Navigation Simulator, System Engineering Simulator, the Aft Shroud Door Trainer, the Forward Shell/Light Shield Simulator, and the Support Systems Module Bay Doors Simulator. They also trained and verified the flight Orbital Replacement Unit Carrier (ORUC) and its ancillary hardware. Discovery's planned 10-day flight is scheduled to end with a night landing at Kennedy.
CASI
Astronaut Training; Hubble Space Telescope; Discovery (Orbiter); Space Transportation System; Extravehicular Activity; Space Maintenance; Flight Crews

19990116992 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41G TCDT
Sep. 15, 1984; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207906; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Crew of STS-41G Challenger Shuttle, Pilot Jon A. McBride, Mission Specialists Kathryn D. Sullivan, Sally K. Ride and David C. Leestma, and Payload Specialists Marc Garmeau, and Paul D. Scully-Power are seen driving in the Astro-van to pick up the Commander of the mission Robert L. Crippen. Footage of the crew arriving at the launch pad, departing the Astro-van and boarding the shuttle to perform a trial countdown demonstration test are shown. Members of the Challenger team are seen exiting the shuttle, and answering questions from reporters. Live footage of the flight control room, and several panoramic views of the shuttle on the launch pad are also seen.
CASI
Checkout; Prefiring Tests; Prelaunch Tests; Ground Tests; Test Firing; Space Shuttle Mission 41-G; Challenger (Orbiter); Space Transportation System; Space Transportation System Flights

19990116993 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 SRB LRFT Forward Center Segment Joint Inspection
Apr. 27, 1988; In English; Videotape: 21 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207911; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a system inspection done in the development of the STS-26 Space Transportation System Spacecraft is seen. The engineering team performs the inspection by lowering a member of the team into the center segment joint. The team member wore an oxygen mask while carrying out the process.
CASI
Inspection; Checkout; Space Transportation System

19990116995 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51C Launch and Landing
Jan. 27, 1985; In English; Videotape: 50 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207923; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release is comprised of live shots covering the day launch and landing of STS-51C/Discovery. The flight crew members were: Thomas K. Mattingly II, Commander; Loren J. Shriver, Pilot; Ellison S. Onizuka, Mission Specialist; James F. Buchli, Mission Specialist; and Gary E. Payton, Payload Specialist. The launch video is presented from several different vantage points and covers the countdown from the launch pad, main engine ignition, liftoff, and solid rocket booster separation. The landing footage contains final descent and approach, landing gear deployment, and touchdown, which was also captured from different locations including a helicopter. STS-51C carried the DoD 85-1 payload and was the first mission dedicated to the Department of Defense.
CASI
Space Shuttle Mission 51-C; Discovery (Orbiter); Spacecraft Landing; Spacecraft Launching

19990116996 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26/Discovery Preparations for Launch
September 1988; In English; Videotape: 2 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207925; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center two-part video release is comprised of footage covering STS-26 launch preparations from the arrival of the Tracking and Data Relay Satellite (TDRS) at the Orbiter Processing Facility (OPF) to the lift and mate of the external tanks. The STS-26 flight crew include: Frederick H. (Rick) Hauck, mission commander; Richard O. Covey, pilot; John M. (Mike) Lounge, mission specialist; David C. Hilmers, mission specialist; and George D. (Pinky) Nelson, mission specialist. The primary payload of STS-26 is the TDRS while the secondary payloads include the Physical Vapor Transport of Organic Solids (PVTOS); Protein Crystal Growth (PCG); Infrared Communications Flight Experiment (IRCFE); Aggregation of Red Blood Cells (ARC); Isoelectric Focusing Experiment (IFE); Mesoscale Lightning Experiment (MLE); Phase Partitioning Experiment (PPE); Earth-Limb Radiance Experiment (ELRAD); Automated Directional Solidification Furnace (ADSF) and two Shuttle Student Involvement Program (SSIP) experiments. Launch preparation footage includes flight crew arrival at KSC, rollout of Discovery to Pad B, OV-103 Discovery power-up, main engine unpacking and installation, solid rocket boosters' arrival prep and stacking, and aft skirt to aft segment mating.
CASI
Space Shuttle Missions; Launching Sites; Launching Pads; Launching Bases

19990117116 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51A: Mission Highlights
Nov. 1984; In English; Videotape: 60 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew (Commander Frederick H. Hauck, Pilot David M. Walker, Mission Specialists Anna L. Fisher, Dale A. Gardner, and Joseph P. Allen) prepares for the 14th shuttle mission. The Canadian communications satellite TELESAT-H (ANIK) is attached to Payload Assist Module-D (PAM-D) and deployed into geosynchronous orbit on flight day two. Defense communications satellite SYNCOM IV-I is deployed on day three. Allan and Gardner retrieve two malfunctioning satellites (PALAPA-B2 and WESTAR-VI). Fisher operates the remote manipulator system, grappling satellites and depositing them in the payload door.
CASI
Space Missions; Space Transportation System Flights; Payload Assist Module

19990117117 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26: O–Ring Installation and Inspection
Apr. 15, 1988; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–1999207903; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This live action short sequence depicts a clean room setting of 0-ring inspection and installation prior to mission STS-26.
CASI
O Ring Seals; Space Transportation System; Inspection; Installing

19990117118 NASA Johnson Space Center, Houston, TX USA
STS 41–G: Mission Highlights
Oct. 31, 1984; In English; Videotape: 50 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew (Commander Robert L. Crippen, Pilot Jon A. McBride, Mission Specialists Kathryn D. Sullivan, Sally K. Ride, and David C. Leestma, Payload Specialists Marc Garneau, and Paul D. Scully-Power) prepares for the 13th Shuttle Mission. Earth Radiation Budget Satellite (ERBS) is deployed less than

nine hours into flight. Components of the Orbital Refueling System are connected, demonstrating that it is possible to refuel satellites in orbit.
CASI
Refueling; Space Transportation System Flights; Space Missions; Earth Radiation Budget

19990117250 NASA Johnson Space Center, Houston, TX USA
STS–93 Mission Highlights Resource Tape
Nov. 29, 1999; In English; Videotape: 1 hr. 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207904; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-93 flight crew, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini are seen performing pre-launch activities such as crew suit-up, and ride out to the launch pad for an early morning launch. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objective is to deploy the Advanced X-ray Astrophysics Facility. Throughout the presentation, the astronauts take turns narrating particular aspects of the mission with which they are involved. Coleman and Tognini command Chandra to spring-eject from its cradle in the payload bay. The crew then work on the various experiments being carried out in flight. They successfully set up the first observatory using the Southwest Ultraviolet Imaging System (SWUIS). The SWUIS is used to image planets and other solar system bodies in order to explore their atmospheres and surfaces in the ultraviolet (UV) region of the spectrum. Tognini conducts a ham radio conversation with Jean-Pierre Haignere on the Mir Space Station. Towards the end of the mission Ashby, Hawley and Tognini set up an exercise treadmill and the Treadmill Vibration Information System (TVIS). The live footage ends with the reentry of Columbia into the Earth's Atmosphere. The night landing includes touchdown, deployment of the drag chute and crew departure from the vehicle.
CASI
Columbia (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy; Solar System

20000000253 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51B Launch and Landing
May 06, 1985; In English; Videotape: 20 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of various isolated launch views is seen. Views of the Space Shuttle Challenger are shown from different camera sites such as the VAB (Vehicle Assembly Building) Roof, Pad Perimeter, Helicopter, Convoy, and Midfield. Also shown from different cameras is the re-entry and landing of the shuttle at Kennedy Space Center (KSC). Footage also includes the ground recovery crew as they travel to the spacecraft. Challengers crew, Commander Robert F. Overmyer, Pilot Frederick D. Gregory, Mission Specialists Don L. Lind, Norman E. Thagard, and William E. Thornton, and Payload Specialists Lodewijk van den Berg, and Taylor G. Wang are also seen leaving the craft.
CASI
Challenger (Orbiter); Space Shuttle Mission 51-B; Space Transportation System; Spacecraft Launching

20000004257 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51G Mission Highlights Resource Tape
Jun. 24, 1985; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207983; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-51G flight crew, Commander Daniel C. Brandenstein, Pilot John O. Creighton, Mission Specialists Shannon W. Lucid, John M. Fabian, and Steven R Nagel, and Payload Specialists Patrick, Baudry, and Sultan Salman Al-Saud are seen performing pre-launch activities such as eating of the traditional breakfast, ride out to the launch pad, and crew suit-up for an early morning launch. Also, included are various panoramic views of Discovery on the pad. The main objective of this mission is to deploy three communication satellites. The satellites being deployed are MORE LOS-A, for Mexico; ARABSAT-A, for the Arab Satellite Communications Organization; and TELSTAR-3D, for AT&T. The crew also retrieve the SPARTAN-1 satellite. Scenes include the crew in the mess deck via video link with Mission Control Center in celebration of the 100th American in space. Al-Saud also spoke with his father in Saudi Arabia via video link. Views of certain experiments are also seen. Al-Saud is seen conducting the postural experiment, and Baudry is seen conducting the equilibrium experiments. Panoramic views of the Hawaiian Island Archipelago, and Wadi Habawnah, Saudi Arabia are also visible from the shuttle. Live footage ends with the re-entry of the vehicle into the Earth's Atmosphere, an early morning touchdown at Edwards Air Force Base and crew departure from the craft.
CASI
Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Space Shuttle Mission 51-G; Saudi Arabian Space Program

20000004427 NASA Johnson Space Center, Houston, TX USA
STS–103 Flight Day Highlights and Crew Activity Report
Dec. 20, 1999; In English; Videotape: 19 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of Discovery, Mission Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy are seen executing various activities. Live footage of Clervoy powering up the robotic arm is seen. While Clervoy powers the robotic arm, Brown and Kelly set up the tools for the various different space walks scheduled, Grunsfeld and Nicollier check out the space suits, and Smith and Foale tend to the space walk tools. Foale, Brown, Kelly and Clervoy are also shown participating in a series of interviews.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Crew Procedures (Inflight)

20000004428 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Activity Report/Flight Day 1 Highlights
Dec. 19, 1999; In English; Videotape: 19 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the astronauts sitting around the table with the traditional cake is presented. The crew of Discovery, Mission Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy are seen executing various activities including suit-up, walkout to the Astro-Van, and strap-in into the shuttle. Also presented are beautiful panoramic views of the shuttle on the pad. During this night launch, footage of the main engine start, ignition of the boosters, liftoff of Discovery, and separation of the solid rocket boosters are seen.
CASI
Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Manned Space Flight

20000004510 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Jean–Francois Clervoy
Sep. 09, 1999; In English; Videotape: 38 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213441; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Jean-Francois Clervoy is seen. The interview addresses many different questions including why Clervoy became an astronaut, what were the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors and computers. Also discussed is an explanation of the ESA (European Space Agency) involvement in this mission, and a brief touch on Clervoy's responsibility during any of the given four space walks scheduled for this mission.
CASI
Hubble Space Telescope; Replacing; Gyroscopes; Transistors; Computers;

Discussion; Spacecrews; Crew Procedures (Inflight); Crew Procedures (Preflight)

20000004511 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Curtis Brown
Sep. 09, 1999; In English; Videotape: 36 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213440; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Curtis L. Brown is seen. The interview addresses many different questions including why Brown became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed is Brown's responsibility during any of the planned space walks scheduled for this mission.
CASI
Hubble Space Telescope; Maintenance; Replacing; Gyroscopes; Computers; Transistors

20000004512 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Scott Kelly
Sep. 09, 1999; In English; Videotape: 26 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213437; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Kelly is seen. The interview addresses many different questions including why Kelly became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed are the Chandra X Ray Astrophysics Facility, and a brief touch on Kelly's responsibility during any of the given four space walks scheduled for this mission.
CASI
Hubble Space Telescope; Replacing; Gyroscopes; Transistors; Computers; Discussion; Spacecrews; Crew Procedures (Inflight)

20000004517 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: John Grunsfeld
Sep. 09, 1999; In English; Videotape: 31 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208158; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist John M. Grunsfeld is seen. The interview addresses many different questions including why Grunsfeld became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Grunsfeld's responsibility during any of the four space walks scheduled for this mission.
CASI
Hubble Space Telescope; Space Maintenance; Crew Procedures (Inflight); Spacecrews; Discussion

20000004522 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26: Preparations for Launch
Jan. 01, 1988; In English; Videotape: 59 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207915; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Preparations for launch of STS-26 are shown. They include: (1) VAB to OPF high bay rollover; (2) Main engine unpacking and installation; (3) OMS pod installation; (4) Crew hatch removal; (5) Modified crew hatch installation; (6) Nose cap installation; (7) 17 inch disconnect work; (8) Ku-band antenna stow and deploy; (9) Tile work; (10) Oasis payload installation; (11) Solid rocket boosters arrival, preps and stacking; (13) Modified SRB segments: Arrival via train at KSC RPSF; (14) AFT segment rotation to vertical in RPSF; (15) AFT skirt to AFT segment mating; (16) SRB grain inspection; (17) Lift AFT segment; and (18) Lift and mate external tank.
CASI
Space Transportation System; Launching; Solid Propellant Rocket Engines; Space Shuttle Boosters; Payloads; Inspection

20000004523 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS 41–D: Post–Flight Press Conference with Highlights from JSC
Sep. 12, 1984; In English; Videotape: 61 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207918; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Henry W. Hartsfield, STS 41-D mission by listing the following firsts: (a) first Discovery flight; (b) first flight for a commercial payload specialist; (c) first SYNCOM satellite deployed from an orbiter; and (d.) first to deploy 3 satellites. This was also the heaviest stack at lift-off and the heaviest payload. The footage concludes with a film of the mission highlights.
CASI
Conferences; Discovery (Orbiter); Space Transportation System; Spacecrews

20000004924 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Press Conference from JPL, Parts 1 and 2
Dec. 08, 1992; In English; Videotape: Running time 1 hr., 22 min., in color, with sound
Report No.(s): NONP–NASA–VT–2000001065; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This two-tape Jet Propulsion Laboratory (JPL) video production presents a Dec. 8, 1992 press conference held at JPL to discuss the final Galileo spacecraft encounter with Earth before beginning its journey to Jupiter. The main theme of the conference was centered on the significance of the 2nd and final Earth/Moon flyby as being the spacecraft's last planetary encounter in the solar system before reaching Jupiter, as well as final flight preparations prior to its final journey. Each person of the five member panel was introduced by Robert MacMillan (JPL Public Information Mgr.) before giving brief presentations including slides and viewgraphs covering their area of expertise regarding Galileo's current status and future plans. After the presentations, the media was given an opportunity to ask questions of the panel regarding the mission. Mr. Wesley Huntress (Dir. of Solar System Exploration (NASA)), William J. ONeill (Galileo Project Manager), Neal E. Ausman, Jr. (Galileo Mission Director), Dr. Torrence V. Johnson (Galileo Project Scientist) and Dr. Ronald Greeley (Member, Imaging Team, Colorado St. Univ.) made up the panel and discussed topics including: Galileo's interplanetary trajectory; project status and performance review; instrument calibration activities; mission timelines; lunar observation and imaging; and general lunar science. Also included in the last three minutes of the video are simulations and images of the 2nd Galileo/Moon encounter.
CASI
Galileo Project; Galileo Spacecraft; Interplanetary Flight; Space Exploration

20000010607 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Mike Foale
Sep. 09, 1999; In English; Videotape: 48 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213442; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist C. Michael Foale is seen. The interview addresses many different questions including why Foale became an astronaut, what were the events that led to his interest. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, and a brief touch on Foale's responsibility during any of the four space walks scheduled for this mission.
CASI
Hubble Space Telescope; Maintenance

20000010608 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Interviews: Steven Smith
Sep. 09, 1999; In English; Videotape: 27 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213439; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Steven L. Smith is seen. The interview addresses many different questions including why Brown became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is an explanation of the why this required mission to service the Hubble Space Telescope must take place at such an early date, replacement of the gyroscopes, transistors, and computers. Also discussed is Smith's responsibility during any of the planned space walks scheduled for this mission.
CASI
Hubble Space Telescope; Maintenance; Replacing; Computers; Gyroscopes; Transistors

20000010609 NASA Johnson Space Center, Houston, TX USA
STS–103 Flight Day 3 Highlights and Crew Activities Report
Dec. 22, 1999; In English; Videotape: 12 min., 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213297; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Highlights of the third day of the STS-103 mission on board the space shuttle Discovery are shown in this videotape. The mission was led by Commander Curtis L. Brown, with Pilot Scott J Kelly, and Mission Specialists Steven L. Smith, Jean-Francois Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace all six of the gyroscopes that make up the three Rate Sensor Units. In addition the Astronauts installed a new computer. During the third day when Discovery reached a point about 35 feet from Hubble, astronaut Jean-Francois Clervoy used the robot arm to capture the telescope's grapple fixture located midway up the HST structure. The approach to the HST is described and the actual maneuver aimed at retrieving the telescope is also described. The video includes actual live views of the HST in the shuttle's service bay, the shuttle, and shots of Johnson mission control. .
CASI
Discovery (Orbiter); Hubble Space Telescope; Space Transportation System; Orbital Servicing; Payload Retrieval (STS); Orbital Rendezvous

20000010619 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Janet L. Kavandi
Aug. 09, 1999; In English; Videotape: 18 min., 43 sec., running time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208099; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA JSC video release is one in a series of space shuttle astronaut interviews and was recorded Aug. 9, 1999. Mission Specialist, Janet L. Kavandi, Ph.D. provides answers to questions regarding her role in the Shuttle Radar Topography Mission (SRTM), mission objectives, which center on the three-dimensional mapping of the entire Earth's surface, shuttle imaging radar, payload mast deploy and retraction, data recording vs. downlinking, the fly cast maneuver, applications of recorded data, international participation (DLR), the National Imaging and Mapping Agency (NIMA), and EarthCam (educational middle school project). The interview is summed up by Dr. Kavandi explaining that the mission's objective, if successful, will result in the the most complete high-resolution digital topographic database of the Earth.
CASI
Space Shuttle Missions; Astronauts; Shuttle Imaging Radar; Earth Observations (From Space)

20000010620 NASA Johnson Space Center, Houston, TX USA
STS–41D Post Flight Press Conference with Highlights
Sep. 12, 1984; In English; Videotape: 61 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207908; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The crew, Commander Henry W. Hartsfield, Jr., Pilot Michael L. Coats, Mission Specialists Judith A. Resnik, Steven A. Hawley, and Richard M. Mullane, and Payload Specialist Charles D. Walker are seen participating a panel discussion. Live footage of the Press Conference begins with a brief introduction of all the crew, followed by highlights of the flight, a selection of slides and still pictures, and ends with a question and answer segment. The highlights consist of the astronauts walk out to the Astro-Van, panoramic views of the Discovery on the launch pad, main engine start, ignition of the solid rocket boosters, liftoff, and separation of the boosters. Images of the opening of the sun shield and the deployment of the three communication satellites (Satellite Business System (SBS-D), SYNCOM IV-2, and TELSTAR) are also seen. The crew is seen working on experiments, dumping the wastewater, eating supper, and sleeping. Concluding the live footage are slides, and stills of various areas around the world, including the Libyan Desert, Angola, Namibia, and Australia. The Press Conference ends with questions from Houston, NASA Headquarter, Kennedy Space Center, and Marshall Space Flight Center.
CASI
Conferences; Astronauts; Spacecrews; Deployment; Syncom 4 Satellite; Telstar Project

20000010639 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Activities Report: Flight Day 7 Highlights
Dec. 28, 1999; In English; Videotape: 21 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001113; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Today Discovery's astronauts begin preparing the spacecraft for it's scheduled return to Earth by checking out the flight control system and reaction control jets that support re-entry. Later in the day the astronauts begin stowing equipment used during the past week and start buttoning up on-orbit systems. The Ku-band antenna which provides most of the capacity for data and television relay was stowed around 8:45 p.m. The recently refurbished Hubble Space Telescope moves slowly through it's checkout sequence before resuming science operations. Both the flight control system (FCS) and the reaction control jets (RCS) were without issue, with all systems ready to support Discovery's return to Earth.
CASI
Spacecrews; Astronauts; Flight Control; Space Transportation System; Data Links; Jet Control; Reentry; Hubble Space Telescope

20000010758 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 VIP Site Saturn Center, Shuttle Liftoff
Dec. 19, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008225; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of the VIP gathering before and during the STS-103 night launch at the Saturn Center at Kennedy Space Center. Images of the Saturn Center, the playing of the national anthem and the crowd's reactions during liftoff are included.
CASI
Space Shuttle Missions; Liftoff (Launching); Cape Kennedy Launch Complex

20000010759 NASA Johnson Space Center, Houston, TX USA
STS–103 Payload Being Uncovered HST–Hubble Servicing Mission
Aug. 17, 1999; In English; Videotape: 1 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008221; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of Discovery's construction crew removing the plastic covering from the Payload Bay is seen.
CASI
Space Shuttle Payloads; Hubble Space Telescope

20000010760 NASA Johnson Space Center, Houston, TX USA
STS–103 In VAB
Nov. 05, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the fully constructed Discovery Orbiter mated to the external tank and solid rocket boosters in the VAB (Vehicle Assembly Building) high bay 1 is seen.
CASI
Discovery (Orbiter); Space Transportation System

20000010761 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Flight Crew Departs from Shuttle Landing Facility in T–38 for Acrobatics Flight, Discovery
Dec. 15, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008216; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA KSC video release presents footage of two of the STS-103 crew members during flight crew training prior to a NASA T-38 acrobatics flight. The two crew members are shown inside the T-38 as it moves slowly across a runway.
CASI
Space Flight Training; T-38 Aircraft; Aerobatics

20000010762 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Hubble Mission 3 Payload at Complex 39B
Nov. 08, 1999; In English; Videotape: 1 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008215; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Included in this short NASA KSC video release are three different views of the STS-103 Hubble Mission 3 Payload at Launch Complex 39B at Kennedy Space Center.
CASI
Cape Kennedy Launch Complex; Space Shuttle Payloads

20000010763 NASA Johnson Space Center, Houston, TX USA
STS–103 Hubble Telescope into Discovery Payload Bay
Nov. 16, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008214; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the moving of some preliminary structure into Discovery's Payload Bay is seen.
CASI
Space Shuttle Payloads; Bays (Structural Units); Hubble Space Telescope

20000010912 NASA Johnson Space Center, Houston, TX USA
STS–103 Flight Day 5 Highlights and Crew Activities Report
Dec. 24, 1999; In English; Videotape: 23 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001110; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Highlights of the fifth day of the STS-103 mission on board the space shuttle Discovery are shown in this videotape. The mission was led by Commander Curtis L. Brown, with Pilot Scott J Kelly, and Mission Specialists Steven L. Smith, Jean-Francois Clervoy, John M. Grunsfeld, Michael Foale, and Claude Nicollier. The main purpose of the mission was to service the Hubble Space Telescope (HST). The primary objective of the mission was to replace all six of the gyroscopes that make up the three Rate Sensor Units. In addition the Astronauts installed a new computer. During the 5th day Michael Foale and Claude Nicollier performed the servicing of the HST in an 8 hour 10 minute Extravehicular Activity (EVA). The servicing included the removal of the old computer and the installation of a new, faster computer with more memory. They also installed a new outer thermal layer to protect the computer. After this was finished the astronauts replaced one of the Fine Guidance Sensors (FGS), an optical sensor which allows NASA to point the telescope in the desired direction. The video includes actual live views of the HST in the shuttle's service bay, and footage of the repair and servicing EVA.
CASI
Extravehicular Activity; Hubble Space Telescope; Space Transportation System; Orbital Workers; Space Maintenance; Space Shuttle Missions; Orbital Servicing

20000010918 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Kevin R. Kregel
Aug. 04, 1999; In English; Videotape: 20 min., 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208101; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Commander Kevin R. Kregel is seen. The interview addresses many different questions including why Kregel became an astronaut, the events that led to his interest, his career path through the Air Force and later the Navy, and then finally, his selection by NASA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM), with specific focus placed on why this SRTM flight is important, and what we will learn from the 3D topographic map of the Earth. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Kregel's responsibility during this 24 hour mission are also discussed.
CASI
Shuttle Imaging Radar; Earth Observations (From Space); Infrared Interferometers; Topography; Relief Maps; Earth Surface; Radar Maps; Radar Imagery

20000010919 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Mamoru Mohri
Aug. 05, 1999; In English; Videotape: 14 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208098; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of a preflight interview with Mission Specialists Mamoru Mohri is seen. The interview addresses many different questions including why Mohri became an astronaut, the events that led to his interest, his career path, and then finally, his selection by NASDA as an astronaut. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of down-linked. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), and EARTHCAM, a student-controlled camera on the Endeavour Orbiter, Mohri's responsibility during this 24 hour mission, and his secondary experiments with high definition TV cameras are also discussed.
CASI
Shuttle Imaging Radar; Earth Observations (From Space); Infrared Interferometers; Topography; Radar Maps; Radar Imagery; Earth Surface

20000010929 NASA Johnson Space Center, Houston, TX USA
STS–103: Flight Day 6 Highlights and Crew Activities Report
Dec. 25, 1999; In English; Videotape: 25min. 19 sec. running time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001111; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Discovery's astronauts (Mission Commander, Curtis L. Brown; Pilot, Scott J. Kelly; Mission Specialists, Steven L. Smith, C. Michael Foale, and John M. Grunsfeld; and (ESA) Mission Specialists, Claude Nicollier and Jean-Francois Clervoy) deliver a Christmas present to the world, putting the Hubble Space Telescope back into service after 24 hours and 33 minutes of repairs and upgrades that make the orbital observatory more capable than ever. European Space Agency Astronaut Jean-Francois Clervoy uses the shuttle's robot arm to release the telescope at 5:03 p.m. CST, then places the arm into an upright salute as Commander Curt Brown fires Discovery's steering jets to begin separating from the telescope. The telescope's re-deployment takes place at an altitude of 370 statute miles as the two spacecraft fly over the South Pacific's coral sea northeast of Australia. At 5:39 CST, Brown executes a second steering jet burn, lowering Discovery's orbit slightly, so that it will begin orbiting faster than the telescope and move away at just under 6 statute miles per orbit. Afterward, each of the seven astronauts on board calls down holiday wishes from space in several languages.
CASI
Space Transportation System; Spacecrews; Hubble Space Telescope; Deployment; Astronauts

20000011034 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Activity Report/Flight Day 8 Highlights
Dec. 27, 1999; In English; Videotape: 18 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001109; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the crew, Mission Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy gathered on the flight deck to answer questions is presented. The crew conducts pre-landing tests, packs up the crew cabin and items used during the mission. Brown and Kelly perform orbit adjustment burns. Footage of the firing of the thrusters over Central Indian Ocean while the shuttle heads to Australia, and some beautiful panoramic views of the Earth are also seen.
CASI
Crew Procedures (Inflight); Spacecrews; Firing (Igniting); Orbital Maneuvers; Orbital Space Tests

20000011035 NASA Johnson Space Center, Houston, TX USA
STS–103 Crew Activity Report/Flight Day 4 Highlights
Dec. 28, 1999; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001112; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the first of the three-scheduled space walks is seen. Mission Specialists Steven L. Smith and John M. Grunsfeld are seen setting up tools, and replacing the Rate Sensor Units. Grunsfeld then replaces Hubble's batteries in the instrument bay, while Smith places covers on the handrails. Grunsfeld and Smith then perform their second task of installing six Voltage/Temperature Improvement Kits. They are also seen taking pictures, and putting away the equipment.
CASI
Crew Procedures (Inflight); Spacecrews; Hubble Space Telescope; Electric Batteries; Remote Sensors; Spacecraft Maintenance

20000011037 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Gorie
Aug. 04, 1999; In English; Videotape: 21 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008264; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Dominic L. Pudwell Gorie is seen. The interview addresses many different questions including why Gorie became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn gain from the 3D topographic map of the Earth, and the possible similarity to the tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the National Imagery and Mapping Agency (NIMA), mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Gorie's responsibility during this 24 hour mission.
CASI
Shuttle Imaging Radar; Infrared Radar; Radar Imagery; Topography; Relief Maps; Earth Surface

20000011221 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Discovery Launch Scrub Press Conference
Dec. 16, 1999; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008137; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A press conference held on December 16, 1999, to explain the reason behind NASA's decision to delay the Discovery's launching by a period of 24 hrs is presented. According to Ron Dittemore, Space Shuttle Program Manager, the STS-103 team delayed the launch because they need extra time to check one vendor's manufacturing processes, after an x-ray inspection revealed that an improper weld rod was used to weld one of the pressuring lines (called NPS lines) in the ET (external tank). Mr. Dittemore explained that since it is in the ET (not a major load carrying structure and rebuild after each flight), it did not pose any danger to the STS-103 flight. However, the same vendor also manufactured some parts of the orbiter and the team wanted to make sure that the quality of the vendor's manufacturing processes is robust before launching the orbiter to space. He also answered some reporters' questions.
CASI
Discovery (Orbiter); Spacecraft Launching; Spacecraft Maintenance; Spacecraft Structures

20000011225 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 HST Blacklight and Whitelight Inspections
Aug. 27, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008202; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 payload inspections using the blacklight and whitelight technique is shown.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Inspection

20000011226 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Crew at Breakfast, Suiting, Departing O&C
Dec. 19, 1999; In English; Videotape: 5 min., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008205; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Hubble Space Telescope (HST) team is preparing for NASA's third scheduled service call to Hubble. This mission, STS-103, will launch from Kennedy Space Center aboard the Space Shuttle Discovery. The seven flight crew members for STS-103 are: Commander Curtis L. Brown (his sixth flight), Pilot Scott J. Kelly and European Space Agency (ESA) astronaut Jean-Francois Clervoy (his third flight) will join space walkers Steven L. Smith (his third flight), C. Michael Foale (his fifth flight), John M. Grunsfeld (his third flight) and ESA astronaut Claude Nicollier (his fourth flight). This current video presents a live footage of the seven STS-103 crewmembers eating breakfast, suiting, and departing the O&C (Operations and Checkout) before the 6:50 p.m. lift-off.
CASI
Discovery (Orbiter); Spacecrews; Crew Procedures (Preflight); Preflight Operations

20000011227 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Discovery: Hubble Servicing Mission Press Showing PHSF
Oct. 14, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008206; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Discovery's payload at the PHSF (Payload Hazardous Servicing Facilities) is shown. Also included is Dr. John Compel, Associate Director of the Hubble Space Telescope, briefing on the Hubble servicing mission.
CASI
Space Shuttle Payloads; Discovery (Orbiter); Orbital Servicing; Ground Support Equipment

20000011229 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 HST Hubble Hardware Arrival
Aug. 12, 1999; In English; Videotape: 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008208; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-103 Hubble hardware arrival at Kennedy Space Center and its ground transportation to the SLF (Shuttle Landing Facility) is shown.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Ground Handling

20000011230 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Payload Door Closure: Hubble Repair. Discovery
Nov. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008212; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Discovery's cargo bay door closure is shown. Discovery's payload include an Orbital Replacement Unit Carrier that contains

the tools and replacement parts necessary to service the HST and Flight Support System that will hold the telescope during servicing.
CASI
Discovery (Orbiter); Space Shuttle Payloads; Doors

20000011231 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Discovery on Pad 39B
Dec. 20, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008217; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the fully assembled Discovery Orbiter on the Launch Pad 39B before the 6:50 p.m. lift off is shown.
CASI
Discovery (Orbiter); Space Transportation System; Launching Pads

20000011232 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Rollover to VAB From OPF#1: Discovery Hubble Mission
Nov. 04, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008218; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the Discovery Orbiter transported from the OPF (Orbiter Processing Facility) to the VAB (Vehicle Assembly Building) is shown.
CASI
Discovery (Orbiter); Ground Handling; Transportation

20000011233 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Rollout From VAB
Nov. 13, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the fully assembled Discovery Orbiter transported from the VAB (Vehicle Assembly Building) to the Launching Pad is shown.
CASI
Discovery (Orbiter); Ground Handling; Transportation

20000011413 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Janice E. Voss
Aug. 04, 1999; In English; Videotape: 29 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208100; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Janice E. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the events that led to her interest, and her career path. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). Specific interest is on the importance of this SRTM flight, the knowledge that we will gain from the 3D topographic map of the Earth, and the reason why this 3D data is being recorded instead of down-linked. The two antennas that will be taking the pictures, the deployment and retraction of the mass, the involvement of the International partners in processing the data (C-band and X-band), and Voss' responsibility during this 24 hour mission are also discussed.
CASI
Shuttle Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface

20000011414 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Interviews: Gerhard P.J. Thiele
Aug. 04, 1999; In English; Videotape: 31 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208097; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Gerhard P.J. Thiele is seen. The interview addresses many different questions including why Thiele became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the purpose for the Shuttle Radar Topography Mission (SRTM). The main interest is on the importance of this SRTM flight, the knowledge we will learn gain from the 3D topographic map of the Earth, and the possible similarity to the Tethered Satellite System Flight. The two antennas that will be taking the pictures, the involvement of the International partners, mass deployment and retraction, gravity gradient force, flight cast maneuvers, EARTHCAM, a student-controlled camera on the Endeavour Orbiter, and Thiele's responsibility during this 24 hour mission are also discussed.
CASI
Shuttle Imaging Radar; Radar Imagery; Radar Maps; Topography; Relief Maps; Earth Surface

20000011427 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Kent Rominger
Mar. 17, 1999; In English; Videotape: 33 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213303; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage of a preflight interview with Commander Kent V. Rominger is seen. The interview addresses many different questions including why Rominger became an astronaut, the events that led to his interest, and his career path. Other interesting information that this one-on-one interview discusses is the logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, the Integrated Cargo Carrier. Rominger mentions Discovery's anticipated docking with the ISS, space walk, plans for the supply and equipment transfers, and an experiment designed to evaluate the system that will transfer oxygen, nitrogen and water between the ISS and the spacecraft. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.
CASI
Crew Procedures (Inflight); Space Logistics; Consumables (Spacecrew Supplies); Stowage (Onboard Equipment); Onboard Equipment; Portable Equipment; Materials Handling

20000011435 NASA Kennedy Space Center, Cocoa Beach, FL USA
Op. No A4495 Columbia, STS–93 Chandra – Breakfast, Suiting, and Walkout
Jul. 22, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008273; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the astronauts after breakfast getting into spacesuits, walking out to board the bus, and boarding the bus prior to launch.
CASI
Astronauts; Spacecrews; Crew Procedures (Preflight); Preflight Operations

20000011500 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93 Columbia, Chandra moved to Payload Canister in the VPF
Jun. 19, 1999; In English; Videotape: 6 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008271; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the loading of the payload canister in the Vertical Processing Facility (VPF). Clean-suited technicians move the Chandra X-ray Observatory into the payload canister.
CASI
Space Transportation System; X Ray Astrophysics Facility; Space Shuttle Payloads; Preflight Operations; Protective Clothing

20000011501 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Payload Door Closure in Orbiter Processing Facility #2 Endeavour (SRTM)
Nov. 29, 1999; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008268; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the Payload Bay door closing is seen.

CASI
Payloads; Bays (Structural Units); Doors; Closures; Spacecraft Components

20000011502 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93 CEIT with crew in the OPF–3
Nov. 13, 1998; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008267; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows parts of a crew briefing and an inspection tour of the clean room. The astronauts are shown examining some of the equipment and tools that they will use during the mission.

CASI
Spacecrews; Crew Procedures (Preflight); Preflight Operations; Inspection; Clean Rooms

20000011506 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–103 Hubble Inspection with Astronauts at Payload Hazardous Servicing Facility (PHSF)
Sep. 03, 1999; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008213; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the inspection of several different parts needed for STS-103 is presented. Some of the things inspected include a latch, and Velcro materials for stability. The astronauts turned the latch on a small door, opened the door then closed it again.

CASI
Inspection; Doors; Fasteners; Discovery (Orbiter)

20000011603 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Rick Husband
Mar. 17, 1999; In English; Videotape: 33 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010536; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Rick D. Husband is seen. The interview addresses many different questions including why Husband became an astronaut, the events that led to his interest, and his career path as a pilot. Other interesting information that this one-on-one interview discusses is this logistics and outfitting mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, and the Integrated Cargo Carrier. Husband mentions Discovery's anticipated docking with the ISS, the space walk with Mission Specialists Tamara E. Jernigan, and Daniel T. Barry, plans for the supply and equipment transfers, and an experiment designed to evaluate the system that will transfer oxygen, nitrogen and water between the ISS and the spacecraft. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.

CASI
International Space Station; Spacecraft Docking; Space Rendezvous; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

20000011695 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Tamara Jernigan
Mar. 17, 1999; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213299; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Tamara E. Jernigan is seen. The interview addresses many different questions including why Jernigan became an astronaut, the events that led to her interest, and her career path. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Jernigan mentions Discovery's anticipated docking with the ISS, her scheduled space walk with Daniel T. Barry, plans for the supply and equipment transfers, and a fly-around maneuver to take pictures of the ISS.

CASI
International Space Station; International Cooperation; Spacecraft Docking; Materials Handling; Transferring; Space Logistics; Cranes; Stowage (Onboard Equipment)

20000011696 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Ellen Ochoa
Mar. 17, 1999; In English; Videotape: 24 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Ellen Ochoa is seen. The interview addresses many different questions including why Ochoa became an astronaut, the events that led to her interest, and her career path through research and engineering. Other interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Ochoa mentions Discovery's anticipated docking with the ISS, her role during the scheduled space walk with Tamara E. Jernigan and Daniel T. Barry, and plans for the supply and equipment transfers. Ochoa also discusses her involvement in a Volatile Removal Assembly (VRA) experiment to remove contaminants from the water, the undocking of the spacecraft from the ISS, and a fly-around maneuver to take pictures of the ISS.

CASI
International Space Station; International Cooperation; Unity Connecting Module; Zarya Control Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

20000012098 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: Other Payloads, Part 8 of 9
Aug. 22, 1988; In English; Videotape: 56 min. 21 sec. playing time in color, with sound
Report No.(s): NONP–NASA–VT–1999207900; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents a press conference that discusses the commercial development and NASA science Mid-deck payloads of Discovery STS-26. Larry Delucas (Univ. Alabama-Birmingham, Center for Macromolecular Crystallography), Chris Podsiadly (3-M Co., Marshall Space Flight Center's (MSFC's) Rep. for Material Processing) and Ed Valentine (MSFC) present discussions of the science and commercial development that surround the Physical Vapor Transport of Organic Solids-2 (PVTOS-2) payload. Their presentations are followed by a question and answer period for journalists from scientific journals.

CASI
Space Shuttle Payloads; Protein Crystal Growth

20000012100 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Dan Barry
Mar. 17, 1999; In English; Videotape: 32 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213300; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Daniel T. Barry is seen. The interview addresses many different questions including why Barry became an astronaut, and the events that led to his interest. Other

interesting information that this one-on-one interview discusses is the logistics and supply mission, why it is important to send equipment to the International Space Station (ISS), and the Integrated Cargo Carrier (ICC). Barry mentions Discovery's anticipated docking with the ISS, his scheduled space walk with Tamara E. Jernigan, plans for the supply and equipment transfers, and his responsibility during this transfer. A fly-around maneuver to take pictures of the ISS, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.
CASI
International Space Station; Spacecraft Docking; Stowage (Onboard Equipment); Space Logistics; Transferring; Materials Handling

20000012101 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Julie Payette
Mar. 18, 1999; In English; Videotape: 46 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213301; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with (French Canadian) Mission Specialist Julie Payette is seen. The interview addresses many different questions including why Payette wanted to be an astronaut, the events that led to her interest, and her career path. Other interesting information that this one-on-one interview discusses is this logistics and supply mission, why it is important to send equipment to the International Space Station (ISS) before the astronauts, and the Integrated Cargo Carrier. Payette mentions Discovery's anticipated docking with the ISS, the space walk with Mission Specialists Tamara E. Jernigan, and Daniel T. Barry and her responsibility as IV (intra-vehicular) crewmember. She also mentions plans for the supply and equipment transfers, the change out of battery chargers, her involvement in the installation of mufflers, the Canadian Space Vision Systems, and the future automatic docking of the Service Module to the Zarya Module of the ISS. A fly-around mission, and the deployment of the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Equipment (STARSHINE) are also discussed.
CASI
International Space Station; Service Module (Iss); Zarya Control Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

20000012102 NASA Johnson Space Center, Houston, TX USA
STS–96 Crew Interview: Valery Tokarev
Mar. 18, 1999; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999213302; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with the Russian Cosmonaut Valery Ivanovich Tokarev is presented. The interview addresses many different questions including why Tokarev wanted to be a cosmonaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is this logistics and supply mission, and why it is important to send equipment to the International Space Station (ISS) before the astronauts. Tokarev compares both the Russian and USA space programs, and space shuttles. He mentions the logistics and supply mission, plans to transfer the supply, his involvement with the installation of mufflers, and the undocking of Discovery. The future automatic docking of the Service Module to the Zarya Module of the ISS, and the role that the ISS will play in future space flight and exploration are also discussed.
CASI
International Space Station; Service Module (Iss); Zarya Control Module; Unity Connecting Module; Spacecraft Docking; Space Logistics; Stowage (Onboard Equipment); Transferring; Materials Handling

20000012324 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96: Crew Arrival at the KSC Shuttle Landing Facility
Apr. 26, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010552; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev) arrive via fighter jets and assemble. A brief speech about the crew's duties during their mission is given by Commander Rominger.
CASI
Spacecrews; Space Transportation System; Space Missions

20000012325 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–88: Flight Crew During Breakfast, Suiting, and Departure from the Operations and Checkout Building
Dec. 03, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010561; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Robert D. Cabana, Pilot Frederick W. Stuckrow, and Mission Specialists Nancy J. Currie, Jerry L. Ross, James H. Newman and Sergei K. Krikalev) begin with breakfast, then proceed to the suiting room. After suiting up, the astronauts board the bus in preparation for departure.
CASI
Spacecrews; Space Shuttle Missions; Space Transportation System Flights

20000012421 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: Shuttle System Changes, Part 2 of 9
Aug. 22, 1988; In English; Videotape: 46 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207916; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents a press conference that discusses the major system changes implemented on the shuttle in preparation for the launch of Discovery STS-26. Richard A. Colonna (Mgr. Orbiter and GFE Projects office) and an unidentified colleague present discussions involving hazard analysis, landing safety, launch abort/crew escape and major modidfications made to the Space Shuttle Boosters. Their presentations are followed by a question and answer period for journalists from scientific journals.
CASI
Space Shuttle Boosters; Space Shuttle Missions; Discovery (Orbiter); Safety Management

20000012422 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: Crew Escape/Crew Equipment, Part 4 of 9
Aug. 22, 1988; In English; Videotape: 56 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207914; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The five member panel present individual viewgraph discussions followed by a question and answer period for the benefit of scientific journalists. William A. Chandler (Asst. to the Dir. of Engineering and the NSTS program) gives a brief overview of the crew escape system followed by Steven Nagel's (Astronaut) presentation on crew equipment. Robert Rice (Crew Escape System Manager) describes the flight test program and the innovative pyrotechnics system test program. Tim Pelischek (Pole Design Team) gives an assessment of the critical design review and Ricardo Machin reviews aerodynamic flight tests performed at Texas A&M and California. The second part of the video includes Robert Crippen's (Deputy Dir. of Operations, Kennedy Space Center) overview of NASA Management, the organizational changes and actions taken to meet the Roger's Commission recommendations.
Author
Safety Devices; Spacecrews; Space Transportation System Flights; Launch Escape Systems

20000012423 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: Shuttle Systems Changes (2), Part 3 of 9
Aug. 22, 1988; In English; Videotape: 49 min., 15 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207913; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The video includes presentations by Gerald Smith

(Solid Rocket Booster (SRB) Project Manager) and Joe Lombardo (Space Shuttle Main Engine (SSME) Project Manager) discussing the major changes that were made to the SRB and SSME between 51-L and STS-26. Mr. Smith's talk centered on the changes and redesigns made to the solid rocket motor field joint, the case to nozzle joint, the SRB aft skirt, and the ET aft attach ring. Mr. Lombardo discusses test data evaluation, SSME inspections and the SSME heat exchanger in particular.
Author
Space Transportation System Flights; Space Shuttle Main Engine; Space Shuttle Boosters

20000012424 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: Flight Crew and TDRS, Part 7 of 9
Aug. 22, 1988; In English; Videotape: 47 min., 48 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207901; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The first portion of the video presents the 5 member flight crew, (Frederick H. Hauck, Commander, Richard O. Covey, Pilot, John M. Lounge, Mission Specialist, George D. Nelson, Mission Specialist, and David C. Hilmers, Mission Specialist) answering questions posed by scientific journalists. Inquiries are made regarding the approximately 250 changes implemented on the orbiter and boosters, failures that occurred during 51-L, astronaut attitudes about flying the first mission since the Challenger accident, and the issue of range safety. The second part of the video includes viewgraph presentations given by Dr. Dale W. Harris (TDRS Project Manager, Goddard Space Flight Center(GSFC)) and Gary A. Morse (Network Director, GSFC) that discuss the primary payload, the NASA Tracking and Data Relay Satellite-3 (TDRS-3) that is attached to an Inertial Upper Stage (IUS), and is the second TDRS deployed.
Author
Space Transportation System Flights; TDR Satellites; Discovery (Orbiter); Spacecrews

20000012426 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–91: Flight Crew Meets with Family and Friends at Launch Complex 39A
Jun. 01, 1998; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010562; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Charles J. Precourt, Pilot Dominic L. Pudwill Gorie, Mission Specialists Wendy B. Lawrence, Franklin R. Chang-Diaz, Janet L. Kavandi and Valery Victorovitch Ryumin) take time from their busy schedule to chat with friends and family, at a distance. They also pose for group and single pictures.
CASI
Spacecrews; Space Transportation System Flights; Space Shuttle Missions; Conversation

20000012855 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93 Columbia, Fit Check and Pre Pak in the O&C for Chandra
Jun. 22, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008276; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the astronauts getting into spacesuits, and inspecting the equipment.
CASI
Astronauts; Space Suits; Spacecrews

20000012859 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur/GOES–J News Conference, Part 1 of 2
May 18, 1995; In English; Videotape: 1 hr. 2 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000000038; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage of the GOES-J Satellite News Conference is presented. The participants of this conference include several NASA and NOAA officials. Floyd Curington, NASA's Launch Manager at the Kennedy Space Center, spoke briefly about the AC-77 launch vehicle. Pat Symons, the NASA Launch Vehicle Manager from the Lewis Research Center, discusses the launch window, the vehicle thrust, the Centaur Liquid Hydrogen, and the parking orbit. Martin Davis, NASA Mission Director from the Goddard Space Flight Center, touches on the NOAA partnership. Steven Kirkner, NOAA's GOES Systems Acquisitions Manager, addresses issues of the National Weather Satellite, the 24-hour observation, and the variable scan capacity of the satellite. Joel Tumbiolo, Launch Weather Officer from the USAF 45th Space Wing, presents data images of storm systems over Central United States; his main focus is on the Florida and Gulf of Mexico areas. Tumbiolo also discusses anvil clouds and thunderstorms, and question and answer session is presented. Immediately following this conference is the NOAA/GOES-J News Briefing. Live coverage of the presentation with panelists Gary Davis, Director, Satellite Operations; Dr. James Purdom, Chief Regional and Mesoscale Meteorology; Frederick Ostby, Director, National Severe Storms Forecast Center; and Steven Kirkner, GOES System Acquisition Manager is shown. Gary addresses the issue with the GOES-8 Satellite and the solutions to the problems that were encountered, the GOES-9 Satellite launching, its checkout and the reliability improvements that were made. Jim presents pictographic comparisons between GOES-8 and GOES-7, the GOES-8 Imager Noise Levels, Hurricane Rosa, and the thunderstorm over the Northern Gulf of Mexico. He also looks at storms in the Hudson Bay, Nova Scotia, and the Gulf of Lawrence areas. As the final speaker, Fred discusses GOES-8, Geostationary Satellites, the Automatic Surface Observation System (ASOS), and the Doppler Radar Network. This Abstract describes the content of tape 1 of 2, tape 2 has a Report number of NONP-NASA-VT-1999206992.
CASI
Atlas Centaur Launch Vehicle; GOES 9; GOES 8; GOES 7; Synchronous Platforms; Geosynchronous Orbits; Conferences

20000012868 NASA Johnson Space Center, Houston, TX USA
STS–93 Crew Interview: Jeff Ashby
Jun. 23, 1999; In English; Videotape: 29 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208163; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Pilot Jeffrey S. Ashby is presented. The interview addresses many different questions including why Ashby wanted to be an astronaut, how he feels about being the rookie on this launch, and what he expects to feel when he lifts off. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x ray energy, whether or not Chandra will compliment the other X Ray Observatories currently in operation, and his responsibilities during the major events of this mission. The Southwest Research Ultraviolet Imaging System (SWUIS) on board Columbia, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.
CASI
Deployment; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy; Gamma Ray Observatory; Hubble Space Telescope

20000012869 NASA Johnson Space Center, Houston, TX USA
STS–93 Crew Training
Jun. 28, 1999; In English; Videotape: 38 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208162; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the STS-93 crewmembers shows Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini going through various training activities. These activities include Bail Out Training NBL, Emergency Egress Training, Earth

Observations Classroom Training, Simulator Training, T-38 Departure from Ellington Field, Chandra Deploy Training, SAREX Shuttle Amateur Radio Experiment, CCT Bail Out Crew Compartment Training, and Southwest Research Ultraviolet Imaging System (SWUIS) Training.
CASI
Astronaut Training; Training Simulators; Training Devices; Flight Simulators; Ejection Training; Bailout; T-38 Aircraft

20000012870 NASA Johnson Space Center, Houston, TX USA
STS–93 Crew Interview: Michel Tognini
Jun. 23, 1999; In English; Videotape: 44 min., 22 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208161; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Johnson Space Center (JSC) video release presents a one-on-one interview with Mission Specialist 3, Michel Tognini (Col., French Air Force and Centre Nacional Etudes Spatiales (CNES) Astronaut). Subjects discussed include early influences that made Michel want to be a pilot and astronaut, his experience as a French military pilot and his flying history. Also discussed were French participation in building the International Space Station (ISS), the STS-93 primary mission objective, X-ray observation using the Advanced X-ray Astrophysics Facility (AXAF), and failure scenarios associated with AXAF deployment. The STS-93 mission objective was to deploy the Advanced X-ray Astrophysics Facility (AXAF), later renamed the Chandra X-Ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar.
CASI
Space Shuttle Missions; Space Transportation System Flights; X Ray Astrophysics Facility; Deployment

20000012871 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–26 Preflight Press Briefing: 5 Man Crew, Part 6 of 9
Aug. 22, 1988; In English; Videotape: 1 hr., 2 min., 29 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207912; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA KSC video release presents part of a press conference held prior to Discovery flight STS-26, the first shuttle mission flown following the 51-L Challenger accident. The video opens with a statement from Commander Frederick H. Hauck, and the introductions of crew members, Richard O. Covey, Pilot, and mission specialists, John M. Lounge, George D. Nelson, and David C. Hilmers. Some of the questions posed by scientific journalists addressed the following subjects: launch preparation in the month prior to flight, astronaut family anxieties in light of the Challenger accident, extent of safety measures made prior to flight, flight readiness firing, the crew escape system, civilians in space, conservative mission design, astronaut selection, mission turnaround and launch rate, and the ability to maintain a high level of scrutiny regarding safety on future missions.
CASI
Space Transportation System Flights; Space Shuttle Missions; Spacecrews; Safety Management; Mission Planning; Astronauts

20000012872 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–11/41–B Post Flight Press Conference
Feb. 21, 1984; In English; Videotape: 1 hr., 2 min., 24 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207910; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA KSC video release begins with opening remarks from Mission Commander Vance D. Brand followed by the other 4 spacecrew panel members (Robert L. Gibson, Pilot, and Mission Specialists, Bruce McCandless II, Ronald E. McNair, Robert L. Stewart) commenting on a home-video that includes highlights of the entire flight from take-off to landing. This video includes actual footage of the deployment of the Westar-VI and PALAPA-B2 satellites as well as preparation for and the actual EVA's that featured a Spacepak that enabled the astronauts to move outside the orbiter untethered. This video is followed by a slide presentation made-up of images taken from approximately 2000 still photographs taken during the mission. All of the slides are described by members of the space crew and include images of the Earth seen from Challenger. A question and answer period rounds out the video, which include problems encountered with the deployment of the satellites as well as the possibilities of sending civilians into space.
CASI
Space Transportation System Flights; Space Shuttle Mission 41-B; Spacecrews

20000012947 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–86: Flight Crew Departing from the Skid Strip at Cape Canaveral Air Station after Mission Completion
Oct. 07, 1997; In English; Videotape: 6 min. running time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010559; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander James D. Wetherbee, Pilot Michael J. Bloomfield, Mission Specialists Vladimar G. Titov, Scott E. Parazynski, Jean-Loup J.M. Chretien, Wendy B. Lawrence, and David A. Wolf) are shown speaking to the press as they board a small plane for departure after their return from the space mission.
CASI
Space Missions; Spacecrews; Space Transportation System Flights

20000012948 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Training
Jan. 19, 2000; In English; Videotape: 38 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010586; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the STS-99 crew members shows Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele going through various training exercises. These exercises include Post Landing Egress, SRTM (Shuttle Radar Topography Mission) Deploy and Mapping Activities, HDTV (High Definition Television) Camera Training, and Ascent Simulation. Footage also includes the six-member crew participating in a photo session.
CASI
Spacecrews; Astronaut Training; Ejection Training; Bailout; Training Simulators

20000012949 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Crew Watches the Installation of Chandra's Solar Panel in the VPF
Mar. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010624; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michael Tognini) are dressed in cleanroom suits while overseeing the solar panel installation.
CASI
Space Transportation System; Spacecrews; Solar Reflectors

20000013156 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Columbia Flight Crew Arrival on FSS 195' Level, Walk Across OAA and Ingress into White Room
Jun. 24, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008274; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape opens with a view of the shuttle on the launch pad. It then shows the flight crew arrival on the 195 foot level of the fixed service structure (FSS), walks across the orbiter access arm (OAA) into the white room,

where the crew is assisted in putting on the final stages of their spacesuits, and then their crawl into the orbiter.
CASI
Spacecrews; Crew Procedures (Preflight); Astronauts; Preflight Operations

20000013266 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Crew Watch the Installation of Chandra's Solar Panel in the VPF
Mar. 24, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008270; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman and Michel Tognini, watching the installation of Chandra's Solar Panel in the Vertical Processing Facility (VPF) at Kennedy Space Center. Crewmembers ask the engineers questions about different components in order to familiarize themselves.
CASI
Installing; X Ray Astrophysics Facility; Panels

20000013267 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Chandra Flight Crew During Breakfast, Suiting and Departing the O&C Building
Jul. 21, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008269; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman and Michel Tognini, sitting around the traditional breakfast table with the traditional cake, talking and having their photographs taken. Footage also includes the crew suiting up and walking out to the Astro-Van from the Operations and Checkout (O&C) Building.
CASI
X Ray Astrophysics Facility; Flight Crews; Crew Procedures (Preflight)

20000013268 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Columbia, Flight Crew Training with M–113 for Chandra
Jun. 22, 1999; In English; Videotape: 11 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008265; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers, Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, and Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini, standing in front of an M-113 armored personnel carrier vehicle, and posing for photographs. Footage also includes the crew inside the vehicle getting quick instructions on how to operate the vehicle. They are also seen taking turns in driving the vehicle, and taking photographs and recording each other as one member of the crew drives the vehicle.
CASI
Astronaut Training; Military Vehicles; X Ray Astrophysics Facility

20000013324 Bionetics Corp., Cocoa Beach, FL USA
STS–95: Discovery Flight Crew at SPACEHAB
Jul. 17, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010630; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) sponsored video release presents members of the STS-95 flight crew: Curtis L. Brown, Commander, Steven W. Lindsey, Pilot, Pedro Duque (ESA), Chiaki Mukai (NASDA) Payload Specialist, John H. Glenn, Payload Specialist, and mission specialists, Scott E. Parazynski, and Stephen K. Robinson becoming familiar with the spacecraft module SPACEHAB stored at the KSC launch complex. The SPACEHAB module being flown on STS-95 provides additional pressurized workspace for experiments, cargo and crew activities. SPACEHAB modules have supported various Shuttle science missions along with several of the joint Shuttle-Mir missions. Members of the Japanese Space Agency (NASDA) are included in the video assisting the NASA flight crew in SPACEHAB training.
CASI
Spacecraft Modules; Spacecrews; Space Flight Training

20000013358 NASA Johnson Space Center, Houston, TX USA
STS–93: Crew Interview – Cady Coleman
Jun. 23, 1999; In English; Videotape: 34 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208160; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Catherine G. Coleman is presented. The interview addresses many different questions including why Coleman wanted to be an astronaut, why she wanted to become a chemist, and how this historic flight (first female Commander of a mission) will influence little girls. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x ray energy, whether or not Chandra will compliment the other X Ray Observatories currently in operation, and her responsibilities during the major events of this mission. Coleman mentions the Inertial Upper Stage (IUS) rocket that will deploy Chandra, and the design configuration of Chandra that will allow for the transfer of information. The Southwest Research Ultraviolet Imaging System (SWUIS) Telescope on board Columbia, the Plant Growth Investigation in Microgravity (PGIM) experiment, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.
CASI
Inertial Upper Stage; Upper Stage Rocket Engines; Deployment; X Ray Astrophysics Facility; X Ray Astronomy; Downlinking; Information Transfer

20000013359 NASA Johnson Space Center, Houston, TX USA
STS–93: Crew Interview – Steve Hawley
Jun. 23, 1999; In English; Videotape: 1 hr. 4 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208159; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Steven A. Hawley is presented. The interview addresses many different questions including why Hawley wanted to be an astronaut, his career path, and how this historic flight (first female Commander of a mission) draws attention from the media. Other interesting information that this one-on-one interview discusses is the deployment of the Chandra satellite, why people care about x ray energy, whether or not Chandra will compliment the other X Ray Observatories currently in operation, and his responsibilities during the major events of this mission. Hawley mentions the Inertial Upper Stage (IUS) rocket that will deployed the Chandra Telescope, and the design configuration of Chandra to gather and transfer information. The Southwest Research Ultraviolet Imaging System (SWUIS) Telescope on board Columbia, the Plant Growth Investigation in Microgravity (PGIM) and Gelation of Sols: Applied Microgravity Research (GOSAMR) experiments, and the two observatories presently in orbit (Gamma Ray Observatory, and Hubble Space Telescope) are also discussed.
CASI
Inertial Upper Stage; Upper Stage Rocket Engines; Deployment; X Ray Astrophysics Facility; X Ray Astronomy; Information Transfer

20000013402 StellaCom, Inc., Rosslyn, VA USA
Delta FUSE Fairing Installation at Launch Complex 17A
Jun. 19, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010629; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the June 19, 1999 installation of the fairing around the Far Ultraviolet Spectroscopic Explorer (FUSE) spacecraft. The spacecraft was previously mated to the Boeing Delta II rocket. Installation took place on Pad A of Launch Complex 17.
CASI
Far UV Spectroscopic Explorer; Fairings; Cape Kennedy Launch Complex

20000013403 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–88 Endeavor: Crew Arrival at the Shuttle Launch Facility
Nov. 04, 1998; In English; Videotape: 3 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-88 crew (Commander Robert D. Cabana, Pilot Frederick W.

Sturckow, Mission Specialists Nancy J. Currie, Jerry L. Ross James H. Newman, and Sergei K. Krikalev) are shown arriving at the facility in fighter jet aircraft. They assemble for group photos, then depart.
CASI
Launching Bases; Space Transportation System; Spacecrews

20000013404 NASA Kennedy Space Center, Cocoa Beach, FL USA
Fuse Lift to Payload Adapting Fixture (PAF) at Hangar A&E
May 04, 1999; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010622; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the placing of the Fuse Lift onto the Adapter Ring.
CASI
Payloads; Adapters; Fixtures

20000013406 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Crew Visit and Departure
Feb. 09, 1999; In English; Videotape: 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-93 crewmembers shows Commander Eileen M. Collins, Pilot Jeffrey S. Ashby, Mission Specialists Steven A. Hawley, Catherine G. Coleman, and Michel Tognini observing and speaking with the engineers about some installations. Footage also shows the crew boarding the T-38 jet and departing from the Shuttle Landing Facility (SLF).
CASI
Landing Sites; Spacecrews; T-38 Aircraft

20000013407 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96: Expedition Crew #2 and 4 Work in Node #1 at the SSPF
May 03, 1998; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette, and Valery Ivanovich Tokarev, shows them in the node of the vehicle at the Space Station Processing Facility (SSPF). Scenes include the engineer explaining and the crew asking questions as to what certain labels mean. Footage also includes the crew observing the nose of the vehicle.
CASI
Flight Crews; Crew Procedures (Preflight); Astronaut Training

20000013491 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Columbia/Chandra Crew Press Conference
Jan. 21, 1999; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008127; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of six different segments. The first segment is a close-up shot from Near-Earth Asteroid Rendezvous (NEAR) of the asteroid EROS. The second presents close-up shots of the Chandra telescope in the clean room. The third segment is an animated film showing the deployment of the Chandra telescope from the shuttle payload bay, and views of the elliptical orbit patterns that the telescope is planned to take. The fourth segment shows TRW Executive Vice President & General Manager, Systems & Information Technology Group, Donald Winter announcing the delivery of the Chandra Telescope to NASA. The fifth part was announced on the tape as an interview of Carolyn Griner, the Deputy Director of Marshall Space Flight Center, but this is not on the tape. The sixth segment shows views of the fourth USA Microgravity Payload (USMP-4) experiments. After shots of the STS-87 liftoff, the tape has views of the Isothermal Dendrite Growth Experiment (IDGE), views of the payload bay, and some further views of the astronauts working on one of the experiments in the payload.
CASI
Asteroid Missions; Space Shuttle Payloads; X Ray Astrophysics Facility; Microgravity

20000013499 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: CEIT with Crew in the OPF–3
Nov. 13, 1998; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008279; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows parts of a crew briefing and an inspection tour of the clean room. The astronauts are shown examining some of the equipment and tools that they will use during the mission. Views of the empty payload shuttle bay are presented.
CASI
Spacecrews; Clean Rooms; Crew Procedures (Preflight); Preflight Operations; Inspection

20000013501 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–95: Post Landing and Crew Walkaround of the Orbiter at the Shuttle Landing Facility
Nov. 07, 1998; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008277; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

After landing, the STS-95 crew (Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, Pedro Duque, Payload Specialists Chiaki Mukai and the legendary John H. Glenn) descend from the Space Shuttle. Commander Brown congratulates the crew and team photos are taken. The crew does a walkaround inspection of the spacecraft, then boards the bus for departure from the facility.
CASI
Space Transportation System; Spacecrews; Inspection

20000013502 NASA Kennedy Space Center, Cocoa Beach, FL USA
NASA Administrator Dan Goldin Speaks to the Press at the Shuttle Landing Facility After the Landing of STS–95
Nov. 07, 1998; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008275; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The landing of STS-95 is shown and Dan Goldin answers questions from the press. The significance of John Glenn being aboard this flight was stressed along with the importance of information gathered to help in future construction of the Space Station.
CASI
Space Transportation System; Landing; Lectures

20000013706 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96: Crew Training at SPACEHAB
Feb. 11, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of the STS-96 mission, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Julie Payette, Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, and Valery Ivanovich Tokarev, checking out equipment inside the SPACEHAB module. The crewmembers are also seen participating in a review as a part of the familiarization activities for their mission.
CASI
Spacecrews; Astronaut Training; Spacecraft Modules

20000013707 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96: SPACEHAB Double MOD/ICC Going into the Payload Bay
Apr. 28, 1999; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010631; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the SPACEHAB Double MOD/ICC (International Cargo Carrier) going into the Payload Bay.
CASI
Spacecraft Modules; Space Station Payloads; Bays (Structural Units); Aircraft Compartments

20000013725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–95: Discovery Flight Crew Arrives at the Shuttle Landing Facility for TCDT
Oct. 06, 1998; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008266; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the night landing of the STS-96 crewmembers, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson and Pedro Duque, and Payload Specialists Chiaki Mukai (NASDA) and John H. Glenn. Footage also includes Mission Commander Curtis L. Brown greeting the media at the Shuttle Landing Facility after the crew's arrival aboard T-38 jets.
CASI
Night; Aircraft Landing; T-38 Aircraft; Flight Training

20000013938 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Crew Arrival and PR Location
Feb. 08, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the astronauts arriving at Kennedy and an inspection in the clean room.
CASI
Astronauts; Spacecrews; Clean Rooms; Preflight Operations; Crew Procedures (Preflight)

20000014070 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Columbia / Chandra Mission Overview (from JSC)
Jul. 07, 1999; In English; Videotape: 1 hr. 34 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008133; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
A press briefing held on July 7, 1999 reviews the progress of the Chandra X ray Observatory project. The tape begins with an animated view of the launch of the Chandra X ray Observatory from the shuttle, as it was planned. Next is a press briefing. Bryan Austin, the Lead Flight Director, discusses the five day mission, and the reason for the shortened length, due to the added weight from the Chandra Observatory. He also reviews the other payloads, and activities that will take place during the mission. Kenneth Ledbetter, Science Director Mission Development, discusses the 4 great observatories and the role of each. They are the Hubble, which observed visible light; Compton Gamma Ray Observatory, the Chandra, and the Space Infrared Telescope Facility. A time line of the expected operational lifetime of each of the 4 great observatories is shown. Specific information about the Chandra Telescope is reviewed. The last press briefing presenter is Fred Wojtalik, who is the Chandra Program Manager. He reviews the Chandra's components, and acknowledges a few of the many companies that contributed to its building. He also reviews the orbital activation and checkout sequences. Question that follows, center around contingency plans if some part of the planned sequence is not successful. The costs are reviewed, and concerns about the Initial Upper Stage, the propulsion unit required to take the Chandra to its high orbit are addressed. The Chandra is planned to take an eliptical orbit, which is higher than the other space telescopes, thus far launched due to the requirement to avoid Earth generated X rays.
CASI
Launching; Mission Planning; Spaceborne Telescopes; X Ray Astrophysics Facility; Payload Integration; Prelaunch Summaries; Space Shuttle Payloads; X Ray Astronomy; Orbital Maneuvers; Orbit Insertion; Satellite Orbits; Orbital Mechanics; Payload Delivery (STS)

20000014123 StellaCom, Inc., Rosslyn, VA USA
STS–96: SPACEHAB Double MOD into PGHM at Launch Complex 39B
Apr. 27, 1999; In English; Videotape: 3 min., 10 sec., playing time in color, with sound
Report No.(s): NONP–NASA–VT–2000010636; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center (KSC) video release presents the SPACEHAB double module moving into the Payload Ground Handling Mechanism (PGHM) which is located in the Payload Change-out Room of Launch Complex 39B at the Kennedy Space Center. PGHM is used to remove or insert the shuttle payload from the Orbiter.
CASI
Space Shuttle Payloads; Ground Handling; Payload Integration

20000014210 NASA Kennedy Space Center, Cocoa Beach, FL USA
Dateline Moon: 30 Years Later
Jul. 20, 1999; In English; Videotape: 44 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008130; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This NASA Kennedy Space Center video release presents a revisitation of the Apollo 11 mission on the 30th anniversary of the July 20, 1969 event in which Neil Armstrong became the first human to set foot on the Moon. Tim Russert moderates the "Newseum" program in which, the crew of Apollo 11: Commander Neil A. Armstrong, Command Module pilot Michael Collins, Lunar Module pilot Edwin E. Aldrin, Jr. discuss the mission. School children present in the audience as well students linked via satellite from New York City pose questions to the astronauts regarding many facets of the mission including spacesuits used during the mission, international cooperation vs. competition regarding the International Space Station and spaceflight in general, anxieties or fears of the astronauts prior to the mission, and the overall effect that Apollo 11 had on the world.
CASI
Apollo 11 Flight; Lunar Landing; Lunar Flight; Astronauts

20000014222 NASA Kennedy Space Center, Cocoa Beach, FL USA
President Clinton's Arrival at CCAS and Visit to KSC for Launch of STS–95
Oct. 29, 1998; In English; Videotape: 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010634; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows President Bill Clinton and First Lady Hillary Rodham Clinton arriving in Airforce 1 on the Skid Strip, viewing the launch, and tracking the plume of Space Shuttle Discovery, on mission STS-95. The viewing takes place on the roof of the Launch Control Center (LCC). Also present on the roof to watch this event are Astronaut Robert Cabana and Eileen Collins (both in flight suit), and the NASA Administrator Daniel Goldin. The President is shown giving a speech to the Launch Team and shaking hands with employees in the LCC.
CASI
Viewing; Spacecraft Launching

20000014223 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96 Press Briefing and MODE–1 Egress Training for TCDT
Apr. 28, 1999; In English; Videotape: 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010625; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows the members of the STS-96 crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev participating in a Press Conference and Egress Training for a Terminal Countdown Demonstration Test. Scenes of Capt. Steve Kelly, Fire Services, explaining the emergency egress procedure to the STS-96 crew is presented. Mission Specialist Tokarev is shown releasing a slide-wire basket. Mission Specialist Barry is also seen in the evacuation seat with the Training Officer Gina Tucker behind him. The TCDT activities include simulated countdown exercises and inspection of the mission payloads in the orbiter's payload bay.
CASI
Astronaut Training; Egress; Conferences

20000014362 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96 Discovery, Bench Review and SPACEHAB Familiarization at SPACEHAB
Apr. 02, 1999; In English; Videotape: 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010623; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows members of the STS-96 crew, Commander Kent V. Rominger, Pilot Rick D. Husband, and Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev participating in familiarization activities, and bench review at SPACEHAB. Commander Kent V. Rominger and Mission Specialists Julie Payette and Ellen Ochoa are seen checking out and reviewing equipment use with Chris Jaskoika, Boeing SPACEHAB, inside the SPACEHAB module.
CASI
Reviewing; Training Evaluation; Astronaut Training; Spacecraft Modules

20000014368 NASA Kennedy Space Center, Cocoa Beach, FL USA
Apollo 12 Mission Summary and Splashdown
Jul. 09, 1999; In English; Videotape: 1 hr. 5 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008135; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the November 14, 1969 Apollo-12 space mission begun from launch complex pad 39-A at Kennedy Space Center, Florida. Charles Conrad, Jr., Richard F. Gordon, Jr., and Alan L. Bean make up the three-man spacecrew. The video includes the astronaut's pre-launch breakfast, President Nixon, his wife, and daughter arriving at Cape Kennedy in time to see the launch, as well as countdown and liftoff. After the launch, President Nixon gives a brief congratulatory speech to the members of launch control at KSC. The video also presents views of the astronauts and spacecraft in space as well as splashdown of the command module on November 24, 1969. The video ends with the recovery, by helicopter and additional personnel, of the spacecrew from the command module floating in the waters of the Atlantic.
CASI
Apollo 12 Flight; Lunar Flight

20000014438 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93: Chandra Crew Arrival
Jul. 16, 1999; In English; Videotape: 15 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008141; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows the astronauts arrival at Kennedy Space Center a week before the launch. Each of the astronauts gives brief remarks, beginning with Eileen Collins, the first woman to command a space mission.
CASI
Astronauts; Spacecrews; Crew Procedures (Preflight)

20000015363 NASA Johnson Space Center, Houston, TX USA
STS 103: Post Flight Crew Presentation
Feb. 09, 2000; In English; Videotape: 15 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015184; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew (Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfield, Claude Nicollier, and Jean-Francois Clervoy) narrate a video presentation of the STS-103 mission highlights. The mission's primary objective is servicing the Hubble Space Telescope.
CASI
Space Transportation System Flights; Space Missions; Spacecrews

20000015365 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Post–flight Crew Press Conference, Part 2
Apr. 19, 1991; In English; Videotape: 14 min., 10 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013420; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video release presents a continuation of the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). Part 2 of the conference continues the question and answer period of Part 1 with Steven R. Nagel, Commander, Kenneth D. Cameron, Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3 fielding questions posed by scientific journalists from JSC and other NASA centers. Topics discussed include: the necessary Extravehicular Activity (EVA) to free the Gamma Ray Observatory high gain antenna, communication between Atlantis and space station MIR, HAM radio contacts with Earth, and EVA contingency planning. Part 1 of the press conference can be found in Report Number NONP-NASA-VT-2000013419.
CASI
Space Transportation System Flights; Space Shuttle Missions; Astronauts; Spacecrews

20000015366 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Post–flight Crew Press Conference, Part 1
Apr. 19, 1991; In English; Viteotape: 1 hr., 2 min., 11 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013419; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center video release presents the April 19, 1991 STS-37 post-flight crew press conference from Johnson Space Center (JSC). The video begins with Steven R. Nagel, Commander applauding the efforts of everyone involved in the very smooth shuttle mission and introducing the rest of the crew seated to his right: Kenneth D. Cameron (1), Pilot, Jerry L. Ross, Mission Specialist 1, Jay Apt, Mission Specialist 2, and Linda M. Godwin, Mission Specialist 3. A video presenting mission highlights and on-board activities including liftoff footage, and the deployment of the primary payload, Gamma Ray Observatory (GRO), is shown. The GRO high-gain antenna failed to deploy on command and had to be manually freed and deployed by astronauts Ross and Apt during an unscheduled contingency space walk, the first since April 1985. After the mission summary video is shown, a slide show that includes pictures of Earth from Atlantis, and views of the GRO is presented and is followed by a question and answer period with questions posed by scientific journalists from JSC and other NASA centers. Part 2 of the press conference can be found in Report Number NONP-NASA-VT-2000013420.
CASI
Space Transportation System Flights; Space Shuttle Missions; Astronauts

20000017963 NASA Johnson Space Center, Houston, TX USA
STS–99 Flight Day Highlights and Crew Activities Report
Feb. 12, 2000; In English; Videotape: 16 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015187; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Blue Team (second of the dual shift crew), Dominic L. Pudwill Gorie, Janice E. Voss and Mamoru Mohri, beginning the first mapping swath covering a 140-mile-wide path. While Mohri conducts mapping operations, Voss and Gorie are seen participating in a news conference with correspondents from NBC and CNN. The Red Team (first of the dual shift crew), Kevin R. Kregel, Janet L. Kavandi and Gerhard P.J. Thiele, relieves the Blue Team and are seen continuing the mapping operations for this around the clock Shuttle Radar Topography Mission (SRTM). Commander Kregel is shown performing boom (mass) durability tests, calibrating the EarthCam Payload, and

speaking with the Launch Control Center (LCC) about trouble shooting a bracket for better camera angle.
CASI
Shuttle Imaging Radar; Earth Observations (From Space); Radar Imagery; Radar Maps; Topography; Earth Surface

20000017964 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Activities Report/Flight Day 1 Highlights
Feb. 11, 2000; In English; Videotape: 20 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015185; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crew, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri and Gerhard P.J. Thiele, seated in the dining room with the traditional cake. The crew is seen performing various pre-launch activities including suit-up, walk out to the Astro-van, and strap-in into the vehicle. Also seen are the retractions of the orbiter access arm and the gaseous oxygen mint hood, main engine start, booster ignition, liftoff, and separation of the solid rocket boosters. The Red Team (first of the dual shift crew) includes Kregel, Kavandi, and Thiele, who are shown conducting jet thruster firings, activating radar instruments, and deploying the boom (mass).
CASI
Countdown; Spacecrews; Crew Procedures (Preflight); Liftoff (Launching); Stage Separation; Space Shuttle Boosters

20000019580 NASA Johnson Space Center, Houston, TX USA
STS–95 CEIT in the OPF–2 and the MPPF
Sep. 02, 1998; In English; Videotape: 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-95, Commander Curtis L. Brown, Pilot Steven W. Lindsey, Mission Specialists Scott E. Parazynski, Stephen K. Robinson, Pedro Duque, Payload Specialists Chiaki Mukai and John H. Glenn in a training room talking. Scenes also show the crew in the simulation spacecraft. Crewmembers are seen in the Orbiter Processing Facility Bay 2 ((OPF-2) and the Multi-Payload Processing Facility (MPPF) looking over equipment during the Crew Equipment Interface Test (CEIT) for their mission. The CEIT gives astronauts an opportunity for a hands-on look at the payloads and equipment with which they will be working on orbit.
CASI
Astronaut Training; Training Simulators; Flight Simulation; Flight Training; Spacecraft Equipment

20000019640 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93 / Columbia Flight Crew Photo Op & QA at Pad for TCDT
Jun. 25, 1999; In English; Videotape: 35 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-93 mission was to deploy the Advanced X-ray Astrophysical Facility, which had been renamed the Chandra X-ray Observatory in honor of the late Indian-American Nobel Laureate Subrahmanyan Chandrasekhar. The mission was launched at 12:31 on July 23, 1999 onboard the space shuttle Columbia. The mission was led by Commander Eileen Collins. The crew was Pilot Jeff Ashby and Mission Specialists Cady Coleman, Steve Hawley and Michel Tognini from the Centre National d'Etudes Spatiales (CNES). This videotape shows a pre-flight press conference. Prior to the astronauts' arrival at the bunker area in front of the launch pad, the narrator discusses some of the training that the astronauts are scheduled to have prior to the launch, particularly the emergency egress procedures. Commander Collins introduces the crew and fields questions from the assembled press. Many questions are asked about the experiences of Commander Collins, and Mission Specialist Coleman as women in NASA. The press conference takes place outside in front of the Shuttle Columbia on the launch pad.
CASI
Females; Spacecrews; Crew Procedures (Preflight); Preflight Operations

20000019643 NASA Johnson Space Center, Houston, TX USA
STS–99 Flight Day Highlights 03 and Crew Activities Report
Feb. 13, 2000; In English; Videotape: 18 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000015186; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-99's Blue Team Pilot Dominic L. Pudwill Gorie, and Mission Specialist Mamoru Mohri speaking with Dr. Bob Ballard and fielding questions from Fox News Network. During the interviews Janet E. Voss oversees the mapping activities. The Blue Team is also seen speaking with the Launch Control Center (LCC) troubleshooting a problem with a small nitrogen thruster mounted at the tip of the radar's outboard antenna.
CASI
Mapping; Topography; Relief Maps; Earth Surface; Maintenance; Antennas

20000019663 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96 Flight Crew Press Q & A at KSCNF for TCDT
Apr. 28, 1999; In English; Videotape: 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010627; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows Commander of STS-96 mission, Kent V. Rominger, introducing the other crewmembers, Pilot Rick D. Husband, and Mission Specialists Tamara E. Jernigan, Ellen Ochoa, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev. During the introduction, Rominger describes each crewmember's responsibilities. He also mentions the deployment of STARSHINE, and the scheduled space walk with Jernigan and Barry. Panoramic views of the shuttle on the launch pad are also shown.
CASI
Conferences; Discussion; Flight Crews; Crew Procedures (Preflight)

20000019665 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Breakfast / Ingress / Launch & ISO Camera Views
Apr. 05, 1991; In English; Videotape: 25 min. playing time, mostly in color, with sound, some black and white footage included
Report No.(s): NONP–NASA–VT–2000013427; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven Nagel. The crew was Pilot Kenneth Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwing. This videotape shows the crew having breakfast on the launch day, with the narrator introducing them. It then shows the crew's final preparations and the entry into the shuttle, while the narrator gives information about each of the crew members. The countdown and launch is shown including the shuttle separation from the solid rocket boosters. The launch is reshown from 17 different camera views. Some of the other camera views were in black and white.
CASI
Space Transportation System; Spacecrews; Space Shuttle Boosters; Prelaunch Summaries; Spacecraft Launching; Launch Vehicles; Launchers

20000019666 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Rollout to Pad B
Mar. 15, 1991; In English; Videotape: 50 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000013430; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven R. Nagel. The crew was Pilot Kenneth D. Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwing. This videotape shows the shuttle being rolled out to the launch pad.
CASI
Space Shuttles; Space Transportation System; Preflight Operations; Launching Pads

20000020755 NASA Johnson Space Center, Houston, TX USA
STS–99: Flight Day 05 Highlights and Crew Activities Report
Feb. 15, 2000; In English; Videotape: 22 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022122; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

During day 5 Endeavour gathers data four times faster than its advanced data communications system can send it to Earth. Pilot Dom Gorie and Mission Specialists Janice Voss and Mamoru Mohri transmit television coverage of Voss using an inflatable globe to explain the mapping of Earth land surfaces. Mohri is shown taking photos out the commander's window, while Gorie is changing a tape on a payload high rate recorder. Mapping operations continued smoothly, with both radar and orbiter systems working flawlessly.
CASI
Space Transportation System; Data Transmission; Television Systems; Spacecrews

20000020774 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96 Crew Training, Mission Animation, Crew Interviews, STARSHINE, Discovery Rollout and Repair of Hail Damage
May 21, 1999; In English; Videotape: 1 hr. 5 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008128; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Mission Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev during various training activities. Scenes include astronaut suit-up, EVA training in the Virtual Reality Lab, Orbiter space vision training, bailout training, and crew photo session. Footage also shows individual crew interviews, repair activities to the external fuel tank, and Discovery's return to the launch pad. The engineers are seen sanding, bending, and painting the foam used in repairing the tank. An animation of the deployment of the STARSHINE satellite, International Space Station, and the STS-96 Mission is presented. Footage shows the students from Edgar Allen Poe Middle School sanding, polishing, and inspecting the mirrors for the STARSHINE satellite. Live footage also includes students from St. Michael the Archangel School wearing bunny suits and entering the clean room at Goddard Space Flight Center.
CASI
Astronaut Training; Training Simulators; Flight Simulation; Flight Training; Ejection Training; Bailout; Virtual Reality; Computerized Simulation; Extravehicular Activity; International Space Station

20000020779 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Mission Overview: Lead Flight Director Briefing
Feb. 25, 1991; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013428; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents a Johnson Space Center (JSC) press conference featuring Chuck Shaw, Lead Flight Director discussing the STS-37 Atlantis shuttle mission. Topics presented include overall mission objectives, flight crew, flight directors, primary payload (Gamma Ray Observatory (GRO)), Extravehicular Activities (EVA) Development Flight Experiment (EDFE), secondary payloads, Development Test Objectives (DTO's), Detailed Supplementary Objectives (DSO's), and flight day activities. Certain flight day activities including the Gamma Ray Observatory deployment and EVA movements and translations are presented as computerized simulations. The video ends with a summary of the key points of STS-37 and a question and answer period with questions posed from Johnson as well as other NASA centers. Questions include topics involving EVA safety, emergency EVA's, and what determines the day of primary payload deployment.
CASI
Space Transportation System Flights; Gamma Ray Observatory; Extravehicular Activity

20000020788 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–96 TCDT Crew Arrival
Apr. 28, 1999; In English; Videotape: 9 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010632; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-96, Commander Kent V. Rominger, Pilot Rick D. Husband, Missions Specialists Ellen Ochoa, Tamara E. Jernigan, Daniel T. Barry, Julie Payette and Valery Ivanovich Tokarev, arriving at the Shuttle Landing Facility in T-38 aircraft for Terminal Countdown Demonstration Test (TCDT) activities. Rominger speaks briefly to introduce the other crewmembers and their designated responsibilities.
CASI
Crew Procedures (Preflight); Astronaut Training; T-38 Aircraft; Arrivals; Landing

20000021102 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Fuse 2nd Stage Erection at Launch Complex 17A
Jun. 07, 1999; In English; Videotape: 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010633; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows workers removing the protective covering from the second stage fuse. Scene shows the lifting to the fuse onto the launch complex.
CASI
Construction; Aircraft Production; Production Engineering

20000021160 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Activities Report / Flight Day 11 Highlights
Feb. 21, 2000; In English; Videotape: 19 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022261; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (STRM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface.. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). The astronauts finished the mapping operations early on day 11, and then retracted the 200 foot long mast into its payload bay canister. The mast, the longest rigid structure ever deployed in space, supported the external antenna during the mapping operation. The videotape shows the mast folding into the canister. The final stowage was delayed when the three latches on the lid of the canister failed to engage as expected. After a few procedures were executed the mast canister was sealed, on the third attempt, as shown on the videotape. The video also contains several views from the STRM. They include a computerized animation of a flight from Pasadena to Palmdale, a still view of Fiji, a view of the San Francisco Bay Area, and another of Pasadena.
CASI
Endeavour (Orbiter); Rigid Structures; Shuttle Imaging Radar; Earth Observations (From Space); Topography; Folding Structures

20000021173 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew Activities Report / Flight Day 06 Highlights
Feb. 16, 2000; In English; Videotape: 25 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022120; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (STRM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface.. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese

Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). This tape shows some of the activities on board the shuttle during day six of the mission. by the end of day six, the mission to map 32 million square miles of the Earth's surface was about 67.2 percent complete. On this video tape there is discussion about the attempts to conserve propellant, to allow for the completion of the planned mapping. There is discussion by Mamoru Mohri about the mission, and Gerhard Thiele answers questions from the German Press about the mission. New radar images from the SRTM of the Kamchatka Peninsula and northwestern Mongolia are shown. There are shots of Endeavour's 200-foot mast, which required troubleshooting due to a balky small thruster.
CASI
Endeavour (Orbiter); Radar Imagery; Shuttle Imaging Radar; Topography; Earth Observations (From Space); Spacecrews

20000021242 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Activities Report / Flight Day 07 Highlights
Feb. 17, 2000; In English; Videotape: 23 min. 10 sec playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022121; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Blue Team of STS-99, Pilot Dominic L. Pudwill Gorie, and Mission Specialists Mamoru Mohri and Janet E. Voss, participating in a discussion with the Launch Control Center (LCC). Gorie and Mohri are also seen speaking with the Prime Minister of Japan. The Blue Team also answers questions from students. Footage also includes various shots of the mass hanging from the shuttle, the star tracker, the X- and C-band panels on the shuttle, and the dumping of water from the shuttle. Still shots of the (Shuttle Radar Topography Mission) SRTM Coverage Map are also presented. Places shown include the San Andreas Fault, San Gabriel Mountains, Simi Valley, Las Angeles, New Zealand, New Mexico, and Hokkaido Japan.
CASI
Shuttle Imaging Radar; Radar Imagery; Relief Maps; Topography; Earth Surface; Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter)

20000021274 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–88 Endeavour: TCDT–Press Q & A at KSCNF Auditorium
Nov. 05, 1998; In English; Videotape: 45 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008136; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of the (Terminal Countdown Demonstration Test) TCDT shows the crew of STS-88, Commander Robert D. Cabana, Pilot Frederick W. Sturckow, and Mission Specialists Nancy J. Curry, Jerry L. Ross, James H. Newman, and Sergei K. Krikalev, participating in a press conference. The moderator Bruce Buckingham is seen introducing Bob Cabana, who then introduces the rest of the crewmembers. Cabana explains the mission and addresses the flight day activities. He includes the building of the Node 1 station element to the Functional Energy Block (FGB) which will already be in orbit, and two space-walks to connect power and data transmission cables. The crewmembers took turn answering questions from both the audience and via radio communication with the Johnson Space Center.
CASI
Astronaut Training; International Space Station; Unity Connecting Module; Zarya Control Module; Space Station Structures; Construction; Data Transmission

20000021585 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew Activities Report / Flight Day 08 Highlights
Feb. 18, 2000; In English; Videotape: 24 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022260; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Red Team of STS-99, Commander Kevin R. Kregel and Mission Specialists Janet L. Kavandi and Gerhard P.J. Thiele, participating in interviews with the Launch Control Center (LCC). Kregel discusses the mapping system, and Thiele speaks about the antenna. The Red Team completes the flight cast maneuver for the day. Footage also shows the Red Team, Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet E. Voss and Mamoru Mohri, participating in discussion with the LCC. Voss explains how the equipment works, while Mohri and Gorie discusses the mass. Also seen is the entire crew gathered on the flight deck participating in an interview with the LCC.
CASI
Spacecraft Maneuvers; Radar Antennas; Radar Maps; Relief Maps; Topography; Earth Surface

20000023167 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–93/ Chandra Science Briefing
Jul. 19, 1999; In English; Videotape: 36 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008138; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows a press briefing, reviewing the type of information which scientist hope to get from the Chandra X-ray Telescope. The telescope is scheduled to be launched during the STS-93 flight. The participants in the briefing are: Don Savage, of NASA Headquarters; Ed Weiler, Associate Administrator for Space Sciences; Alan Bunner, Chandra Project Scientist and Michael Turner, an astrophysicist at the University of Chicago. After the introduction by Mr. Savage, the broad scientific goals of the Chandra mission are reviewed by Dr. Weiler. This is followed by an acknowledgement of many of the people who participated in the development of the Chandra Telescope. This is followed by a discussion of the astrophysics and the information which the telescope should provide. Mrs. Chandrasekhar, the widow of Subrahmanyan Chandrasekhar, was in the audience. She was introduced and spoke briefly about the late Nobel Laureate astrophysicist.
CASI
Astrophysics; X Ray Astrophysics Facility; Spaceborne Astronomy; X Ray Astronomy

20000023223 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37/Atlantis/GRO
Apr. 11, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013422; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. The mission was led by Commander Steven Nagel. The crew was Pilot Kenneth Cameron and Mission Specialists Jerry Ross, Jay Apt, and Linda Godwing. This videotape shows the crew having breakfast on the launch day. It then shows the crew's final preparations and the entry into the shuttle. The countdown and launch is shown including the shuttle separation from the solid rocket boosters. The launch is reshown from several different camera views. Some of the other camera views were in black and white. The deployment of the Gamma Ray Observatory is shown, including an unscheduled spacewalk to deploy the high gain antenna. The landing at Edwards Air Force Base is shown. The landing is also shown from several different cameras views.
CASI
Gamma Ray Observatory; Spacecrews; Launching; Extravehicular Activity; Horizontal Spacecraft Landing

20000024783 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Atlantis, Shuttle Radar Topography Mission (SRTM) in the MPPF with Technicians working
Mar. 22, 1999; In English; Videotape: 1 min. playing time, in color, no sound except background noise
Report No.(s): NONP–NASA–VT–2000027987; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This

videotape shows technicians in clean room suits working on the SRTM in the Multi-Payload Processing Facility (MPPF).
CASI
Clean Rooms; Payloads; Shuttle Imaging Radar

20000024784 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Payload Door Closure in Orbiter Processing Facility # 2, Endeavour, (SRTM)
Nov. 29, 1999; In English; Videotape: 3 min playing time in color,no sound except background sound
Report No.(s): NONP–NASA–VT–2000027986; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This videotape shows the SRTM in Endeavour's payload bay, while the payload bay doors are being closed. There are some views of the Orbiter Processing Facility and technicians in the clean room environment.
CASI
Bays (Structural Units); Doors; Endeavour (Orbiter); Shuttle Imaging Radar

20000024868 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Payload Gamma Ray Observatory Pad–B in PCR
Mar. 17, 1991; In English; Videotape: 2 min. 20 sec., in color with background sound
Report No.(s): NONP–NASA–VT–2000013432; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. This videotape shows the Gamma Ray Observatory being placed in the payload bay of the shuttle. The Payload Changeout Room (PCR) and the clean room operations required to place the payload in the bay are shown.
CASI
Clean Rooms; Gamma Ray Observatory; Payloads; Space Transportation System; Controlled Atmospheres; Bays (Structural Units)

20000025181 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Payload Bay Door Opening at Pad 39A Endeavour
Jan. 17, 2000; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027988; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This videotape shows the doors to the payload bay opening prior to the emplacement of the SRTM. It also shows views of the personnel in the clean room during the process.
CASI
Doors; Payloads; Space Transportation System; Clean Rooms

20000025182 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew Arrival for Launch of SRTM, Endeavour
Jan. 27, 2000; In English; Videotape: 6. min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027985; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the arrival of the crew at Kennedy Space Center. After arrival, each of the crew makes a brief statement to the assembled press.
CASI
Spacecrews; Space Shuttle Payloads; Space Transportation System; Astronauts; Crew Procedures (Preflight)

20000025183 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew departs SLF after TCDT
Jan. 17, 2000; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027984; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the astronauts boarding jet planes at the Shuttle Landing Facility after the Terminal Countdown Demonstration Test.
CASI
Astronauts; Spacecrews; Jet Aircraft; Preflight Operations

20000025184 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Rollover from OPF–2 to VAB
Dec. 02, 1999; In English; Videtape: 4 min playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027983; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the Endeavour Space Shuttle being rolled over from the Orbiter Processing Facility to the Vertical Assembly building.
CASI
Endeavour (Orbiter); Space Shuttles; Space Transportation System; Preflight Operations

20000025185 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Rollout to SRTM 39A
Dec. 14, 1999; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027980; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows the shuttle with the solid rocket boosters being rolled out to launch pad 39A.
CASI
Endeavour (Orbiter); Launching; Space Transportation System

20000025186 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 SRTM Lift and Insert into Canister
Jul. 19, 1999; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027276; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows clean room technicians working on a part of the 200 foot long mast that will hold the SRTM in position during the mission. This videotape also shows the lowering of the SRTM into the canister.
CASI
Beams (Supports); Clean Rooms; Shuttle Imaging Radar

20000025249 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew Activities Report / Flight Day 10 Highlights
Feb. 20, 2000; In English; Videotape: 26 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022259; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the activities of the tenth day of the mission. During this day the mapping of the Earth continued. Each of the astronauts gives a brief statement about the mission or some other point of interest. Some of the equipment and supplies on board the shuttle are shown, including the medical supplies. The videotape ends showing some of the images released during the day from the SRTM. These include views of Oahu, Hawaii; Miquelon Island and St. Pierre Island, Newfoundland; Kamchatka, and Baikal, Russia; Oberpfaffenhofen, Germany; Katmandu, Nepal; and Cotopaxi, Ecuador.
CASI
Astronauts; Shuttle Imaging Radar; Space Transportation System; Spacecrews; Endeavour (Orbiter); Crew Procedures (Inflight)

20000025314 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Flight Day 04 Highlights and Crew Activities Report
Feb. 14, 2000; In English; Videotape: 26 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022123; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency).On the fourth day of the mission the blue team's Dominic Gorie led off the day's tape with a brief memorial to Charles Schultz, as he spoke of some of the vessels that were named for characters in Peanuts, and called to mind the Silver Snoopy, one of the highest awards NASA bestows. Janice Voss answered a couple of questions sent over the internet about a problem with a small thruster on the end of the 200 foot long mast. Mamoru Mohri talks about the EarthKam. Gerhard Thiele and Janet Kavandi describe the process of achieving the digital map of the entire world. At the end of the videotape some of the recently released views from the SRTM are shown. These include shots of the South Island of New Zealand.
CASI
Endeavour (Orbiter); Shuttle Imaging Radar; Space Transportation System; Topography; Spacecrews

20000025326 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Prelaunch Press Briefing
Jan. 30, 2000; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027989; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows a press briefing about a mechanical problem that the shuttle was having. There was discussion about possibly scrubbing the launch due to the problem with the Enhanced Master Events Controller. A problem with a fuel pump part had also become evident and there was discussion about the impact that this could have on the flight.
CASI
Endeavour (Orbiter); Space Transportation System; Preflight Operations; Prelaunch Problems; Spacecraft Reliability

20000025327 NASA Kennedy Space Center, Cocoa Beach, FL USA
Astronaut Mamoru Mohri Leaves Patrick Air Base After the Scrub of STS–99 Due to Mechanical Failure
Feb. 02, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027982; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This videotape shows Mamoru Mohri boarding a plane at Patrick Air Base after the scrub of the mission due to mechanical problems. Prior to his departure, he answers a few questions from members of the Japanese press who had gathered for his departure.
CASI
Astronauts; Endeavour (Orbiter); Space Transportation System; Spacecrews

20000025328 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew with Press, TCDT Crew Emergency Egress Training, Walkdown Pad 39A
Jan. 13, 2000; In English; Videotape: 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027979; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). In this tape Commander Kevin Kregel introduces the crew to the assembled press at the

site where they will practice emergency exit procedures as part of the Terminal Countdown Demonstration Test (TCDT), a dress rehearsal for launch.
CASI
Space Transportation System; Spacecrews; Preflight Operations; Crew Procedures (Preflight); Prelaunch Tests; Astronauts

20000025450 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew Activities Report / Flight Day 09 Highlights
Feb. 20, 2000; In English; Videotape: 28 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000022263; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the activities of the ninth day of the mission. The announcement of the decision to extend the SRTM for 9 hours is made to the crew. This means that almost all (i.e., 99.9 %) of the target area of the Earth will be imaged, at least once. Some shots of the 200 foot long mast where the outboard antennas are located are shown. Mamoru Mohri is shown changing a data tape, while he explains the rationale for recording rather than transmitting the data. Gerhard Thiele speaks to the German press. At the end of this tape are images generated from the SRTM. There are views of Oahu, Molokai, Lanai and west Maui, Hawaii; Dallas, Texas; Salalah, Oman; and Tasmania, Australia. Animations showing the topography around Hokkaido, Japan and Brazil are also shown.
CASI
High Resolution; Shuttle Imaging Radar; Space Transportation System; Spacecrews; Topography

20000025466 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew Arrives for Second Launch Attempt, SRTM Mission, Endeavour
Feb. 07, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027995; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows the arrival of the crew at the Kennedy Space Center for a second attempt to launch. The first attempt was scrubbed due to mechanical problems. The crew is introduced to the press by Commander Kregel. Mamoru Mohri speaks to the press in English and Japanese and Gerhard Thiele makes a brief statement in German.
CASI
Space Transportation System; Spacecrews; Astronauts; Crew Procedures (Preflight)

20000025467 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Commander and Pilot for the SRTM Mission, Practice Flight in the Shuttle Training Aircraft
Feb. 09, 2000; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027978; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour, and led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri from the National Space Development Agency (Japanese Space Agency), and Gerhard P. J. Thiele from DARA (German Space Agency). This tape shows Commander Kregel and Pilot Gorie getting on board the Shuttle Training Aircraft and practicing approaches for the shuttle landing.
CASI
Spacecrews; Training Aircraft; Crew Procedures (Preflight); Horizontal Spacecraft Landing

20000025543 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 SRTM Moved from the SSPF to the OPF #2
Jul. 21, 1999; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027994; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the move of the Shuttle Radar Topography Mission (SRTM) system from the Space Station Processing Facility (SSPF) to the Orbiter Processing Facility (OPF).
CASI
Shuttle Imaging Radar; Radar Imagery; Radar Maps; Relief Maps; Topography; Earth Surface

20000025544 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Lift and Mate to External Tank in VAB, Endeavour, SRTM Mission
Dec. 03, 1999; In English; Videotape: 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027992; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the lifting of the external tank to the Endeavour orbiter system of STS-99 in the Vehicle Assembly Building (VAB).
CASI
Space Transportation System; Space Transportation System Flights; Endeavour (Orbiter)

20000025577 NASA Kennedy Space Center, Cocoa Beach, FL USA
TCDT STS–99 Crew at FSS/White Room
Jan. 14, 2000; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027991; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, putting on equipment for ingress training.
CASI
Astronaut Training; Ingress (Spacecraft Passageway); Spacecrews; Crew Procedures (Preflight)

20000025957 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 23 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027977; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape presents a pre-launch briefing for the press held on Feb 8, 2000. Statements were given by Doug Lyons, Shuttle Test Director; Scott Higginbotham, STS-99 Payload Director and Ed Priselac, Shuttle Weather Officer. Mr. Lyons reported on the replacement of the Master Control Unit on board Endeavour, the part that had caused a delay in the launch. He reviewed the work that had to be done and the timeline for completion. Scott Higginbotham reported that there were no problems with the SRTM. Ed Priselac reported on favorable weather conditions for the launch. Discussion after the statements concerned a possible problem with a cable, and the possibility of a further delay to the launch.
CASI
Countdown; Endeavour (Orbiter); Launching; Prelaunch Summaries; Prelaunch Problems; Prelaunch Tests

20000025958 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Briefing
Feb. 08, 2000; In English; Videotape: 27 min., 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape presents a pre-launch briefing for the press held on Jan. 28, 2000. Statements were given by Doug Lyons, Shuttle Test Director; Scott Higginbotham, STS-99 Payload Director and Ed Priselac, Shuttle Weather Officer. Doug Lyons reported on the checkout of the equipment. Scott Higgenbotham reviewed the steps required to assemble and test the SRTM instrumentation and equipment. Ed Priselac gave the weather forecast for the expected launch day. The questions concerned a possible problem with a part onboard the shuttle and the likely impact this might have on the launch.
CASI
Countdown; Endeavour (Orbiter); Launching; Prelaunch Summaries; Prelaunch Tests; Prelaunch Problems

20000026827 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Briefing
Feb. 09, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027993; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the participants in the Press Conference disclosing the status of the STS-99 flight. The panelists consists of NASA's test Director Steve Altemus, the STS-99 Payload Manager Scott Higginbotham, and the Shuttle Weather Officer Ed Priselac. Joel Wells NASA's Public Affairs introduces each panelist as they discuss the problems with the left hand ignition cable, the potential change of the GPS receiver, payload status, and favorable weather conditions. The panel members also answered questions from members of the audience. Also shown are various shots of the Shuttle on the launch pad.
CASI
Conferences; Countdown; Spacecraft Launching; Checkout; Spacecraft Maintenance; Ignition; Cables (Ropes); Global Positioning System; Receivers; Weather

20000026828 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Press Conference
Feb. 10, 2000; In English; Videotape: 10 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027981; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the participants in the Press Conference disclosing the status of the STS-99 flight. The panelists consists of NASA's test Director Jeff Spaulding, the STS-99 Payload Manager Scott Higginbotham, and the Shuttle Weather Officer Ed Priselac. Bruce Buckingham NASA's Public Affairs introduces each panelist as they discuss the servicing of fuel tanks, checkout, closeouts, payload status, and favorable weather conditions. The panelists also answer questions from the audience. Also shown are various shots of the Shuttle on the launch pad.
CASI
Conferences; Checkout; Fuel Tanks; Countdown; Spacecraft Launching; Weather

20000026829 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Crew News Conference/ESA Call Flight Day 8
Feb. 18, 2000; In English; Videotape: 26 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025577; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in a press conference. The crew answer questions from U.S and Japanese reporters at various NASA Centers, and Headquarters. Discussions include the nitrogen gas line problem, the deployment of the mass, and what would happen if the mass has to be jettisoned. Thiele, Kregel, Kavandi and Voss also answer questions from German Research Minister Edelgard Buhlmann. The NASA Administrator Daniel Goldin along with Buhlmann also congratulates the crew on the success of the mission and the potential benefits of the resulting high-resolution maps.
CASI
Conferences; Teleconferencing; Video Communication

20000027502 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39 Compiled Orbiter Footage
Apr. 07, 1991; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013423; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the rollback of STS-39 to the VAB (Vehicle Assembly Building), the rollback of Discovery to the OPF (Orbiter Processing Facility) High Bay 2, Discovery ET Disconnect Door Hinges (Cracks), Discovery ET Disconnect Door Hinges (Edited) and Discovery in the VAB.
CASI
Discovery (Orbiter); Space Transportation System; Space Transportation System Flights; Spacecraft Maintenance

20000027507 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 CEIT at the OPF High Bay–2, Endeavour, SRTM Mission
Jul. 28, 1999; In English; Videotape: 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000027990; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, participating in Crew Equipment Interface Test (CEIT) activities at the Orbiter Processing Facility (OPF). The crew is shown checking out and learning about the equipment.
CASI
Astronaut Training; Spacecraft Equipment; Onboard Equipment; Crew Procedures (Preflight); Preflight Operations

20000027508 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Flight Crew Post–Landing Press Conference
Feb. 23, 2000; In English; Videotape: 35 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025580; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system that will produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. The mission was led by Commander Kevin Kregel. The crew was Pilot Dominic L. Pudwill Gorie and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, the National Space Development Agency (Japanese Space Agency) and Gerhard P. J. Thiele, from DARA (German Space Agency). The shuttle landed at Kennedy on the February 22, 2000 at 5:22 CST. This tape shows a post landing press conference with the crew. Commander Kregel made a brief statement praising the crew for the mission's success and then introduced the crewmembers. The crew answered questions about the retraction of the mast. The retraction had been successful, but the latches to the canister had failed. The extreme cold may have caused the problem and a solution was proposed from ground control. If this had not worked, an EVA would have been required. The astronauts were confident in the solution to the problem, however they were ready to perform any required EVA. Mamoru Mohri answered questions from the Japanese press, speaking in English and Japanese.
CASI
Astronauts; Shuttle Imaging Radar; Space Transportation System; Space Transportation System Flights; Spacecrews

20000027606 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Pre–Launch Press Conference
Jan. 29, 2000; In English; Videotape: 49 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025581; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre-Launch Press Conference disclosing the status of the STS-99 flight. The panelists consists of Ron Dittemore the Shuttle Program Manager from JSC (Johnson Space Center), Dave King Director of Shuttle Operation from KSC (Kennedy Space Center), Klaus Damian Head of ESA Astronaut Training Division, and Capt. Clif Stargardt Meteorologist 45th Weather Squadron. George Diller, NASA's Public Affairs Office, introduces each panelist as they discuss the failure of a segment of the tip seal, the international contributions made to this mission, and the weather condition. The panelists also answer questions from the audience about the rejected component of the tip seal, how this error was made, and the effects that this has on the flight plans. Also shown are various night shots of the Shuttle on the launch pad.
CASI
Prelaunch Summaries; Spacecraft Launching; Mission Planning; Prelaunch Problems; Spacecraft Reliability; Component Reliability; Quality Control; Spacecraft Maintenance; Prelaunch Tests

20000027607 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Post–Launch Press Conference
Feb. 11, 2000; In English; Videotape: 33 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025578; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Post-Launch Press Conference disclosing the status of the STS-99 flight. The panelists consist of Bill Gerstenmaier, Acting Manager of Launch Integration and Dave King, Director of Shuttle Operations at KSC (Kennedy Space Center). Joel Wells, of NASA's Public Affairs Office, introduces each panelist as they discuss the mapping to the Earth, and improve safety of the shuttle. The panelists also answer questions from the audience about the countdown. Also shown are various shots of the Shuttle on the launch pad.
CASI
Spacecraft Launching; Postlaunch Reports; Conferences; Shuttle Imaging Radar; Radar Imagery; Topography; Earth Surface; Flight Safety

20000027608 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Briefing
Jan. 29, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025576; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. The mission was launched at 12:31 on February 11, 2000 onboard the space shuttle Endeavour. This tape shows a pre-launch briefing. The panel members are George Diller, NASA Public Affairs; Scott Higginbotham, SRTM Payload Manager; Steve Altemus, NASA Test Director; and Ed Priselac, Meteorologist. The briefing opens with an announcement by Mr Diller that there were no further developments with the engine problems, and requests that questions about that issue be held for another press briefing. Steve Altemus summarized the situation and the steps to be taken. Scott Higginbotham reported that there were no problems with the mission hardware. Ed Priselac reported favorable weather for tanking and launch, and at emergency landing sites.
CASI
Endeavour (Orbiter); Launching; Shuttle Imaging Radar; Space Transportation System

20000027609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 / Endeavour SRTM Science Briefing and Applications from JSC
Jan. 21, 2000; In English; Videotape: 1 hr. 24 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025574; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM), a specially modified radar system. This radar system produced unrivaled 3-D images of the Earth's Surface. This videotape shows a science press briefing. The panel members are Michael Kobrick, the SRTM Project Scientist at JPL; Thomas Henning, SRTM Program Manager at the National Imagery and Mapping Agency; Diane Evans, the Director of the Earth Sciences Program at NASA; and Marian Werner, XSAR Project Manager for the DLR, Deutschen Zentrum fur Luft- und Raumfahrt, Germany's National Aerospace Research Center. Michael Kobrick explained the mechanics of interferometric measurements of the Earth. He explained and demonstrated with a scale model the deployable mast's use. He also explained the importance of the attitude and orbit determination avionics. A brief animated video showing how four beams would give a 225 km wide swath of the Earth topography was viewed. Thomas Henning discussed some of the usage of the digital terrain elevation data for flood relief planning, cell phone station placement, military planning for command and control centers, and flight simulation. He explained that public access to the most precise data would be limited. Diane Evans described data usage in flood prediction, earthquake fault identification and archeology. Marian Werner described the German and Italian input to the project. The questions from the press concerned the time to process this data, and the reasons for the limited access to the more precise data.
CASI
Digital Data; Earth Sciences; High Resolution; Shuttle Imaging Radar; Space Transportation System; Terrain; Topography; Satellite Observation; Remote Sensing; Radar Geology; Radar Imagery; Space Shuttle Payloads

20000027612 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 / Endeavour Pre Launch Press Conference
Feb. 09, 2000; In English; Videotape: 34 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000033844; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre Launch Press Conference disclosing the status of the STS-99 flight. The panelists consists of Ron Dittemore the Shuttle Program Manager from JSC (Johnson Space Center), Dave King Director of Shuttle Processing from KSC (Kennedy Space Center), and Capt. Clif Stargardt Meteorologist 45th Weather Squadron. George Diller NASA's Public Affairs Office introduces each panelist as they discuss the hardware change, re-test, and the weather condition. The panelists also answer questions from the audience about the GPS box that failed early that morning, the deployment of the mass, and vehicle safety today as it compares to the past. Also shown are various shots of the Shuttle on the launch pad.
CASI
Prelaunch Summaries; Spacecraft Launching; Conferences; Hardware; Prelaunch Tests; Weather; Flight Plans

20000027618 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 / Endeavour Mission Overview
Jan. 30, 2000; In English; Videotape: 1 hr. 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025572; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The primary objective of the STS-99 mission was to complete high resolution mapping of large sections of the Earth's surface using the Shuttle Radar Topography Mission (SRTM). This radar system will produce unrivaled 3-D images of the Earth's Surface. This videotape presents a mission overview press briefing. The panel members are Dr. Ghassem Asrar, NASA Associate Administrator Earth Sciences; General James C. King, Director National Imagery and Mapping Agency (NIMA); Professor Achim Bachem, Member of the Executive Board, Deutschen Zentrum fur Luft- und Raumfahrt (DLR), the German National Aerospace Research Center; and Professor Sergio Deiulio, President of the Italian Space Agency. Dr. Asrar opened with a summary of the history of Earth Observations from space, relating the SRTM to this history. This mission, due to cost and complexity, required partnership with other agencies and nations, and the active participation of the astronauts. General King spoke to the expectations of NIMA, and the use of the Synthetic Aperture Radar to produce the high resolution topographic images. Dr. Achim Bachem spoke about the international cooperation that this mission required, and some of the commercial applications and companies that will use this data. Dr Deiulio spoke of future plans to improve knowledge of the Earth using satellites. Questions from the press concerned use of the information for military actions, the reason for the

restriction on access to the higher resolution data, the mechanism to acquire that data for scientific research, and the cost sharing from the mission's partners. There was also discussion about the mission's length.
CASI
International Cooperation; Shuttle Imaging Radar; Earth Observations (From Space); Topography

20000027671 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 Countdown Status Briefing
Jan. 30, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025579; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

After an introduction by Bruce Buckingham (NASA Public Affairs), participants Jeff Spaulding (NASA Test Director, Scott Higginbotham (STS-99 Payload Manager), and Ed Priselac (Shuttle Weather Officer) proceed with the countdown status briefing. They expressed that the opening countdown was proceeding well and servicing of the cryotanks was completed. The launch pad closeouts continued and the tanking process was in order. There was a card failure in the data handling processor, so a backup system was used.
CASI
Space Transportation System; Space Shuttle Missions; Countdown; Launching

20000027706 NASA Johnson Space Center, Houston, TX USA
STS–103 Mission Highlights Resource Tape (1 of 2)
Mar. 01, 2000; In English; Videotape: 1 hr. 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036030; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The STS-103 flight crew, Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy, are seen performing pre-launch activities such as crew suit-up, and ride out to the launch pad for a night launch. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the White Room for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters. Once on-orbit the primary objective is to capture and service the Hubble Space Telescope. Included are various live shots of the payload bay showing the flight support system, the orbiter replacement unit carrier and the forward fixture that house the new Fine Guidance System (FGS). Smith and Grunsfeld replaces and changes the sensor units during the first space walk of this mission. The second space walk by Nicollier and Foale includes the changing of the computer and installation of the FGS. This is tape 1 of 2, tape 2 has a report number of NONP-NASA-VT-2000036031.
CASI
Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Maintenance; Hubble Space Telescope

20000028407 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–71/Mir/Spacelab Landing at KSC
Jul. 07, 1995; In English; Videotape: 57 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036562; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of various day landing views of the Spacecraft Atlantis are shown from different camera sites. Also shown is the re-entry and day landing of the spacecraft at Kennedy Space Center. Footage also includes touchdown, drag chute deployment, nose gear touchdown, and the ground recovery crew as they travel to the spacecraft. Atlantis crew, Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, and the download crew from MIR-18 Norman E. Thagard, Vladimir Dezhurov, and Gennadiy Strekalov are also seen leaving the craft. Included is a phone conversation between President Clinton and the crew.
CASI
Spacecraft Landing; Touchdown; Reentry; Descent; Drag Chutes

20000028408 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–71/Mir/Spacelab Mission Update
Jul. 03, 1995; In English; Videotape: 19 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036561; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-71 and Mir 18, Commander Robert L. Gibson, Pilot Charles J. Precourt, Mission Specialists Ellen S. Baker, Bonnie J. Dunbar, Gregory J. Harbaugh, MIR-19 crew upload Anatoly Solovyev and Nikolai Budarin, and MIR-18 crew download Norman E. Thagard, Vladimir Dezhurov, and Gennadiy Strekalov, on board the Russian Space Station Mir and the Atlantis spacecraft complex. The ten-member crew is shown participating in an interview. An animation of the undocking and fly-around of the Atlantis spacecraft is presented. Also shown is the commander of the STS-79 mission, discussing the undocking of the Atlantis Spacecraft.
CASI
Mir Space Station; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Space Laboratories; Space Station Modules; Spacecraft Docking

20000028409 NASA Johnson Space Center, Houston, TX USA
STS–30 Post Flight Press Conference
May 18, 1989; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036554; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, Mission Specialists Norman E. Thagard, Mary L. Cleave and Mark C. Lee, participating in the Post Flight Press Conference. The astronauts took turns narrating the footage taken from the inside of the cockpit during lift-off. The crew answer questions from the audience as well as some of the NASA Centers. Included are various stills of Magellan, and some ground shots of the Florida Peninsula, Bahamas, North West Nicaragua, California, the Himalayan Mountains, the Canary Islands, Houston, Dust Storms across the Sahara, and some waves in the South China Seas.
CASI
Conferences; Postflight Analysis; Spacecraft Launching; Magellan Ultraviolet Astronomy Satellite; Spaceborne Astronomy; Liftoff (Launching)

20000029611 NASA Johnson Space Center, Houston, TX USA
STS–99 Crew News Conference
Jan. 21, 2000; In English; Videotape: 36 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025582; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Shuttle Crew (Mission Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele) are shown in a live news conference presenting the mission objectives of STS-99. The main objective is to obtain the most complete high-resolution digital topographic database of Earth. This project is named the Shuttle Radar Topography Mission (SRTM).
CASI
Spacecrews; Conferences; Space Shuttle Missions

20000030669 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Landing
Apr. 11, 1991; In English; Videotape: 45 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013429; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the STS-37 Spacecraft as it re-enters the Earth's atmosphere for a morning landing. The Atlantis spacecraft is seen making a 270-degree turn in its approach attempts to land on runway 33 at Edwards Air Force Base. Also shown are the touchdown of the main and nose gears, and Atlantis' rollout on the runway. The STS-37 crewmembers, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, are shown departing the vehicle, posing for photographs,

and boarding the Astro-van. Included are also various landing from many different cameras.
CASI
Touchdown; Spacecraft Landing; Approach; Flight Paths; Landing Gear

20000030725 NASA Johnson Space Center, Houston, TX USA
STS–103 Mission Highlights Resource Tape (2 of 2)
Mar. 01, 2000; In English; Videotape: 58 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036031; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-103 flight crew, Commander Curtis L. Brown, Pilot Scott J. Kelly, Mission Specialists Steven L. Smith, C. Michael Foale, John M. Grunsfeld, Claude Nicollier, and Jean-Francois Clervoy, are seen passing over the Yucatan and Florida Peninsulas. Smith and Grunsfeld replace and change the S-band single transmission cables during the third and final space walk of this mission. Crewmembers are also seen taking video documentation of the solar arrays. Footage presented includes the release of the Hubble Space Telescope, thruster firing and orbit adjust burn over the Central Indian Ocean and Australia. Also shown is the night landing of Discovery at Kennedy Space Center, crew departure from the vehicle, and short statements made by the crew. This is tape 2 of 2; tape 1 has a report number of NONP-NASA-VT-2000036030.
CASI
Space Transportation System; Space Transportation System Flights; Hubble Space Telescope; Maintenance; Checkout; Replacing; Equipment Specifications

20000031349 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37/GRO Crew Arrival and TCDT Activities
Mar. 19, 1991; In English; Videotape: 13 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013431; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the night arrival of the T-38 training aircraft. The crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, are seen participating in the Terminal Countdown Demonstration Tests (TCDT). The crew made statements and answer questions from the press. The shuttle is also shown on the pad.
CASI
Astronaut Training; Equipment Specifications; T-38 Aircraft; Crew Procedures (Preflight)

20000031397 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–30 Launch Highlights and Continuous Record from T–9 Mins.
19890428; In English; Videotape: 36 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036565; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of the STS-30 mission was to deploy the Magellan/Venus radar mapper spacecraft and attached Inertial Upper Stage (IUS). The commander of the mission was David M. Walker. The crew was pilot, Ronald J. Grabe, and mission specialists, Norman E. Thagard, Mary L. Cleave, and Mark C. Lee. The mission was launched on May 4, 1989, after the April 28 launch attempt was scrubbed due to a problem with a liquid hydrogen recirculation pump on the number one main engine and a vapor leak in the four-inch liquid hydrogen recirculation line between the orbiter and the external tank. This videotape shows the crew breakfast on April 28, and the final preparations for launch. It also shows the crew boarding the shuttle. After the countdown is halted at T-31 seconds the crew leaves the orbiter.
CASI
Countdown; Launching; Space Transportation System; Spacecrews; Prelaunch Problems; Space Vehicle Checkout Program

20000031596 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–99 / Endeavour: Launch Postponement Press Conference
Jan. 31, 2000; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000025570; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows Ron Dittemore, the Shuttle Program Manager from Johnson Space Center (JSC), participating in a Launch Postponement Press Conference disclosing the status of the STS-99 flight. He addresses the weather condition which caused the postponement and the erroneous response from one of the Master Events Controllers (MEC). The moderator of this conference is Bruce Buckingham from NASA's Public Affairs Office. Ron answers questions from the audience about the MEC responsible for sending commands for launch, and the implications that it might have on the launch schedule.
CASI
Conferences; Spacecraft Launching; Launch Dates; Delay; Prelaunch Problems; Weather; Spacecraft Reliability; Controllers

20000031615 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: APU Controller Removal
Apr. 11, 1990; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039787; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The launch April 10 of the STS-31 was scrubbed at T-4 minutes due to a faulty valve in auxiliary power unit (APU) number one. The auxiliary power unit is a hydrazine-fueled, turbine-driven power unit that generates mechanical shaft power to drive a hydraulic pump that produces pressure for the orbiter's hydraulic system. This video shows the removal of the STS-31's auxiliary power unit (APU).
CASI
Auxiliary Power Sources; Controllers; Spacecraft Power Supplies; Spacecraft Maintenance; Discovery (Orbiter); Hydraulic Equipment

20000031616 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble Space Telescope Lift to Vertical
Oct. 09, 1989; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039777; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the lifting of the Hubble Space Telescope (HST) to a vertical position in the Kennedy Space Center. HST is a 2.4-meter reflecting telescope that will be deployed in low-Earth orbit (600 kilometers) by the crew of the space shuttle Discovery (STS-31) on 25 April 1990.
CASI
Hubble Space Telescope; Space Shuttle Payloads; Ground Handling; Discovery (Orbiter)

20000031891 NASA Johnson Space Center, Houston, TX USA
STS–101 Crew Training
Mar. 27, 2000; In English; Videotape: 32 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039941; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-101, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Susan J. Helms, Yuri Vladimirovich Usachev, James S. Voss, Mary Ellen Weber, and Jeffrey N. Williams, participating in various crew training. Footage includes the crew Photo Session, crew Compartment Bailout Training, SAFER EVA Virtual Reality Training, ISS Ingress Training, Shuttle Simulator Rendezvous Training, EVA Preparation, and ISS Stowage Training.
CASI
Astronaut Training; Ejection Training; Bailout; Virtual Reality; Spacecraft Cabins; Training Simulators

20000031892 NASA Johnson Space Center, Houston, TX USA
STS–101 Crew Interview / Scott Horowitz
Mar. 20, 2000; In English; Videotape: 38 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039860; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Scott J. Horowitz is seen. The interview addresses many different questions including why Horowitz became an astronaut, the events that led to his interest, any role models that he had, and his inspiration. Other interesting information that this one-on-one interview discusses is the reaction and reasons for the splitting-up of the objectives for STS-101 with STS-106. Horowitz also mentions the scheduled space-walk, docking with the International Space Station (ISS), the new glass cockpit of Atlantis, the repairs of equipment and change of the batteries.

Horowitz also discusses his responsibilities during the space-walk, and docking of the spacecraft. He stresses that he will have an added challenge during the space-walk, his inability to see where he needs to place the Extravehicular Activities (EVA) crew.
CASI
Crew Procedures (Preflight); Space Transportation System; Space Transportation System Flights

20000031946 NASA Johnson Space Center, Houston, TX USA
STS–101 Crew Interview / Mary Ellen Weber
Mar. 23, 2000; In English; Videotape: 28 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039851; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Mary Ellen Weber is seen. The interview addresses many different questions including why Weber became an astronaut, the events that led to her interest in chemistry and sky diving. Other interesting information that this one-on-one interview discusses is the reaction and reasons for the change of the mission objectives. Weber also mentions the scheduled space-walk, docking with the International Space Station (ISS), the repairs of equipment and change of the batteries, and the installation of handrails. Weber also discusses her responsibilities during the space-walk, and docking of the spacecraft.
CASI
Crew Procedures (Preflight); Spacecrews

20000032035 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34 Galileo PCR at Pad & Galileo in Atlantis
Sep. 12, 1989; In English; Videotape: 7 min. 50 sec. playing time, in color, no sound except background noise
Report No.(s): NONP–NASA–VT–2000039781; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-34 mission was the deployment of the Galileo spacecraft and the attached Inertial Upper Stage. This videotape shows the Galileo in the Payload Clean Room in preparation for the six year trip to Jupiter. There are also views of the spacecraft in the Atlantis Payload Bay.
CASI
Clean Rooms; Galileo Spacecraft; Space Transportation System

20000032036 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31 Mission Highlights Resource Tape, Part 1
Jun. 01, 1999; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039772; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of mission STS-31 was to deploy the Hubble Space Telescope. The commander of the mission was Loren J. Shriver. The crew was pilot Charles F. Bolden, and Mission Specialists, Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. The mission was launched on April 24, 1990. This videotape shows the astronauts at their pre-launch breakfast, their final preparations for launch and boarding the Shuttle Discovery. It shows the launch and the detachment of the rocket boosters. It shows the deployment of the Hubble Telescope and the unfurling of its Solar Arrays. Other payloads include the Protein Crystal Growth (PCG) experiment, and the Radiation Monitoring Equipment III, to measure gamma ray levels in the crew cabin. The videotape shows many shots of the Kennedy Mission Control room and the shuttle cockpit. The videotape finally shows the landing at Edwards Air Force Base, and the crew disembarking the shuttle.
CASI
Hubble Space Telescope; Spacecrews; Space Transportation System; Payload Delivery (STS); Space Shuttle Payloads

20000032447 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble HST Science
Apr. 08, 1990; In English; Videotape: 42 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200039780; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The primary objective of STS-31 was to deploy the Hubble Space Telescope(HST). This videotape presents a press briefing about the scientific goals of the HST program. The panel members were Dr. Weiler, HST program scientist; Dr. Boggess from NASA Goddard, the Center managing the HST Program; and Dr. Bahcall, President Elect of the American Astronomical Union. Dr. Weiler opened the panel discussion by introducing other HST scientists who were in the audience. Dr. Bahcall explained the four major areas that astronomers hope to better understand using the HST data: (1) The size and age of the universe; (2) quasars as flashlights to understanding other features of the universe; (3) planets around other stars; and (4) weather on the other planets of our Solar System. Other areas in which he hopes to have some understanding are galaxies under quasars, black holes, and missing matter. After his remarks, Dr. Bahcall presented a plaque to Charles Pellerin, who helped initiate the series of astrophysics telescopes. The HST is the first of these ”Great Observatories”. After the presentation, questions from the press were answered.
CASI
Universe; Hubble Space Telescope; Spaceborne Astronomy; Astrophysics

20000032462 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview / Jeffrey N. Williams
Mar. 21, 2000; In English; Videotape: 36 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039942; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Jeffrey N. Williams is seen. The interview addresses many different questions including why Williams became an astronaut, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Williams also mentions the scheduled space-walk that he will perform, docking with the International Space Station (ISS), the repairs of equipment, and the change of the batteries.
CASI
Crew Procedures (Preflight); Spacecrews; Astronauts; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000032463 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview / James S. Voss
Mar. 21, 2000; In English; Videotape: 31 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039855; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist James S. Voss is seen. The interview addresses many different questions including why Voss became an astronaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Voss also mentions the scheduled space-walk that he will perform with Jeffrey N. Williams, docking with the International Space Station (ISS), the repairs of equipment, and the change of the batteries. Voss explains why himself, Susan J. Helms, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their certification from Russia to work on the Zarya Control Module.
CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

20000032464 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview / Susan J. Helms
Mar. 21, 2000; In English; Videotape: 34 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039853; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Susan J. Helms is seen. The interview addresses many different questions including why Helms became an astronaut, the individuals who influenced her, and the events that led to her interest. Other interesting information that this one-on-one interview discusses is his reaction to and the reasons for the change of the mission objectives. Susan also mentions the docking with the International Space Station (ISS), the repairs of equipment, the change of the batteries, and the transfer of equipment. Susan explains why she, James S. Voss, and Yuri Vladimirovich Usachev are the perfect choice for this mission because of their experience with

the ISS modules. She also discusses what the ISS means to her as well as to the human efforts to explore space.
CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Crew Procedures (Preflight); Spacecrews; Talking

20000032470 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble in VPF Lift to Work Platform
Oct. 10, 1989; In English; Videotape: 13 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039784; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the Hubble Space Telescope being moved in the clean room Vertical Processing Facility (VPF) to the work platform. The Hubble Space Telescope was deployed on April 25, 1990 from the space shuttle Discovery during STS-31.
CASI
Clean Rooms; Hubble Space Telescope; Controlled Atmospheres; Assembling

20000032471 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35: Astro–1 BBXRT Problem Area
Aug. 31, 1990; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043342; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of STS-35 was to conduct observations in ultraviolet and X-ray astronomy with the ASTRO-1 observatory. ASTRO-1 consisted of four telescopes: Hopkins Ultraviolet Telescope (HUT); Wisconsin Ultraviolet Photo-Polarimeter Experiment (WUPPE); Ultraviolet Imaging Telescope (UIT); and Broad Band X-ray Telescope (BBXRT). This videotape shows work on the BBXRT in the clean room. Two days before a scheduled September 1 launch date, the avionics box on the BBXRT malfunctioned and had to be changed and retested.
CASI
Avionics; X Ray Telescopes; Clean Rooms

20000032479 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34: Galileo Processing
Aug. 10, 1989; In English; Videotape: 13 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–200043349; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows work being done on the Galileo spacecraft in the clean room, Vertical Processing Facility (VPF). It also shows the spacecraft being lifted to a work platform in the VPF. The deployment of Galileo on its trip to Jupiter was the primary objective of the STS-34 mission.
CASI
Clean Rooms; Galileo Spacecraft; Assembling

20000032488 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35: Astronaut Departure
May 30, 1990; In English; Videotape: 10 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043341; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X ray astronomy with ASTRO-1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, the mission Specialists Jeffery Hoffman, John Lounge, and Robert Parker, and the payload specialists Samuel Durrance, and Ronald Parise. This videotape shows the astronauts leaving the Kennedy Space Center after one of the attempts to launch the mission was scrubbed due to hydrogen leaks aboard the shuttle Columbia.
CASI
Astronauts; Spacecrews; Preflight Operations

20000032538 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble Discovery Payload Doors Closing
Apr. 08, 1990; In English; Videotape: 2 min. 20 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039774; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of mission STS-31 was to deploy the Hubble Space Telescope. The videotape shows the Hubble Space Telescope in Discovery's payload bay in the Vertical Assembly Building (VAB) clean room, while the payload bay's doors slowly close.
CASI
Hubble Space Telescope; Payloads; Discovery (Orbiter)

20000032539 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–32: LDEF Move from SAEF II to Hanger "C" CCAFS
May 14, 1990; In English; Videotape: 9 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000039779; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
One of the primary objectives of STS-32 was to retrieve the Long Duration Exposure Facility (LDEF) from space. The LDEF was designed to provide long-term data on the space environment and its effects on space systems and operations. This videotape shows the LDEF being moved from the Spacecraft Assembly and Encapsulation Facility to Hanger C in the Cape Canaveral Air Force Station after it had been retrieved from space. There are many views of the environment around the Kennedy Space Facility.
CASI
Long Duration Exposure Facility; Cape Kennedy Launch Complex

20000032577 NASA Johnson Space Center, Houston, TX USA
STS–35: Post Launch News Conference
Dec. 02, 1990; In English; Videotape: 24 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the question and answer session of the Post Launch News Conference. The Panelists address questions from NASA Centers such as Goddard Space Flight Center and Kennedy Space Center (KSC), and from various audience participants. The status of the launch of STS-35 is discussed. Also discussed are the liquid oxygen malfunctions, helium leakage, and photographic optical tracking during the daytime.
CASI
Conferences; Postlaunch Reports; Space Transportation System; Space Transportation System Flights; Columbia (Orbiter)

20000032742 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35: Helicopter Footage Orbiters on Both Pads A and B
Sep. 01, 1990; In English; Videotape: 3 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043334; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows several circuits around the launch pads at the Kennedy Space Center with Orbiters on both Pads A and B. Along with the Space Shuttle Columbia awaiting launch for STS-35 on Pad A, there are shots of Discovery awaiting launch for STS-41 on Pad B.
CASI
Cape Kennedy Launch Complex; Space Shuttles; Launchers; Launching Pads

20000032744 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34: JPL RTG Safety Tests
Jul. 20, 1989; 7p; In English; Videotape: 11 min. 31 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000043346; No Copyright; Avail: CASI; A02, Hardcopy; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of STS-34 was to launch Galileo on its trip to Jupiter. The Galileo spacecraft contains two Radioisotope Thermoelectric Generators (RTG), which contains plutonium. This videotape shows and the accompanying material explains the tests that the RTG containment vessel has been subjected to, and the results of the tests. The videotape shows the trajectory of the Galileo

spacecraft, a cutaway view of an RTG, the Plutonium-238 fuel capsule, and seven of the tests on the RTG.
CASI
Fuel Capsules; Galileo Spacecraft; Radioisotope Batteries; Thermoelectric Generators; Impact Tests; Performance Tests; Reliability

20000032749 NASA Johnson Space Center, Houston, TX USA
STS–99: Post Flight Presentation
Apr. 03, 2000; In English; Videotape: 15 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043499; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-99, Commander Kevin R. Kregel, Pilot Dominic L. Pudwill Gorie, and Mission Specialists Janet L. Kavandi, Janice E. Voss, Mamoru Mohri, and Gerhard P.J. Thiele, arriving at Kennedy Space Center (KSC) in the T-38 aircraft. Crewmembers are seen speaking to the welcoming crowd at KSC, suiting-up, walking out to the Astro-van, being strapped in the shuttle, and performing various activities while in orbit. Scenes include the astronaut training process, main engine ignition, liftoff, solid rocket booster separation, mast deployment and retraction, and the changing of the mapping tapes. Footage also includes the crewmembers sleeping, eating, exercising, dancing and having fun in zero gravity. The High Definition Television Camera (HDTV) picks up images from the Earth. These images includes Bolivia, Paraguay, Brazil, Bahamas, Mauritania, Saudi Arabia, Mount Fuji, Tokyo Bay, Southern Russia, the Black Sea, Equador, Northern Peru, the Mediterranean Sea, Malta, Sicily and Italy. The crewmembers of STS-99 each took a turn to narrate the scenes and events as they occur.
CASI
Space Transportation System; Space Transportation System Flights; Spacecrews; Talking; Radar Maps; Radar Imagery; Shuttle Imaging Radar; Topography; Earth Surface

20000032782 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview / Yuri Vladimirovich Usachev
Mar. 20, 2000; In English; Videotape: 23 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039856; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Yuri Vladimirovich Usachev is seen. The interview addresses many different questions including why Usachev became a cosmonaut, the individuals who influenced him, and the events that led to his interest. Other interesting information that this one-on-one interview discusses is his reaction and integration into the STS-101 crew. Usachev also mentions the scheduled space-walk of James S. Voss and Jeffrey N. Williams, his feeling once he steps into the International Space Station (ISS), the repairs of equipment, his handling of the hand held laser, and the change of the batteries.
CASI
Cosmonauts; Russian Space Program; Spacecrews; Talking; Crew Procedures (Preflight); Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000033207 NASA Johnson Space Center, Houston, TX USA
STS–29: Pre–Launch Preparations/Launch and Landing
Mar. 15, 1989; In English; Viedotape: 57 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036553; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James P. Bagian, James F. Buchli, and Robert C. Springer, seated in the White Room with the traditional cake. The crew is seen performing various pre-launch activities including suit-up, and walk out to the Astro-van. This early morning launch shows countdown, main engine start, liftoff, booster separation, and various isolated footage of the launch from different cameras. Also presented are footage of the approach, gear touchdown, rollout at Edwards Air Force Base, and various isolated views of the landing.
CASI
Crew Procedures (Preflight); Spacecrews; Astronauts; Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)

20000033208 NASA Johnson Space Center, Houston, TX USA
STS–29: TCDT
Feb. 08, 1989; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036551; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-29, Commander Michael L. Coats, Pilot John E. Blaha, and Mission Specialists James P. Bagian, James F. Buchli, and Robert C. Springer, participating in Terminal Countdown Demonstration Tests. The astronauts are seen on the launch pad, learning about the shuttle and its safety features. They are also shown putting on disposable masks and going into an emergency eye wash and emergency showers.
CASI
Astronaut Training; Crew Procedures (Preflight); Preflight Operations

20000033439 NASA Dryden Flight Research Center, Edwards, CA USA
X–34 Captive Carry & Seunghee Lee Interview
Jun. 29, 1999; In English; Videotape: 5 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043975; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the rollout of the aircraft carrying the X-34. Also shown are the taxing of the aircraft and takeoff. The NASA Dryden X-34 Project Manager is also shown during an interview.
CASI
X-34 Reusable Launch Vehicle; Air Launching; Pegasus Air-Launched Booster; Research Vehicles; Research and Development

20000033440 NASA Dryden Flight Research Center, Edwards, CA USA
X–38 Phase 3 Drops V–132 FF#3
Mar. 30, 2000; In English; Videotape: 43 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000043892; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the drop of the X-38 vehicle. Also shown are parachute deployments from various cameras.
CASI
X-38 Crew Return Vehicle; Research Vehicles; Research and Development

20000033783 NASA Kennedy Space Center, Cocoa Beach, FL USA
Apollo 11: The Twentieth Year, *1969 - 1989*
May 02, 1989; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036559; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the Apollo 11 crew, Commander Neil A. Armstrong, Lunar Module Pilot Edwin E. Aldrin, Jr., and Command Module Pilot Michael Collins, preparing for their mission. The crewmembers are seen getting their medical examinations, suiting up, and walking out to the Astro-van. Scenes include a brief view of the Launch Control Center (LCC), ignition, liftoff, and shell and engine skirt separation. The most important images are those of the moon landing and astronauts walk on the moon. Also shown are the parachute landing of the shuttle and the celebration of the world.
CASI
Apollo 11 Flight; Lunar Exploration; Lunar Flight; Lunar Landing

20000033784 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–33: At Pad B – IEA Removal; STS–32: In the VAB HB1 – IEA Removal
Nov. 14, 1989; In English; Videotape: 4 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039788; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-33 at Pad B Integrated Electronic Assembly (I.E.A.) is shown. The STS-32 I.E.A. removal in the Vehicle Assembly Building (V.A.B) High Bay

1 (H.B.1) is also presented. The change out of the short they found in boosters is the purpose for the video.
CASI
Space Transportation System; Spacecraft Electronic Equipment

20000033785 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–33: Removal of the I.E.A. at Pad B and Inspection at the ARF
Nov. 15, 1989; In English; Videotape: 7 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039789; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the removal of the Integrated Electronics Assembly (I.E.A.) from the STS-33 is presented. The I.E.A. is then inspected at United Space Boosters, Inc. (U.S.B.I).
CASI
Space Transportation System; Spacecraft Electronic Equipment

20000033819 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35: ASTRO–1 Assembly at O&C
Apr. 03, 1989; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043345; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the assembly of the ASTRO-1 payload for STS-35. The assembly occurred in the Operations and Checkout Building.
CASI
Astro Missions (STS); Spaceborne Astronomy; Spaceborne Telescopes; Spacelab Payloads; Assembling

20000033833 NASA Dryden Flight Research Center, Edwards, CA USA
X–43 Composite Tape, *March 99 - March 00*
Dec. 16, 1999; In English; Videotape: 7 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000045251; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows Project Manager Joel Sitz participating in an interview about the X-43 project. Sitz mentions several tests that will be performed on the X-43. He also mentions that the main objective of this project is to validate the design code for hypersonic air breathing vehicles. He discusses the projected data collection to prove that the predictions that were made in the laboratories and wind tunnels are correct. Scenes include the roll of the X-43 and an animation of the flight.
CASI
X-43 Vehicle; Hypersonic Flight; Air Breathing Boosters; Air Breathing Engines; Airframes

20000033861 NASA Dryden Flight Research Center, Edwards, CA USA
X–33, X–34, X–37 Press Conference (Tape 2)
Aug. 24, 1999; In English; Videotape: 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043974; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows Project Managers Susan Turner, MSFC and David Manley, Boeing Co. participating in the X-37 Briefing. NASA's Public Affairs June Malone introduced these panelists who went on to discuss the vehicle and its secondary payload. Manley mentions the X-37 capabilities, main propulsion system, its lithium iron batteries, hot control surfaces, and its fly by wire system. Turner mentions the on-board operations, the deployment of the solar arrays, and the autonomous navigation and landing system. Also included is an animation of the X-37 vehicle during flight and the secondary payload release into orbit.
CASI
X-37 Vehicle; Reusable Launch Vehicles; Recoverable Launch Vehicles; Conferences

20000034043 NASA Kennedy Space Center, Lompoc, CA USA
STS–34: Mission Overview Briefing
Sep. 05, 1989; In English; Videotape: 43 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039782; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows Milt Heflin, the Lead Flight Director participating in the STS-34 Mission Briefing. He addresses the primary objective, and answered questions from the audience and other NASA Centers. Heflin also mentions the Shuttle Solar Backscatter Ultraviolet secondary payload, and several experiments. These experiments include Growth Hormone Crystal Distribution (Plants), Polymer Morphology, Sensor Technology Experiment, Mesoscale Lightning Experiment, Shuttle Student Involvement Program "Ice Crystals", and the Air Force Maui Optical Site.
CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000034044 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Mission Highlights, Part 2
Jun. 21, 1990; In English; Videotape: 27 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039776; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-31, Commander Loren J. Shriver, Pilot Charles F. Bolden, Jr., and Mission Specialists Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan, participating in a press conference. The crew is seen answering questions about the Hubble Space Telescope from participating audience as well as from various NASA Centers.
CASI
Space Transportation System; Space Transportation System Flights; Discovery (Orbiter); Teleconferencing; Telecommunication; Conferences

20000034072 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35/Astro–1: Editors Work Tape
May 25, 1990; In English; Videotape: 53 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043337; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows preparation for the Astro-1 mission. Scenes include Payload Bay door closing, Rollover to the Vehicle Assembly Building (VAB) from OPF, the STS-35/Astro rollout to Pad-A, Broad Band X-Ray Telescope (BBXRT) Servicing, and crew arrival for the Terminal Countdown Demonstration Tests (TCDT). The crewmembers of STS-35, Commander Vance D. Brand, Pilot Guy S. Gardner, and Mission Specialists Jeffrey A. Hoffman, John M. Lounge, Robert A. Parker, Samuel T. Durrance, and Ronald A. Parise, are shown participating in various training activities. Activities include driving the M113 vehicle, participating in emergency training, and addressing the press upon arrival at Kennedy Space Center.
CASI
Crew Procedures (Preflight); Astronaut Training; Astro Missions (STS); Spacelab Payloads

20000034073 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35/Astro–1: Launch T–20 Through Orbit with Replays (Tape 2 of 2)
Dec. 02, 1990; In English; Videotape: 35 min. 25 sec. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000043335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the Launch Control Center (LCC) communicating with the STS-35 Space Shuttle. Scenes include various playback launch views of STS-35. Also shown are panoramic views of the Shuttle on the launch pad, main engine start, ignition, liftoff and booster separation and various Long Range Tracker views.
Author
Launching Bases; Communicating; Spacelab Payloads; Astro Missions (STS); Spaceborne Astronomy

20000034858 NASA Johnson Space Center, Houston, TX USA
STS–35: Mission Highlights Resource Tape
Feb. 27, 1995; In English; Videotape: 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043350; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-35, Commander Vance D. Brand, Pilot Guy S. Gardner, Mission Specialists Jeffrey A. Hoffman, John M. Lounge, and Robert A. Parker, and Payload Specialists Samuel T. Durrance, and Ronald A. Parise, participating in the traditional breakfast prior to launch. The crew is seen suiting up, and walking out to the Astro-Van for their 1 a.m. launch.

Also shown are some beautiful panoramic shots of the shuttle on the launch pad, main engine start, ignition, liftoff, and various shots of the Launch Control Center (LCC). The crew is also shown during flight performing some routine functions such as operating the trash compactor, eating, and getting into and out of their sleeping quarters. The crew is seen taking part in a conversation with the Secretary of State, and the Foreign Minister of the Soviet Union. Footage also includes the landing of Columbia, its rollout on the runway, and its crew as they depart from the vehicle.
CASI
Space Transportation System; Space Transportation System Flights; Columbia (Orbiter); Astro Missions (STS); Spaceborne Astronomy; Spacelab Payloads

20000034909 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34: Galileo TCDT, *13-15 Sep. 1989*
Sep. 15, 1989; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039773; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-34, Commander Donald E. Williams, Pilot Michael J. McCulley, and Mission Specialists Franklin R. Chang-Diaz, Shannon W. Lucid, and Ellen S. Baker, participating in Terminal Countdown and Demonstration Tests. The crew is seen arriving in the T-38 aircraft, driving the M113 vehicle. Upon arrival at Kennedy Space Center, Williams addresses the waiting audience. The Crew discusses some of the experiments for their mission. They mention Remote Sensing, Recrystallization and Ozone experiments.
CASI
Astronaut Training; T-38 Aircraft; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000034925 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–30: Mission Highlights Reel
Mar. 22, 1990; In English; Videotape: 58 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036555; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmember of STS-30, Commander David M. Walker, Pilot Ronald J. Grabe, and Mission Specialists Norman E. Thagard, Mary L. Cleave, and Mark C. Lee, participating in the traditional breakfast, suiting up and walking out to the Astro-van. Scenes include the retraction of the orbiter access arm, main engine start, ignition, and liftoff. The crew is also shown doing in-flight procedures such as experiments and equipment changes. The landing of Atlantis at Edwards Air Force Base is also seen.
CASI
Crew Procedures (Inflight); Crew Procedures (Preflight); Spaceborne Experiments; Maintenance

20000036516 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34: Galileo Payload Canister Doors Closing in VPF
Aug. 24, 1989; In English; Videotape: 9 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043348; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the closing of the Payload Bay doors in the Vertical Processing Facility (VPF) at Kennedy Space Center.
CASI
Payloads; Bays (Structural Units); Doors; Aircraft Compartments; Closing

20000036571 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–36: Breakfast / Suit–Up / C–7 Ex / Launch and Landing at Edwards
Mar. 05, 1990; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043344; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crew members of STS-36, Commander John O. Creighton, Pilot John H. Casper, and Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thuot, having the traditional breakfast, suiting up, and walking out to the Astro-Van. Scenes include panoramic views of the shuttle on the pad, main engine start, ignition, liftoff, and booster separation. The landing of Atlantis at Edwards Air Force Base is also seen. Several playback views from different cameras of both the launch and landing are also presented.
CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000037725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–36: Isolated Camera Breakfast Suit–up Walkout
Feb. 28, 1990; In English; Videotape: 3 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043343; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crewmembers of STS-36, Commander John O. Creighton, Pilot John H. Casper, Mission Specialists Richard M. Mullane, David C. Hilmers, and Pierre J. Thuot, having a traditional breakfast. The crew is also shown suiting up, and walking out to the Astronaut-van from the Operations and Checkout Building.
CASI
Spacecrews; Crew Procedures (Preflight); Preflight Operations

20000037771 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Hubble Space Telescope Post Launch Press Conference from Kennedy Space Center
Apr. 24, 1990; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039778; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a post-launch press conference on the STS-31 Hubble Space Telescope. Dick Young, Kennedy Space Center Public Affairs, introduces the panel. The panel consists of Robert Sieck, Kennedy Space Center Launch Director, and George T. SASsen, Director Shuttle Engineer. The STS-31 launch was accomplished with very few problems. Terminal count was started and then stopped at 31 seconds because the software sensed that a valve was not positioned correctly. The valve was positioned correctly, the count was resumed, and the launch was carried out safely and successfully. George T. SASsen explains, in detail, how the problem was corrected.
CASI
Hubble Space Telescope; Space Transportation System; Spacecraft Launching

20000037772 Lockheed Space Operations Co., Cocoa Beach, FL USA
STS–30: Flight Summary
Mar. 27, 1989; In English; Videotape: 1 hr. 2 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036557; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows Flight Director Milt Heflin, and the Magellan Project Manager, John Gerpheide, participating in a panel discussion. They discuss the objectives of the Magellan Project, the way in which Magellan will gather images, the Venus Orbiting Imaging Radar, and STS-30. Gerpheide presents an animation of Venus and discussed its variation to that of the Earth. Both Heflin and Gerpheide took turns answering the questions from the audience as well as those from NASA Headquarters, and Kennedy Space Center.
CASI
Magellan Project (NASA); Magellan Spacecraft (NASA); Imaging Radar; Radar Imagery; Space Exploration; Venus Orbiting Imaging Radar (Spacecraft); Venus Probes

20000037773 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–30: TGS Isolated Video Playbacks
May 04, 1989; In English; Videotape: 15 min. 20 sec. playing time, in color, with partial sound
Report No.(s): NONP–NASA–VT–2000036556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows isolated playbacks of the launch of STS-36 from various tracking cameras.
CASI
Playbacks; Tracking (Position); Spacecraft Tracking; Cameras

20000038055 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–71/MIR/Spacelab: Lightning Strikes at Pad 39A
Jun. 24, 1995; In English; Videotape: 1 min 30 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000036558; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation shows the STS-71 after lightning struck Pad 39A.
CASI
Lightning; Space Transportation System; Mir Space Station

20000038083 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35/ASTRO–1: Breakfast/Suit–up /Depart O & C / Ingress / Launch with Isolated Views
Dec. 02, 1990; In English; Videotape: 34 min. 50 sec. running time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The primary objective of the STS-35 mission was the round-the-clock observations of the celestial sphere in ultraviolet and X ray astronomy with ASTRO-1. The mission was commanded by Vance D. Brand. The crew consisted of the pilot Guy S. Gardner, mission Specialists Jeffery Hoffman, John Lounge, and Robert Parker, and payload specialists Samuel Durrance, and Ronald Parise. This videotape opens with a view of the shuttle on the pad at night in preparation for a night launch. The astronauts are introduced as they finish their pre-launch breakfast. The next shots are those of the astronauts getting into their spacesuits, and boarding the bus to be taken to the pad. The astronauts are next shown climbing into the shuttle. The launch of the shuttle is shown from 19 different camera angles.
CASI
Launching; Spacecrews; Columbia (Orbiter)

20000038348 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–35/ASTRO–1: Day–1 Down–links
Dec. 02, 1990; In English; Videotape: 1 hr. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043340; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows views of the ASTRO-1 observatory telescopes, moving into position. These views are shown from the right rear camera in the payload area. The telescopes are the Hopkins Ultraviolet Telescope (HUT), Wisconsin Ultraviolet Photo-Polarimeter Experiment (WUPPE), Ultraviolet Imaging Telescope (UIT), and the Broad Band X-Ray Telescope (BBXRT).
CASI
Astro Missions (STS); Spaceborne Astronomy; Spaceborne Telescopes; Downlinking

20000038404 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Downlinks M. E. T.
Apr. 06, 1991; In English; Videotape: 34 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013424; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in a question and answer segment with students at the Launch Control Center (LCC). The crew is also seen working in the zero-gravity environment and taking photographs of the space environment. Also seen are some beautiful shots of the Atlantis orbiter with the Earth as its background.
CASI
Downlinking; Communication Satellites; Ground Stations; Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter)

20000038701 NASA Johnson Space Center, Houston, TX USA
STS–31: Post Flight Press Conference (Tape 2 of 2)
May 09, 1990; In English; Videotape: 16 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039775; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows panelists answering questions from various NASA Centers. The panelists takes turn fielding questions from NASA Headquarters, Goddard Space Flight Center, and Kennedy Space Center.
CASI
Conferences; Postflight Analysis

20000039290 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–34: Atlantis Stacking Activities in the VAB
Aug. 22, 1989; In English; Videotape: 9 min. 45 sec. in color, with sound
Report No.(s): NONP–NASA–VT–2000039786; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary mission for STS-34 was the launch of the Galileo Probe to Jupiter. This videotape shows the shuttle Atlantis in the Vertical Assembly Building (VAB) being hoisted from the horizontal position to the vertical position. It also shows the shuttle being moved into position for mating with the solid rocket boosters.
NASA
Space Shuttle Boosters; Space Transportation System; Atlantis (Orbiter)

20000039309 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: TCDT Pad B Atlantis GRO (3 of 3)
Mar. 20, 1991; In English; Videotape: 40 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013418; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows some beautiful panoramic views of STS-37 on the pad. Scenes include the narration of simulated auto sequence start, engine start, engine firing and cut-off. Also shown is the crew emergency egress procedure. This is tape 3 of 3. Tape 1 has a report # of NONP-NASA-VT-2000013416, and tape 2 has a report # of NONP-NASA-VT-2000013417.
CASI
Crew Procedures (Preflight); Astronaut Training; Training Simulators; Flight Simulation; Prelaunch Tests; Preflight Operations; Test Firing; Prefiring Tests; Preflight Analysis; Systems Analysis

20000039310 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: TCDT Pad B Atlantis GRO (2 of 3)
Mar. 20, 1991; In English; Videotape: 55 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013417; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows the remaining two crewmembers of STS-37, Mission Specialists Jerry L. Ross, and Jay Apt, entering the White Room, putting on their life preservation vest, and then entering the launch vehicle. Video playbacks, of the crew during the earlier stage of the Terminal Countdown and Demonstration Test, and the processing of the primary payload (Gamma Ray Observatory) are shown. Scenes showing the arrival of Ross at Kennedy Space Center in the T-38 aircraft, the crew on the launch complex during familiarization activities, and training with the M113 vehicle are presented. Also shown are some beautiful panoramic views of the shuttle on the pad. This is tape 2 of 3. Tape 1 has a report # of NONP-NASA-VT-2000013416, and tape 3 has a report # of NONP-NASA-VT-2000013418.
CASI
Crew Procedures (Preflight); Astronaut Training; Training Simulators; Flight Simulation; Flight Tests; Prelaunch Tests; Preflight Operations; Test Firing

20000039311 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: TCDT Pad B Atlantis GRO (1 of 3)
Mar. 20, 1991; In English; Videotape: 1 hr. 1 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013416; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Live footage shows the crewmembers of STS-37, Commander Steven R. Nagel, Pilot Kenneth D. Cameron, and Mission Specialists Jerry L. Ross, Jay Apt, and Linda M. Godwin, participating in Terminal Countdown Demonstration Test. The crew is seen in the breakfast room, in the Operations and Checkout Building suiting up and walking out to the Astronaut-Van. Scenes include the drive out to the launch pad, the boarding of the crew on the elevator, crew entrance in the White Room, and the ingress of the crew into the launch vehicle. Linda and Jerry are seen standing on the Gantry (bridge) looking out as they wait

to enter the White Room to finish suiting up to enter the vehicle. Also shown are some beautiful panoramic views of the shuttle on the pad. This is tape 1 of 3. Tape 2 has a report # of NONP-NASA-VT-2000013417, and tape 3 has a report # of NONP-NASA-VT-2000013418.
CASI
Crew Procedures (Preflight); Astronaut Training; Training Simulators; Flight Simulation; Flight Tests; Prelaunch Tests; Preflight Operations; Test Firing

20000039757 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Surveyor '98 Animation From JPL
Jun. 16, 1997; In English; Videotape: 19 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000010563; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents live animation of the Mars Surveyor Program. NASA is looking for faster, better, cheaper missions to Mars since the Mars Observer malfunctioned on August 22, 1993. Daniel Goldin, NASA Administrator says that NASA will perform flyby missions, orbiters, landers, and sample returns to look for evidence of life on Mars. The first mission to Mars, the Mars Global Surveyor, was launched on November 7, 1996, to provide geological, topographical, and atmospheric maps from its polar orbit about Mars. The second, the Mars Pathfinder, launched on December 4, 1996, photographs terrain, monitors weather and deploys a robotic rover that analyzes samples of Mars' rocks and soils. The third, the Mars Surveyor '98, includes two separate, launched spacecraft, the orbiter and the lander. The Orbiter was launched December 98 from Cape Canaveral. Its 9-month journey to Mars will circle the planet every two hours and once stability was achieved, will configure itself for mapping. On January 3, 1999, the lander was on an 11-month journey to Mars, scheduled to arrive on Mars on December 3, 1999 to record the geological composition of the landing site from its SSI (Surface Stereo Imager).
CASI
Flyby Missions; Mars (Planet); Mars Global Surveyor; Mars Missions; Surveyor Project; Mars Surface

20000040798 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–31: Mission Highlights Resource Tape, Part 2
June 1990; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039768; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary objective of STS-31 was the deployment of the Hubble Space Telescope (HST). The flight was commanded by Loren J. Shriver. The pilot was Charles F. Bolden, Jr., and the mission specialists were Steven A. Hawley, Bruce McCandless II, and Kathryn D. Sullivan. This videotape shows an inflight press conference that occurred after the deployment of the HST. The press gathered at the Goddard Space Flight Center and the Kennedy Space Center, asked questions mainly about the deployment of the HST.
CASI
Hubble Space Telescope; Space Shuttle Payloads

20000042295 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Interview – Jim Halsell
Mar. 24, 2000; In English; Videotape: 36 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039861; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The objective of STS-101 will be the servicing of the International Space Station, to ensure that it will be ready to receive a crew later in 2000. The crew, commanded by James D. Halsell, will include Pilot Scott J. Horowitz, Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms and Yuri V. Usachev. This videotape provides live coverage of an interview with the mission commander Jim Halsell. He describes the influences on his life that led him to become a NASA astronaut, and the importance of the mission. He discusses the new glass cockpit design. He describes the flight plan and the docking maneuver. An important feature of this mission is the replacement of electric components, voltage and current regulators on the space station. Commander Halsell also describes the role of each crew member during the re-supply and refitting of the Space Station and reviews the priorities.
CASI
International Space Station; Space Transportation System; Spacecraft Docking; Orbital Rendezvous; Spacecraft Maintenance; Replacing; Space Station Power Supplies

20000052202 NASA Johnson Space Center, Houston, TX USA
STS–101 Crew Activity Report Flight Day 02 Highlights
May 20, 2000; In English; Videotape: 13 min., 51 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–2000065770; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Haslsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the second day of the flight. On this day the shuttle crew checked the equipment in preparation for rendezvous with the International Space Station. This video shows the astronauts entering the SpaceHab, where the supplies bound for the space station are stored. There are also views of the robotic arm, which will be used during the spacewalk to maneuver Williams and Voss between Atlantis and the station.
CASI
International Space Station; Robot Arms; Space Shuttle Orbiters; Space Transportation System

20000052455 NASA Johnson Space Center, Houston, TX USA
STS–101: CAR / Flight Day 03 Highlights
May 21, 2000; In English; Videotape: 12 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000065772; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Haslsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the third day of the flight. On this day the shuttle rendezvoused and docked with the station. The videotape shows the rendezvous and the docking maneuver, and some of the crew activities in the shuttle.
CASI
International Space Station; Orbital Rendezvous; Space Transportation System; Spacecraft Docking

20000052456 NASA Johnson Space Center, Houston, TX USA
STS–101: Flight Day Highlights / CAR
May 19, 2000; In English; Videotape: 17 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000065771; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the launch of STS-101, beginning with the pre-flight breakfast and the crew's introduction. The videotape next shows a pre-dawn view of the orbiter waiting the crew's arrival. The crew is shown getting into their space suits and then climbing onboard the shuttle. In this videotape we are shown a few of the crew getting into their places onboard the shuttle. We are also shown the newly designed "glass cockpit", which gives the pilot and the commander better views and are told that this is the first flight of

the shuttle with the new design. After the hatch is closed, we see the shuttle launch into the night, followed by the Solid Rocket Boosters (SRB) separation.
Author
Launching; Space Transportation System Flights; Spacecraft Launching; Spacecrews; Space Shuttles; Crew Procedures (Preflight); Preflight Operations

20000052492 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101: Crew Activity Report CAR/Flight Day 04 Highlights
May 22, 2000; In English; Videotape: 20 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068746; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev are seen performing final preparations for the scheduled space walk. Horowitz, Williams and Voss are seen in the mid-deck before the space walk. Horowitz and Weber are also seen in the flight deck, powering-up the robot-arm. During the space walk Voss is seen checking the American Cargo Crane-Orbital Replacement Unit Transfer Device. Voss and Williams are shown securing the American-built crane that was installed on the station last year. They are seen as they install the final parts (boom extension) of a Russian-built crane on the station. Voss and Williams are also shown as they replace a faulty antenna for one of the station's communications systems on the Unity Module, and install several handrails and a camera cable on the station's exterior.
CASI
International Space Station; Spacecraft Docking; Extravehicular Activity; Unity Connecting Module

20000053482 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report / Flight Day 5
May 23, 2000; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068743; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Haslsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the fifth day of the mission. The day's activities started with the opening of the hatch to the space station. Helms and Usachev then opened the hatch to the station's Unity Connecting Module. The crew also placed ducting throughout the Zarya Control Module to improve air circulation and prevent problems with stale air. Helms and Usachev are shown replacing two of six batteries to be replaced in this mission in the Zarya module. The crew began moving supplies into the space station. There are several shots of the interior of the space station.
CASI
Ducts; Electric Batteries; International Space Station; Supplying; Unity Connecting Module; Zarya Control Module; Spacecrews; Space Station Power Supplies; Crew Procedures (Inflight)

20000054271 NASA Kennedy Space Center, Cocoa Beach, FL USA
Magellan Press Conference (2 of 2)
Aug. 09, 1990; In English; Videotape: 23 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000039785; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the speakers participating in the Magellan Press Conference question and answer session. Speakers include Huntress, Spear, Ledbetter, Johnson, McCarthy, and Saunders. The speakers are shown answering questions from various NASA Centers, and participating audience members from many different industries. They discuss the start and stop date for the mapping. Also shown are animation and radar images of Venus and Artemis. This is tape 2 of 2; tape 1 has a report number NONP-NASA-VT-2000036552.
CASI
Conferences; Magellan Ultraviolet Astronomy Satellite; Spaceborne Astronomy; Magellan Project (NASA)

20000055625 NASA Johnson Space Center, Houston, TX USA
Crew Activity Report / Flight Day 7
May 25, 2000; In English; Videotape: 18 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068735; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Atlantis Space Shuttle crew (Mission Commander James D. Halsell, Jr., Pilot Scott J. Horowitz, Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) completed several activities including: (1) installation of final battery in the International Space Station; (2) installation of new storage compartments behind panels in the Zarya module; (3) installation of a new Radio Telemetry System; (4) firing of Atlantis steering jets to perform the second part of three-day maneuver to raise the station's altitude; and (5) transferring more than a ton of gear to the station to await use by the first resident crew.
CASI
Space Shuttle Missions; Spacecrews; Space Shuttle Orbiters; Electric Batteries; Scientists; International Space Station

20000055626 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report / Flight Day 6
May 24, 2000; In English; Videotape: 16 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000068740; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was, James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape shows the activities of the sixth day of the flight. The videotape begins with a shot of the Space Station. The narrator remarks that the transfer of supplies and equipment is continuing and the videotape shows the replacing of fans and smoke detectors. There is a group picture on board the station, after which a few questions were asked. The quality of the air inside the station is remarked on as being good. The quality of the air being a concern and one of the reasons for the mission. One of the new batteries was shown being installed in the Zarya Control Module.
CASI
International Space Station; Spacecrews; Supplying; Space Station Modules; Spacecraft Maintenance; Installing; Logistics; Spare Parts; Handling Equipment

20000056609 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101: Crew Activity Report/Flight Day 8 Highlights
May 26, 2000; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073122; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev are seen closing up the hatches to the ISS. Halsell, Horowitz, and Weber are seen participating in a question and answer session with Launch Control Center (LCC). Weber explains the transfer of goods and supplies and Horowitz discusses the re-boost maneuver. Also shown is the crew gathered together on the mid-deck fielding questions from LCC. Scene shows Voss checking behind panels for evidence of smoke or odor.
CASI
Space Transportation System; Space Transportation System Flights; International Space Station; Spacecraft Docking; Hatches; Closing

20000056993 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report /Flight Day 9 Highlights
May 27, 2000; In English; Videotape: 14 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073124; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-101 Atlantis mission, the flight crew, Commander James D. Halsell Jr., Pilot Scott J. Horowitz, and Mission Specialists

Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev prepares to undock Atlantis from the International Space Station (ISS). Atlantis is seen as it undocks form the ISS over Kazakhstan. Halsell, Usachev, and Weber are seen participating in a communication link with Russia.
CASI
Space Transportation System; Space Transportation System Flights

20000056994 NASA Johnson Space Center, Houston, TX USA
STS–101: Crew Activity Report/Flight Day 10 Highlights
May 28, 2000; In English; Videotape: 18 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000073123; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a report from the Space Shuttle Atlantis Crew. The crew consists of James D. Halsell, Jr., Mission Commander; Scott Horowitz, Pilot; and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. The crew made preparations for the Space Shuttle Atlantis return to Earth. Weber gave a general overview of refurbishments done to the International Space Station such as maintenance of the electrical system, one to three thousands of pounds of new hardware supplied to I.S.S. and a supply of personal hygiene products. Also live animation of the Spacehab Module is given where supplies bound for the Space Station are stored.
CASI
International Space Station; Spacecrews; Space Transportation System; Spacecraft Maintenance

20000057168 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101 / Atlantis EVA briefing
Mar. 27, 2000; In English; Videotape: 26 min, 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000076143; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The primary mission objective for STS-101 was to deliver supplies to the International Space Station, perform a space walk, and reboost the station from 230 statute miles to 250 statute miles. The commander of this mission was James D. Halsell. The crew was Scott J. Horowitz, the pilot, and mission specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev. This videotape is a press briefing by Scott Bleisath, STS-101 Lead EVA Officer, about the planned Extravehicular Activity planned for the fourth day of the mission. The work that this EVA is to accomplish is the repair of a crane and the installation of a beam on Unity. The astronauts will also replace antennae and install hand rails and cables. The astronauts who are scheduled to perform the EVA activities are Williams and Voss. They will be assisted by Weber, who will operate the Shuttle's robotic arm, and Scott Horowitz. The spacewalk is scheduled to take 6 hours. The videotape includes some views of the astronauts training in an underwater environment. Mr. Bleisath answered questions from the press after he completed the briefing.
CASI
Extravehicular Activity; International Space Station; Space Transportation System; Spacecrews; Space Maintenance

20000057498 NASA Kennedy Space Center, Cocoa Beach, FL USA
DELTA/WIND Pre–Launch Press Conference
Oct. 31, 1994; In English; Videotape: 41 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078315; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the participants in the Pre Launch Press Conference disclosing the status of the Delta/Wind flight. The panelists consists of Jim Womack NASA Launch Manager from KSC (Kennedy Space Center), Dan Miller NASA Delta Launch Vehicle Manager from GSFC (Goddard Space Flight Center), Bill Huddleston NASA Wind Program Manager from NASA HQ (Headquarter), and Joel Tumbiolo Launch Weather Officer from USAF (USA Air Force). Panelists' discuss launch vehicle specification - the first Russian instrument in an American Spacecraft, the total cost of the mission, and the weather condition. The panelists also answer questions from the audience and NASA HQ about the Delta/Wind launch.
CASI
Conferences; Delta Launch Vehicle; Prelaunch Summaries; Reports; Mission Planning

20000057499 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta/Wind Launch
November 1, 1994; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078316; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents live footage of the successful Delta II/WIND spacecraft launch from Pad 17B at the Eastern Test Range, Cape Canaveral Air Station, FL. Footage of engineering activity from launch control as well as narrative information concerning spacecraft configuration, equipment, instruments and objectives is also presented. WIND is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the ISTP Project. WIND is positioned in a sunward, multiple double-lunar swingby orbit with a maximum apogee of 250Re during the first two years of operation. This will be followed by a halo orbit at the Earth-Sun L1 point. The main scientific objectives of the WIND mission are to provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies. The WIND spacecraft includes KONUS, the first Russian instrument to fly on an American satellite since civil space cooperation between the U.S. and Russia was resumed in 1987.
CASI
Delta Launch Vehicle; Launch Vehicle Configurations; Payloads; Liftoff (Launching); Rocket Launching

20000057500 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta/Wind Launch with Isolated Cameras from Continuous Recording
Nov. 01, 1994; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078317; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Wind spacecraft represents one of NASA's contributions to the International Solar Terrestrial Program (ISTP), an international effort to quantify the effects of solar energy on the Earth's magnetic field. Wind will provide continuous measurement of the solar wind, particularly charged particles and magnetic field data. The specific objectives of Wind are to: (1) provide complete plasma, energetic particle, and magnetic field input for magnetospheric and ionospheric studies; (2) determine the magnetospheric output to interplanetary space in the upstream region; (3) investigate basic plasma processes occurring in the near-Earth solar wind; and (4) provide baseline ecliptic plane observations to be used in heliospheric studies. This videotape shows the pre-dawn launch of the Wind spacecraft aboard a Delta 7925 on November 1, 1994. After the countdown and launch, the tape shows the activity in the Telemetry Room at Kennedy Space Center, where people are following the progress of the spacecraft. Following the activity in the telemetry room, there are four different replays of the launch from different locations. After showing the replays of the launch, the video returns to the Telemetry Room when an important stage in the launch and flight is achieved.
CASI
Solar Wind; Liftoff (Launching); Countdown

20000057515 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101: Atlantis Orbiter Upgrade Briefing
Mar. 27, 2000; In English; Videotape: 54 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000076142; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows panelists, Manager of the Space Shuttle Program Development, Elric McHenry, and the Associate Program Manager for Space Shuttle Upgrades, Andy Allen, giving an overview of the new upgrades on the STS-101 Orbiter. McHenry and Allen speaks about the changes and modernization of Atlantis. The panelists' mentions all the new capabilities of the new glass cockpit. They emphasize the redesign of the engine, specifically, the

ability to shut down automatically. They also discuss future implementation of a smart cockpit.
CASI
Revisions; Upgrading; Improvement; Cockpits; Pilot Support Systems; Engine Design

20000060867 NASA Kennedy Space Center, Cocoa Beach, FL USA
RADARSAT Launch
Nov. 01, 1995; In English; Videotape: 2 hrs. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078318; No Copyright; Avail: CASI; B05, Videotape-Beta; V05, Videotape-VHS
This segment of the launch begins with pre-recorded footage of X-band antenna testing and transporting of the the spacecraft to the launch pad. There is also pre-recorded footage of Delta II load testing and installation on the launcher. The footage returns to ”live” coverage and resumes the countdown to launch.
CASI
Spacecraft Launching; Load Tests; Microwave Antennas; Radarsat; Launchers

20000063511 NASA Johnson Space Center, Houston, TX USA
STS 101: Post Flight Presentation
Jun. 21, 2000; In English; Videotape: 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000087291; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew (Mission Commander James D. Halsell, Jr., Pilot Scott J. Horowitz, and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) describe the highlights of the STS 101 Mission. The primary scenes reviewed include the spacewalk, incremental assembly/upgrades, space station rendevous, suit testing, critical replacement and repairs to suspect batteries, and reboosting the station from 230 statute miles to 250 statute miles.
CASI
Space Transportation System Flights; Spacecrews; Space Stations; Space Transportation System

20000080114 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Scott D. Altman
Jul. 19, 2000; In English; Videotape: 30 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111953; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Pilot Scott D. Altman is seen. The interview addresses many different questions including why Altman became a pilot, the events that led to his interest, his career path through the Navy, and then finally, his selection by NASA as an astronaut. Other interesting information discussed in this one-on-one interview was his work on the movie set of ”Top Gun,” the highlights of his Navy career, and possible shorter time frame turnarounds for missions. Altman also mentions the scheduled docking with the new International Space Station (ISS) after the arrival of the Zvezda Service Module.
CASI
Crew Procedures (Preflight); Spacecrews; Talking

20000080135 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Richard A. Mastracchio
Jul. 20, 2000; In English; Videotape: 26 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage of a preflight interview with Mission Specialist Richard A. Mastracchio is seen. The interview addresses many different questions including why Mastracchio became interested in the space program, the events that led to his interest, his 14 year career path through the Johnson Space Center (JSC) as an engineer before finally getting selected into the astronaut program. Other interesting information that this one-on-one interview discusses is the main goal of the STS-106 mission, and its scheduled docking with the new International Space Station (ISS) since the arrival and connection of the Zvezda Service Module. Mastracchio also mentions his responsibility during the much-anticipated docking and scheduled space-walk.
CASI
Crew Procedures (Preflight); Spacecrews; Astronauts; Talking

20000080200 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Yuri Malenchenko
Jul. 20, 2000; In English; Videotape: 1 hr. 5 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111957; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Russian Cosmonaut/Mission Specialist Yuri Malenchenko, Col. Russian Air Force. Among other topics, Malenchenko discusses his 125-day space mission on Russian Space Station MIR in 1994, and his planned spacewalk to complete the connection between the Russian service module Svezda and the International Space Station (ISS). STS-106 is International Space Station assembly flight ISS-2A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.
CASI
International Space Station; Space Transportation System; Space Shuttle Missions; Cosmonauts; Extravehicular Activity

20000080201 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Boris Morukov
Jul. 20, 2000; In English; Videotape: 37 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111955; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Russian Cosmonaut/Mission Specialist Boris Morukov, M.D., Ph.D. Among other topics, Morukov discusses his background in studying weightlessness at the Russian Institute for Biomedical Problems and how his experiences prepared him to become a Cosmonaut candidate. STS-106 is International Space Station assembly flight ISS-2A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.
CASI
International Space Station; Space Transportation System; Space Shuttle Missions; Weightlessness; Cosmonauts

20000080260 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Daniel Burbank
Jul. 20, 2000; In English; Videotape: 33 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000110658; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This NASA Johnson Space Center (JSC) video production presents an STS-106 pre-launch interview with Mission Specialist Daniel C. Burbank, Lt. Commander, USA Coast Guard (USCG). Among other topics, Burbank discusses how his Coast Guard career evolved into spaceflight, his experiences flying helicopters for the Coast Guard, and his chief duties on the upcoming spaceflight. STS-106 is International Space Station assembly flight ISS-2A.2b and will utilize the SPACEHAB Double Module and the Integrated Cargo Carrier (ICC) to take supplies to the station. The mission will also include 2 spacewalks.
CASI
International Space Station; Space Transportation System; Space Shuttle Missions; Astronauts

20000080369 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40/SLS–1: Lift to Cargo Bay
Mar. 24, 1991; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118115; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The footage shows the lifting of the solid state micro-accelerometer into

Colombia's cargo bay. This was done in a clean room setting and is part of the In Orbit Technology Demonstration Program.
CASI
Accelerometers; Bays (Structural Units); Cargo

20000080370 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40: Hinge Inspection
Mar. 17, 1991; In English; Videotape: 4 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118117; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The footage shows hinge inspection for cracks and tolerance checks. Scenes are from both the inspection shop and aboard Columbia.
CASI
Inspection; Hinges; Cracks; Columbia (Orbiter)

20000080371 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41: Discovery Payload Bay Door Investigation
Jun. 04, 1990; In English; Videotape: 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118126; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The brief footage shows the visual inspection of the bay door by 2 technicians. They inspect the layers between the panels for structural defects, and the door, joints, and hinges for wear, cracks, stress, and damage from flight.
CASI
Doors; Hinges; Inspection; Panels

20000080384 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Terrence W. Wilcutt
Jul. 19, 2000; In English; Videotape: 25 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000110660; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of a preflight interview with Mission Commander Terrence W. Wilcutt is seen. The interview addresses many different questions including why Wilcutt became an astronaut, the events that led to his interest, and his career both as a High School Mathematics Teacher and as a member of the US Marine Corps. Other interesting information that this one-on-one interview discusses are his responsibilities during docking and undocking of the spacecraft, and possible shorter time frame turnarounds for missions. Wilcutt also mentions the scheduled installation and transfer of equipment into the new International Space Station (ISS).
CASI
Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking

20000080388 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Interviews: Edward T. Lu
Jul. 19, 2000; In English; Videotape: 34 min. 30 sec. playing time, in coor, with sound
Report No.(s): NONP–NASA–VT–2000111956; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Mission Specialist Edward T. Lu is seen. The interview addresses many different questions including why Lu became interested in the space program, the events that led to his interest, the transition from an engineer to research scientist, and finally to getting selected into the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-106 mission, its scheduled docking with the new International Space Station (ISS), making the Zvezda Service Module ready for entrance, and crew training both in the United States and Russia. Lu mentions his responsibilities during the much-anticipated docking as well as his scheduled space-walk with Yuri Ivanovich Malenchenko. Lu also discusses the use of the Robotic Arm during his space-walk, installation of a magnetometer on the Zvezda Module, and work that will have to take place inside the Service Module.
CASI
Crew Procedures (Preflight); Spacecrews; Astronauts; Cosmonauts; Talking

20000080451 NASA Johnson Space Center, Houston, TX USA
ISS Expedition 1 Crew Interviews: William M. Shepherd
Jul. 19, 2000; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111599; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Bill Shepherd is seen. The interview addresses many different questions including why Shepherd became interested in the space program, the events that led to his interest, the transition from the navy to his selection in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitance, and all the specifics that will make his living arrangements difficult. Shepherd mentions his responsibilities during the much-anticipated two-day flight to the ISS, as well as the scheduled space-walk. Shepherd also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his interpretation of the meaning of mission success, and the implications of having human beings in space.
CASI
International Space Station; Expeditions; Space Flight; Spacecrews; Astronauts; Cosmonauts; Crew Procedures (Preflight); Talking

20000080452 NASA Kennedy Space Center, Cocoa Beach, FL USA
Orbiter Umbilical Hinge Door Problem
Feb. 19, 1991; In English; Videotape: 4 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113527; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

During processing work on the orbiter Discovery at Pad A, significant cracks were found on all four lug hinges on the two external tank umbilical door drive mechanisms. NASA managers opted to roll back the vehicle to the Vehicle Assembly Building (VAB) on March 7, and then to the Orbiter Processing Facility (OPF) for repair. Hinges were replaced with units taken from orbiter COLUMBIA, and reinforced. Discovery returned to the pad on April 1. Shown are the cracked orbiter umbilical door hinges.
CASI
Spacecraft Maintenance; Prelaunch Problems; External Tanks; Cracks; Doors; Hinges; Lugs

20000080453 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–38: Bolt Tightening
Jul. 20, 1990; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113533; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The very brief footage shows the torquing of bolts by technicians. They are aided in their efforts by a diagram that shows the torque sequence and amount of torque needed for each bolt.
CASI
Bolts; Space Transportation System; Torque

20000080454 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–38: Post Landing News Conference
Nov. 20, 1990; In English; Videotape: 22 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113534; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the STS-38 Post Landing News Conference. Dick Young of NASA Public Affairs office is seen introducing the panel members. The panelists include: Forrest McCartney, Kennedy Space Center's (KSC) Director; William B. Lenoir, Associate Administrator Space Flight; and Robert B. Sieck, Space Shuttle Processing Director. Atlantis lands at KSC, which marks the first landing since 1985 to this location. The panelists mention the status of the landing, the success of the flight, and the historic implication that this landing carries. They also answer questions from the participating audience.
CASI
Conferences; Postflight Analysis; Spacecraft Landing

20000080455 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39: OMS Pod Thruster Removal/Replace
Feb. 04, 1991; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113535; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Shown is the removal and replacement of the Discovery's orbital maneuvering systems (OMS) pod thruster. The OMS engine will be used to propel Discovery north, off of its previous orbital groundtrack, without changing the spacecraft's altitude. A burn with this lateral effect is known as "out-of-plane."
CASI
Orbital Maneuvers; Pods (External Stores); Replacing; Discovery (Orbiter); Spacecraft Maintenance; Prelaunch Problems

20000080479 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39: Landing at KSC
May 06, 1991; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118018; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Space Shuttle Discovery landed on May 6, 1991, 2:55:35 p.m. EDT at the Shuttle Landing Facility after traveling more than 3,500,000 miles on a successful eight-day mission. Rollout distance and time were 9,235 feet and 56 secs respectively. The landing weight was 211,512 lbs. Landing was diverted to KSC because of unacceptably high winds at the planned landing site, Edwards Air Force Base, California. Aboard were: Commander Michael L. Coats; Pilot L. Blaine Hammond, Jr.; and Mission Specialists Guion S. Bluford Jr., Gregory J. Harbaugh, Richard J. Hieb, Donald R. McMonagle, and Charles L. Veach. This was the 40th flight in the Space Shuttle program and the 12th for the orbiter Discovery. The landing was the 7th Shuttle landing in Florida. After landing at the Shuttle Landing Facility, the STS-39 crew posed for a photo in front of Discovery.
CASI
Discovery (Orbiter); Spacecraft Landing; Space Transportation System Flights; Space Missions

20000080480 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39: Payloads in Cannister at VPF
Feb. 05, 1991; In English; Videotape: 8 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118023; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Discovery spent about 15 weeks in the processing facility undergoing about 22 modifications and routine testing. Shown are STS-39 primary payloads installed in Discovery's payload bay in the Orbiter Processing Facility (OPF). Payloads installed in the OPF include the Critical Ionization Velocity payload and the Chemical Release Observatory.
CASI
Space Shuttle Payloads; Discovery (Orbiter); Spacecraft Maintenance; Preflight Operations

20000080530 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39 IBSS SPASS II Rotation and Installation
Jan. 03, 1991; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In the Orbiter Processing Facility, the Infrared Background Signature Survey / Shuttle Pallet Satellite-II (IBSS/SPAS-II) is rotated and installed in the payload bay of the orbiter Discovery. IBSS/SPAS-II is one of the primary payloads on mission STS-39.
CASI
Space Shuttle Payloads; Discovery (Orbiter); Ground Handling; Spacecraft Maintenance; Installing; Shuttle Pallet Satellites

20000080531 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39 Discovery in the VAB and Columbia Tow From HB–2
Feb. 09, 1991; In English; Videotape: 8 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118016; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The orbiter Discovery sits inside the Vehicle Assembly Building (VAB) after its rollover from the Orbiter Processing Facility (OPF). In the VAB, Discovery will be mated with an external tank and solid rocket boosters for its launch. Shown also is Columbia orbiter being towed from the High Bay 2.
CASI
Discovery (Orbiter); Ground Handling; Spacecraft Maintenance; Columbia (Orbiter); Airfield Surface Movements

20000080532 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39 Discovery Rollback to the OPF High Bay #2 (Shots of Doors)
Mar. 14, 1991; In English; Videotape: 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118014; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Shown is Discovery rolling back to the Orbiter Processing Facility (OPF) High Bay 2 for repair. High Bay 2, located west of the Vehicle Assembly Building (VAB), is used for external tank (ET) checkout and storage and as a contingency storage area for orbiters.
CASI
Discovery (Orbiter); Spacecraft Maintenance; Ground Handling

20000081731 NASA Johnson Space Center, Houston, TX USA
ISS Expedition 1 Crew Interviews: Sergei K. Krikalev
Jul. 19, 2000; In English; Videotape: 1 hr. 1 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111600; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage of a preflight interview with Flight Engineer Sergei K. Krikalev is seen. The interview addresses many different questions including why Krikalev became a cosmonaut, the events that led to his interest, the transition from being an engineer to being selected as a Russian cosmonaut. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitance, and all the specifics that will make his living arrangements difficult. Krikalev mentions his responsibilities during the much-anticipated two-day flight to the ISS, as well as the possibility of his space-walk. Krikalev also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.
CASI
Crew Procedures (Preflight); Spacecrews; Cosmonauts; Talking

20000081732 NASA Johnson Space Center, Houston, TX USA
ISS Expedition 1 Crew Interviews: Yuri P. Gidzenko
Jul. 19, 2000; In English; Videotape: 38 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111586; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Soyuz Commander Yuri P. Gidzenko is seen. The interview addresses many different questions including why Gidzenko became interested in the space program, the events that led to his interest, the transition from being a military pilot to being selected as a Russian cosmonaut. Other interesting information that this one-on-one interview discusses are the main goals of the first Expedition Crew, their scheduled docking with the International Space Station (ISS), making the ISS ready for human inhabitance, and all the specifics that will make his living arrangements difficult. Gidzenko mentions his responsibilities during the much-anticipated two-day flight to the ISS on the Soyuz spacecraft, as well as the possibility of his space-walk. Gidzenko also discusses the crew's first tasks upon entrance including other scheduled tasks for the first week, docking from cargo ships, and

spacecraft delivering equipment or performing Extra Vehicular Activities (EVA). He explains his opinion of the implications of having human beings in space.
CASI
Crew Procedures (Preflight); Spacecrews; Cosmonauts; Talking

20000081733 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40 TCDT
May 07, 1991; In English; Videotape: 7 min. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000118119; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the crew of STS-40, Commander Bryan D. O'Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, as they arrive at Kennedy Space Center (KSC). The crew arrives on T-38 jets for Terminal Countdown and Demonstration Tests (TCDT) at KSC. O'Connor is seen addressing the audience. Footage also shows the crew sitting around the table for their traditional breakfast, crew suit-up, and departure.
CASI
Spacecrews; Crew Procedures (Preflight); Astronaut Training

20000081755 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses: Ulysses – The Movie
Jun. 01, 1990; In English; Videotape: 26 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118123; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows animation of the planned activities of the Ulysses mission. These activities range from Ulysses' deployment from the spacecraft to the orbits around the red giant. The Ulysses spacecraft mission is to explore the polar regions of the Sun.
CASI
Ulysses Mission; Deployment; Air Launching; Mission Planning; Polar Regions; Sun

20000081756 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40 Get Away Special Experiment Preflight Briefing
May 15, 1991; In English; Videotape: 11 min. 47 sec. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000118122; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the preflight briefing of the Get Away Special Experiment for STS-40. The focus of the discussion is the payloads that STS-40 will carry. Some of the experiments that are scheduled include crystal growth, melting and re-growing of gallium nitride, fluid behaviors, ecological alteration of plants, growth of semiconductors, thermal transfer, flux behavior, orbiter stability, and the effects of cosmic rays on floppy disks. Also shown is a video release of the STS-40/SLS-1 mission. The STS-40 crew, Commander Bryan D. O'Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, are seen while they exercise and perform their experiments.
CASI
Space Transportation System; Columbia (Orbiter); Get Away Specials (STS); Spaceborne Experiments; Spacelab Payloads

20000081757 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40/SLS–1 Breakfast/Suit–up/Depart O&C/Ingress/Launch with isolated Views
Jun. 05, 1991; In English; Videotape: 27 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118120; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crew members, Commander Bryan D. O'Connor, Pilot Sidney M. Gutierrez, Mission Specialists James P. Bagian, Tamara E. Jernigan, M. Rhea Seddon, and Payload Specialists F. Drew Gaffney, and Millie-Hughes Fulford, sitting down at the traditional breakfast table. The crew is also seen suiting-up, entering the elevator, leaving the Operations and Checkout Building (O&C), and getting into the Astro-van. Scenes also show the crew members entering the vehicle as well as various isolated morning launch views, and some beautiful panoramic shots of the shuttle on the launch pad.
CASI
Space Transportation System; Spacecrews; Crew Procedures (Preflight); Space Suits

20000083226 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses TCDT Activities
Sep. 10, 1990; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122912; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in Terminal Countdown Demonstration Tests (TCDT). The astronauts are seen participating in many different activities including the traditional breakfast, suit-up, simulated training in the crew module, and a dry run of launch and emergency egress training.
CASI
Spacecrews; Astronauts; Crew Procedures (Preflight); Astronaut Training; Training Simulators

20000083363 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40 SRB/MLP Rollout to Pad B
Jun. 11, 1990; In English; Videotape: 8 min., 20 sec. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000118127; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the rollout preparations of the SRB/MLP. Also shown is the rollout of SRB/MLP to Pad B.
CASI
Preparation; Preflight Operations; Spacecraft Launching

20000083364 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40/SLS–1: Move from Work Stand to Canister
Mar. 21, 1991; In English; Videotape: 12 min., 45 sec. playing time, in color, with some sound
Report No.(s): NONP–NASA–VT–2000118121; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage shows the SLS-1 (Spacelab Life Science) payload being lifted by a crane from the work stand to the canister.
CASI
Payload Transfer; Preflight Operations

20000083583 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Training
Jul. 27, 2000; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000111587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the STS-106 crewmembers shows Commander Terrence W. Wilcutt, Pilot Scott D. Altman, Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov going through various training activities. These activities include SpaceHab Training at Kennedy Space Center (KSC), EVA Pre-Post Operations, Post Launch Operations, Rendezvous, Bailout, and Post Landing Egress Training at Johnson Space Center (JSC). The crew is also seen participating in a group photograph session.
CASI
Spacecrews; Astronauts; Cosmonauts; Crew Procedures (Preflight); Astronaut Training

20000083886 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses Launch (10/06/90), Ulysses Deploy (10/06/90), Landing (10/10/90)
Oct. 10, 1990; In English; Videotape: 1 hr. 1 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122915; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows the crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in the traditional activities the day of their flight. The crew are seen eating breakfast, suiting-up, walking out to the Astronaut-Van, putting on life vests in the 'White Room' area, and entering the crew module of the Discovery Orbiter. Footage also includes the deployment of the Ulysses satellite. The Discovery spacecraft is seen as it approaches and lands at Edwards Air Force Base. Also shown are several scenes from different cameras of both launching and landing of the STS-41 spacecraft.
CASI
Ulysses Mission; Deployment; Payload Delivery (STS); Space Transportation System; Space Transportation System Flights; Discovery (Orbiter)

20000083887 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–42/Discovery/IML–1 Admiral Richard Truly Press Briefing
Jan. 22, 1992; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122913; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A press briefing is presented by Admiral Richard Truly about the STS-42 Discovery International Microgravity Laboratory-1 (IML). He describes the launch that took place on the morning of January 22, 1992. It was NASA's first launch of 1992 following the Challenger disaster. Life Sciences and materials science microgravity experiments were flown on the STS-42 to study the behavior of materials and living things in microgravity. The briefing ends with a short question and answer period.
CASI
Microgravity; Space Transportation System; Space Shuttles; Spaceborne Experiments

20000083888 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Ulysses Breakfast, Suit–up, C–7 Exit, Launch and ISOS Cam Views
Oct. 06, 1990; In English; Videotape: 54 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122911; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage shows the crewmembers of STS-41, Commander Richard N. Richards, Pilot Robert D. Cabana, Mission Specialists William M. Shepherd, Bruce E. Melnick, and Thomas D. Akers, participating in the traditional activities the day of their flight. The crew are seen eating breakfast, suiting-up, walking out to the Astronaut-Van, putting on life vests in the 'White Room' area, and entering the crew module of the Discovery Orbiter. Footage also includes preparation of the Ulysses Payload. Engineers are seen loading Ulysses to the upper stage, transferring Discovery to an upright position, bolting Discovery to the external tank, rolling Discovery out to the launch pad, and finally installing the Ulysses Payload inside Discovery. Also shown are both night and morning panoramic shots of the shuttle on the pad, main engine start, ignition, liftoff, booster separation, and various camera views of the launch.
CASI
Ulysses Mission; Space Transportation System; Space Transportation System Flights; Manned Space Flight; Discovery (Orbiter)

20000083970 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41/Ulysses Camcorder Footage Replay of Ulysses Deploy on 10/06/90
Oct. 08, 1990; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118125; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the STS-41 deployment of the European Space Agency's Ulysses probe is presented. Richard N. Richards, Commander, Robert D. Cabana, Pilot, Mission Specialists William M. Shepherd, Bruce E. Melnick and Thomas D. Akers are shown aboard the Space Shuttle.
CASI
Deployment; Space Probes; Space Transportation System; Ulysses Mission

20000102394 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Crew Activity Report / Flight Day Highlights Day 2
Sep. 09, 2000; In English; Videotape: 13 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000131282; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-106 was launched on Sept 8, 2000 at 8:45 a.m. The crew was commanded by Terrence W. Wilcutt, the pilot was Scott D. Altman. The mission specialists were Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov. During the 11-day mission, the crew spent a week inside the International Space Station (ISS) unloading supplies from both a double SPACEHAB cargo module in the rear of the Atlantis cargo bay and from a Russian Progress M-1 resupply craft docked to the aft end of the Zvezda Service Module. The videotape shows the activities of the second day of the flight and the preparations for docking with the ISS. Shown on the video are shots of the flight deck on the shuttle, the shuttle payload arm, and shots of the crew eating lunch.
CASI
Cargo; International Space Station; Space Shuttle Payloads; Space Station Payloads; Unloading; Supplying; Crew Procedures (Inflight)

20000102606 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 1 Highlights
Sep. 08, 2000; In English; Videotape: 17 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000131281; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen performing pre-launch activities. They are shown sitting around the breakfast table with the traditional cake, suiting-up, and riding out to the launch pad. The final inspection team is seen as they conduct their final check of the space shuttle on the launch complex. Also, included are various panoramic views of the shuttle on the pad. The crew is readied in the 'white room' for their mission. After the closing of the hatch and arm retraction, launch activities are shown including countdown, engine ignition, launch, and the separation of the Solid Rocket Boosters.
CASI
Spacecraft Launching; Atlantis (Orbiter); Manned Space Flight; Space Transportation System; Space Transportation System Flights

20000102607 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 3 Highlights
Sep. 10, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000131280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen as they approach the International Space Station (ISS). Also shown are views of the rendezvous taken from both the Zarya Control Module and the Atlantis spacecraft. Final preparation for the docking includes checking of tools and equipment needed to support the rendezvous and docking, as well as equipment for the scheduled space walk. After docking over Western Kazakhstan, the Zarya and Zvezda Service Module is seen from the external cameras of Atlantis. Also shown is footage of the crew before and during the rendezvous.
CASI
Space Transportation System; Space Transportation System Flights; Atlantis (Orbiter); Spacecraft Docking; Orbital Rendezvous

20000104230 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 04 Highlights
Sep. 11, 2000; In English; Videotape: 20 min., 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000135182; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen preparing for the scheduled space walk. Lu and Malenchenko are seen coming through the hatch of the International Space Station (ISS). Also shown are Lu and Malenchenko

attaching a magnetometer and boom to Zvezda. Mastracchio operates the robot arm moving the extravehicular activity (EVA) crew outside of the ISS.
CASI
International Space Station; Service Module (Iss); Space Transportation System; Space Transportation System Flights; Manned Space Flight; Atlantis (Orbiter)

20000104231 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 05 Highlights
Sep. 12, 2000; In English; Videotape: 22 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000135181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several activities. Malenchenko and Wilcutt are seen opening the hatches of the Zvezda Service Module and the Zarya Control Module, and finally, the transfer chamber of Zvezda, Progress. Burbank and Mastracchio are seen transferring food and equipment, and removing the manual docking system of Zarya. Lu, Burbank and Malenchenko are also seen checking the hatch interfaces. Footage also shows the entire interior of the International Space Station (ISS) complex.
CASI
International Space Station; Service Module (Iss); Zarya Control Module; Space Transportation System; Space Transportation System Flights

20000108860 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 11 Highlights
Sep. 18, 2000; In English; Videotape: 20 min., 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138904; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live animation of the Space Shuttle Atlantis slowly pulling away from the International Space Station is presented. Pilot Scott Altman flew the Atlantis away from the I.S.S. and describes this process. A live view of Commander Terry Wilcutt, Pilot Scott Altman and Mission Specialists Ed Lu, Rick Mastracchio, Dan Burbank, Yuri Malenchenko and Boris Morukov aboard the Space Shuttle Atlantis is shown. The astronauts then answered questions inside the SpaceHab module about the living conditions aboard the I.S.S. and preparations that were made to the I.S.S. for the next crew to arrive.
CASI
Space Shuttles; Space Transportation System Flights; International Space Station

20000109654 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 06 Highlights
Sep. 13, 2000; In English; Videotape: 20 min., 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136106; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting and transferring activities. Burbank and Morukov replace batteries in Zarya, while Lu and Malenchenko install three batteries and electrical equipment inside the Zvezda Service Module. Footage of Wilcutt participating in an interview concludes the events of the day.
CASI
Zarya Control Module; International Space Station; Service Module (Iss)

20000109655 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 07 Highlights
Sep. 14, 2000; In English; Videotape: 21 min., 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136103; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen participating in several outfitting activities. Burbank and Morukov remove and replace a fourth battery in Zarya. Lu and Malenchenko finish installing the third and final battery and other electrical equipment inside the Zvezda Service Module. While Altman and Wilcutt perform a series of jet firings, Altman is shown as he narrates a tour of the Zvezda Service Module. Scenes also include Lu and Malenchenko unpacking the Russian-made Orlan space suits, Burbank and Wilcutt participating in an interview, and a beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth.
CASI
International Space Station; Zarya Control Module; Service Module (Iss)

20000110575 NASA Johnson Space Center, Houston, TX USA
STS–92 Flight Day Highlights and Crew Activities: Day 9
Oct. 20, 2000; In English; Videotape: 21 min., 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157382; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur participate in an audio interview while scenes are shown of the International Space Station (ISS) and the Earth.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000112950 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/W. McArthur
Sep. 14, 2000; In English; Videotape: 55 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138906; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-92 Mission Specialist William S. McArthur is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the contributions of the Russians, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000112965 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 IUS Lift to Workstand at the VPF
Apr. 29, 1991; In English; Videotape: 9 min., 13 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000148072; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage filmed at the Vertical Processing Facility (VPF) shows the inertial upper stage (IUS) being lifted to the workstand.
CASI
Inertial Upper Stage; Space Transportation System

20000112966 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 TCDT Slideware Training and Photo Session
Jun. 15, 1992; In English; Videotape: 22 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148079; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, Payload Specialist Franco Malerba, Mission Specialists Jeffrey A. Hoffman, Franklin R. Chang-Diaz, Claude Nicollier, and Marsha S. Ivins are seen introducing themselves and discussing the mission during a photo session. The crew then answers questions from the press.
CASI
Atlantis (Orbiter); Prelaunch Summaries; Crew Procedures (Preflight)

20000112967 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Mission Overview
Aug. 10, 1992; In English; Videotape: 42 min., 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152239; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Flight Director Milt Heflin gives an overview of the goals of the Space Shuttle Endeavour. He describes the crew, the role of the orbiter, the planned experiments, and the timeline of activities on board. Mission Manager Aubray King introduces the Spacelab-J mission. He discusses the planned experiments and Japanese involvement in development. Heflin and King then take questions from the press.
CASI
Endeavour (Orbiter); Spacelab; Prelaunch Summaries; Spaceborne Experiments

20000114422 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 11 Highlights
Oct. 22, 2000; In English; Videotape: 16 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000159448; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur participate in an audio interview while footage of the Earth is seen. Michigan and the northern USA can be identified.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000114428 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 10 Highlights
Oct. 21, 2000; In English; Videotape: 17 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157386; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the undocking of Discovery from the International Space Station (ISS) as Lopez-Alegria is seen closing the hatch on the Unity Module. A slow sweep of the outside of the ISS shows the space station in detail against the backdrop of a dark Earth where the lights of a city shine. Lopez-Alegria closes the outer hatch and Discovery undocks from the ISS. As the two separate, the ISS is seen orbiting across a beautiful dark blue Earth.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss)

20000114429 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 8 Highlights
Oct. 19, 2000; In English; Videotape: 18 min. 32 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the fourth and final spacewalk of the mission. Scenes are shown of Lopez-Alegria and Wisoff during their 6 hour 56 minute spacewalk against a backdrop of the Earth. Central America and Florida are easily seen and North Carolina can be identified through the clouds. Lopez-Alegria and Wisoff prepare a latch assembly that will later hold the solar array truss while Wakata operates the arm.
CASI
International Space Station; Service Module (Iss); Discovery (Orbiter)

20000114430 NASA Johnson Space Center, Houston, TX USA
Crew Activity Report/Flight Day 6 Highlights
Oct. 17, 2000; In English; Videotape: 18 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157383; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this sixth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue working on the exterior of the International Space Station (ISS) to prepare the station for its first resident crew. Lopez-Alegria and Wisoff perform the second of four spacewalks to maneuver the third pressurized mating adapter (PMA-3) into its new location on the Unity module.
CASI
International Space Station; Service Module (Iss); Discovery (Orbiter); Unity Connecting Module; Zarya Control Module

20000114431 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 2 Highlights
Oct. 13, 2000; In English; Videotape: 17 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157376; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-92 mission, the flight crew, Commander. Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue to approach the International Space Station (ISS) in the Discovery Orbiter. Wakata and Duffy are congratulated and questioned by Japanese dignitaries. A panoramic view of the Earth is seen as Discovery orbits.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000114432 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 4 Highlights
Oct. 15, 2000; In English; Videotape: 21 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157375; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur give an overview of the day's accomplishments. Footage of the third pressurized mating adapter (PMA-3), the common berthing mechanism (CBM), and the installed Z1 truss are shown.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000114433 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 5 Highlights
Oct. 16, 2000; In English; Videotape: 17 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157374; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for the first of four spacewalks. McArthur and Chiao are seen shortly before suiting up and Wakata is seen at the controls for the robotic arm. Footage is shown of the spacewalk where McArthur and Chiao remove the S-band Antenna Subassembly (SASA). Duffy gives an overview on the day's accomplishments.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss); Unity Connecting Module; Zarya Control Module

20000114493 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Countdown Status
Jun. 23, 1992; In English; Videotape: 20 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152241; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller of the NASA Public Affairs Office introduces Mike Leinbach, NASA Shuttle Test Director, Russ Lunnen, Kennedy Space Center (KSC) USML Payload Manager, and Ed Priselac, U.S. Airforce/KSC Weather Officer to give a briefing on the countdown status for STS-50. Leinbach gives an overview of when certain tests are run and what problems are encountered. Lunnen outlines the payload activities for the shuttle. Priselac describes the current weather as well as the conditions needed for launch. They also take questions from the press.
CASI
Countdown; Prelaunch Summaries; Spacecraft Launching; Prelaunch Tests; Prelaunch Problems

20000114494 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Crew Arrival
Jun. 22, 1992; In English; Videotape: 16 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-50, Commander Richard N. Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh are seen landing four T-38 aircraft at Kennedy Space Center for a terminal countdown and demonstration test.They are introduced by Richards and each makes a brief statement about his or her expectations for the upcoming Columbia mission.
CASI
Spacecrews; Space Transportation System; Prelaunch Summaries; Crew Procedures (Preflight)

20000114495 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Post–Launch News Conference
Sep. 12, 1992; In English; Videotape: 21 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148082; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young of the NASA Public Affairs Office introduces Brewster Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of the Kennedy Space Center. Shaw briefly describes the successful launch of STS-47 and Sieck gives an overview of the problems solved before launch. Shaw and Sieck also answer questions from the press.
CASI
Prelaunch Problems; Spacecraft Launching; Endeavour (Orbiter); Postlaunch Reports

20000114496 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Unedited Eureca Solar Array Deploy
Jan. 01, 1992; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148081; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the deployment of the solar panels on the EURECA satellite. The unfurling takes place against a backdrop of Earth and the Persian Gulf can be identified.
CASI
Deployment; EURECA (ESA); Solar Arrays

20000114497 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 TCDT Activities
Nov. 01, 1991; In English; Videotape: 11 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148080; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-44, Commander Frederick D. Gregory, Pilot Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco, Jr., and James S. Voss are seen landing T-38 aircraft at Kennedy Space Center in a terminal countdown and demonstration test (TCDT). Footage of the crew (including Payload Specialist Thomas J. Hennen) during various stages of training is shown, including training on the use of gas masks and other emergency equipment and suiting up preparatory to liftoff. A brief introduction of the crew is presented by Gregory.
CASI
Prelaunch Summaries; Crew Procedures (Preflight); Astronaut Training

20000114498 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/B. Duffy
Sep. 14, 2000; In English; Videotape: 28 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138909; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Commander Brian Duffy is shown being interviewed. He answers questions about his inspiration to become an astronaut, his training, and gives details on the mission, including overviews of the Z1 truss, the S-band antenna, the third pressurized meeting adaptor (PMA-3), the common berthing mechanism (CBM), and the spacewalks. He shares his thoughts on Russia's contributions to the International Space Station (ISS), the role of STS-92 in preparing the ISS for its first resident crew, and the importance of the ISS in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000114499 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/P. Wisoff
Sep. 14, 2000; In English; Videotape: 20 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Mission Specialist Peter J.K. Wisoff is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the contributions of the Russians, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000114500 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/P. Melroy
Sep. 14, 2000; In English; Videotape: 23 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138903; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-92 Pilot Pamela A. Melroy is shown being interviewed.She answers questions about her inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and the spacewalks. She shares her thoughts on the international collaboration of space exploration, Russia's contributions, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000114501 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activity Report/Flight Day 8 Highlights
Sep. 15, 2000; In English; Videotape: 20 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136107; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-106 Atlantis mission, the flight crew, Commander Terrence W. Wilcutt, Pilot Scott T. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov move into the second half of preparing the

International Space Station (ISS) for its first resident crew. Lu and Malenchenko are seen installing the power converters in the Zvezda module and components of the primary oxygen generation system. Mastracchio and Wilcutt moves supplies and logistics from the payload of Atlantis to the ISS. Wilcutt and Altman participate in several interviews and the crew wishes the Olympiads in Sydney good luck in their endeavors. Scenes also include external views of the ISS and images of Earth, including Sydney, Australia.
CASI
International Space Station; Space Transportation System; Service Module (Iss); Space Transportation System Flights; Spacecraft Maintenance

20000114879 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/M. Lopez–Alegria
Sep. 14, 2000; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138910; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Michael Lopez-Alegria is seen being interviewed. He answers questions about his inspiration to become an astronaut and gives details on the mission, including overviews of the Z1 truss, the third pressurized meeting adapter (PMA-3), and his spacewalks. He shares his thoughts on the international collaboration of space exploration, the role of STS-92 in preparing the International Space Station (ISS) for its first resident crew, and the importance of the ISS and the Space Shuttle in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000114880 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51 ACTS/TOS Payload Briefing
Jul. 06, 1993; In English; Videotape: 56 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152230; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Richard Gedney, Project Manager of Lewis Research Center, gives an overview on the Advanced Communications Technology Satellite (ACTS). Al Hughes, Manager of Upper Stage Projects at Marshall Space Flight Center, gives an overview of the Transfer Orbit Station (TOS). They also answer questions from the press.
CASI
Transfer Orbits; ACTS; Postlaunch Reports; Space Transportation System

20000114881 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 3 Highlights
Oct. 14, 2000; In English; Videotape: 17 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157387; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this third day of the STS-92 mission, the flight crew, Cmdr. Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur prepare for their dock with the International Space Station (ISS). External views of the docking process are shown with the Earth as a backdrop. The crew is seen opening the outermost hatch between Discovery and the ISS.
CASI
International Space Station; Discovery (Orbiter); Service Module (Iss)

20000116071 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview/L. Chiao
Sep. 14, 2000; In English; Videotape: 16 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138908; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-92 Mission Specialist Leroy Chiao is seen being interviewed. He answers questions about his inspiration to become an astronaut, his training, and gives details of the mission, including overviews of the Z1 truss, the third pressurized mating adapter (PMA-3), the common berthing mechanism (CBM), and the spacewalks. He shares his thoughts on the role of STS-92 in preparing the International Space Station (ISS) for the first resident crew, Russia's contribution to the ISS, and the importance of the ISS and Space Shuttle in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000116073 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 CPCG
Apr. 07, 1992; In English; Videotape: 20 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152223; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Marianna Long with the Center for Macromolecular Crystallography gives an overview of commercial protein crystal growth. She describes the applications of protein crystallography and explains why it is better to grow the crystals in space. She shows the results of experiments that have been performed on twelve previous Space Shuttle flights.
CASI
Crystallography; Protein Crystal Growth; Crystals; Spaceborne Experiments

20000116074 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Post Launch News Conference
Jul. 31, 1992; In English; Videotape: 18 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152229; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Dick Young introduces Brewster Shaw, Deputy Director of the Space Shuttle Program, and Robert B. Sieck, Launch Director of Kennedy Space Center. Shaw and Young give an overview of the launch of the spaceship Atlantis and answer questions from the press.
CASI
Atlantis (Orbiter); Prelaunch Summaries; Spacecraft Launching

20000116075 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Crew Training
Jul. 21, 1998; In English; Videotape: 25 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152242; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-46, Commander Loren J. Shriver, Pilot Andrew M. Allen, and Mission Specialists Franklin R. Chang-Diaz, Jeffrey A. Hoffman, Claude Nicollier, Marsha S. Ivins, and Franco Malerba are seen at various stages of their training. Footage includes firefighting training, helmet fit and T-38 checkout, bailout training in the weightless environment training facility, and remote manipulator training. The crew uses a computer simulation and the shuttle engineering simulator to practice using the tethered satellite system.
CASI
Spacecrews; Astronaut Training; Crew Procedures (Preflight)

20000116076 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 7 Highlights
Oct. 18, 2000; In English; Videotape: 22 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157373; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur continue work on the Z1 truss and the third pressurized mating adapter (PMA-3) on the International Space Station (ISS). Footage is seen of Chiao's and McArthur's spacewalk while they install two DC-to-DC converter units and attach a second tool storage box on the Z1 truss.
CASI
International Space Station; Service Module (Iss); Discovery (Orbiter); Spacecraft Maintenance

20000116608 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39/Breakfast, Suit–Up, Depart O&C, Launch, On–Orbit, and Landing
May 01, 1991; In English; Videotape: 60 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118015; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. Discovery, its payload (Space Test Payload 1), and Earth are shown from space while Discovery orbits.
CASI
Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Spacecraft Landing

20000118230 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Astronaut Interview in Space
Aug. 06, 1991; In English; Videotape: 24 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122919; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-43, Commander John E. Blaha, Pilot Michael A. Baker, and Mission Specialists Shannon W. Lucid, James C. Adamson, and G. David Low are interviewed. They answer questions about the International Space Station, their expectations for the flight, what it is like to be in space, observing Earth from their vantage point, how the day-to-day activities are progressing, and the legacy of their flight.
CASI
Astronauts; Spacecrews; Spaceborne Experiments

20000118231 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Atlantis/Breakfast & Suit–Up, Depart O&C, Ingress, Launch with Isolated Views, TDRS–E Deploy, and Landing with Isolated Views
Aug. 11, 1991; In English; Videotape: 61 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122918; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-43 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown from space and the deployment of the fifth Tracking and Data Relay Satellite (TDRS-E) is also shown.
CASI
Deployment; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight)

20000118232 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TDRS at the PCR/Cannister Doors Opening
Jun. 17, 1991; In English; Videotape: 9 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122917; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the cannister doors opening to reveal the Tracking and Data Relay Satellite (TDRS) for the Atlantis mission.
CASI
TDR Satellites; Atlantis (Orbiter)

20000118233 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–42 Discovery/Breakfast, Suit–Up, Depart O&C, Ingress, Launch, On–Orbit, and Landing
Jan. 30, 1992; In English; Videotape: 59 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000129914; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of various stages of the Discovery mission is shown, including shots of the crew at breakfast, getting suited up, and departing to board the orbiter. The launch is shown from many vantage points, as is the landing. The crew is shown performing various micro-gravity experiments while in orbit.
CASI
Spacecraft Launching; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Crew Procedures (Preflight); Spacecraft Landing

20000118234 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–42 Preflight Background Briefing Life Sciences (MSFC)
Jan. 10, 1992; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122909; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A panel of scientists give an overview of the experiments that are to take place on-board the STS-42 Discovery mission. Ronald J. White, International Microgravity Laboratory (IML) Program Scientist, gives a general description of why going into space with IML is so important. Robert Snyder, IML Mission Scientist, describes other aspects of the microgravity environment. Millard Reschke, Principal Investigator (PI) Microgravity Vestibular Investigation (MVI), explains what MVI is and the effects of space on the vestibular system. David Heathcote, PI for the Gravitational Plant Physiology Facility (GPPF), describes the GPPF's on-board experiment involving the effects of light and gravity on plants. Claude Brillouet, Program Scientist of the Biorack Facility, gives an overview of the Biorack equipment and experiment. Alan Mortimer, Chief Life Sciences for the Canadian Space Agency (CSA), describes the on-board experiments for the long- and short-term effects of microgravity on humans and biotechnology (cell separation techniques). The men then answer questions from the press and NASA centers.
CASI
Gravitational Effects; Gravitational Physiology; Life Sciences; Microgravity; Prelaunch Summaries; Spaceborne Experiments

20000118238 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Spacelab–J Landing at KSC SLF
Sep. 20, 1992; In English; Videotape: 32 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152214; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage is shown of Endeavour's approach and landing at Kennedy Space Center (KSC). The KSC crew then checks around the orbiter for toxic leaks before transport vehicles approach Endeavour.
CASI
Spacelab; Endeavour (Orbiter); Spacecraft Landing

20000118240 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Atlantis Main Engine #3 Computer Controller Removal and Replacement
Jul. 27, 1991; In English; Videotape: 4 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148102; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the removal of Atlantis' main engine number three. The new engine is then lifted into place.
CASI
Spacecraft Components; Atlantis (Orbiter); Replacing; Engines

20000118241 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45/Atlas–1 Post–Landing Science Briefing from MSFC
Apr. 02, 1992; In English; Videotape: 24 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148101; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dr. Torre gives an overview of the scientific goals of the Atlantis mission and the instruments on board, including Atlas-1. She summarizes the accomplishments of the mission and answers questions from the press.
CASI
Atlantis (Orbiter); Postmission Analysis (Spacecraft); Postflight Analysis

20000118242 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Mission Highlights Resource Tape
Jul. 01, 1992; In English; Videotape: 50 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148098; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Scenes of the mission highlights for the STS-46 Atlantis mission are shown. Footage shows the pre-launch activities (crew breakfast and suit-up) and launch of Atlantis. The European Retrievable Carrier's (EURECA) and the Tethered Satellite System's (TSS) pre-deploy and deployment are shown. Shots of the crew's activities and the Earth are shown, including footage taken over the Red Sea and central South America. Atlantis' landing is also shown.
CASI
Deployment; EURECA (ESA); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Tethered Satellites

20000118243 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47/Spacelab–J Installation into Payload Bay of Endeavour OPF HB–3
Jul. 14, 1992; In English; Videotape: 7 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148097; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the lowering of Spacelab-J into the payload of Endeavour in a clean room.
CASI
Installing; Spacelab; Endeavour (Orbiter)

20000118244 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45/Atlas–1 TCDT Activities
Feb. 01, 1992; In English; Videotape: 21 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148091; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows three T-38 aircraft coming in for landing at Kennedy Space Center (KSC) and jetting on the runway. The crew of Atlantis gets out of the cockpits and are introduced by Commander Charles F. Bolden to the press. The crew is also shown learning about the Atlas-01 module before suiting up to board Atlantis.
CASI
T-38 Aircraft; Crew Procedures (Preflight); Astronaut Training; Atlantis (Orbiter)

20000118245 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46/Eureca Guidance Installation/Astronaut Inspection
Dec. 06, 1991; In English; Videotape: 13 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148090; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows EURECA-II being lifted and maneuvered into place. The crew of STS-46 Atlantis then inspects the module.
CASI
Installing; EURECA (ESA); Atlantis (Orbiter)

20000118252 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Training
Nov. 09, 2000; In English; Videotape: 12 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000167004; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-97, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are shown during various stages of their training. Footage shows them during a food tasting, during emergency bailout training, spacewalk training, and de-orbit preparation.
CASI
Spacecrews; Bailout; Astronaut Training; Crew Procedures (Preflight)

20000118253 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Activity Report/Flight Day 1 Highlights
Oct. 12, 2000; In English; Videotape: 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157388; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-92 mission, the flight crew, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur are shown during their pre-launch activities. Footage shows the crew at breakfast, getting suited up, leaving for the launch pad, and boarding Discovery. The launch is also shown.
CASI
Spacecraft Launching; Crew Procedures (Preflight); Discovery (Orbiter)

20000118255 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45 Atlas–1/ Breakfast & Suit–Up, Depart O&C, Ingress, Launch with Isolated Views, On–Orbit Activities, and Landing with Isolated Views
Apr. 02, 1992; In English; Videotape: 61 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148084; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-45 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. Atlantis is shown orbiting Earth and the crew gives an overview of the experiments that will take place during the mission.
CASI
Launching; Atlantis (Orbiter); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Spaceborne Experiments

20000118256 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–42 Discovery Rollout to Pad A
Dec. 19, 1991; In English; Videotape: 2 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Discovery onto pad A. Different close-up and panoramic shots of the orbiter are also shown.
CASI
Discovery (Orbiter); Prelaunch Tests

20000118257 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Astronaut Arrival for TCDT
Jul. 01, 1991; In English; Videotape: 3 min. 8 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148071; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of two T-38 aircrafts jetting on the runway after landing. The crew of STS-43 is shown getting out of the cockpits and boarding a bus to leave the runway.
CASI
Astronauts; Crew Procedures (Preflight); T-38 Aircraft

20000118258 NASA Johnson Space Center, Houston, TX USA
STS–92 Crew Interview – Wakata
Sep. 14, 2000; In English; Videotape: 38 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000138905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-92 Mission Specialist Koichi Wakata is interviewed. He answers questions about his inspiration to become an astronaut, his training, and gives details on the mission, including overviews of the ZI truss, the S-band antenna, the third pressurized mating adapter (PMA-3), the common berthing mechanism, and his part in controlling the robotic arm during the spacewalks. He shares his thoughts on Russia's contribution to the International Space Station (ISS), the

role of STS-92 in preparing the ISS for its first resident crew, and the importance of ISS in the future.
CASI
International Space Station; Astronauts; Prelaunch Summaries

20000118259 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 9 Highlights
Sep. 16, 2000; In English; Videotape: 19 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136105; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are shown transferring supplies and equipment. Equipment includes an exercise treadmill, for use by the first resident crew. Altman, Lu, Burbank and Morukov are seen installing the treadmill in the Zvezda module. Footage also shows Lu and Altman participating in a telecommunication interview. A beautiful night shot of the International Space Station (ISS) and Atlantis complex above the Earth is also shown.
CASI
Orbital Assembly; Assembling; Construction; Spacecraft Equipment; Treadmills

20000118260 NASA Johnson Space Center, Houston, TX USA
STS–106 Crew Activities Report/Flight Day 10 Highlights
Sep. 17, 2000; In English; Videotape: 18 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000136104; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-106 Atlantis mission, the flight crew, Commander Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are shown preparing for their departure from the International Space Station (ISS). Crewmembers are shown closing the hatches of the Zarya, Unity and Zvezda modules. They are also shown packing up trash and packing materials into the Russian Progress ship.
CASI
Spacecrews; Crew Procedures (Inflight); Spacecraft Docking; Closing; Hatches

20000118261 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TCDT
Jul. 03, 1990; In English; Videotape: 62 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000122920; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage is seen of the simulated ignition of Atlantis' main engines up until about 30 seconds before ignition. The crew's activities of the days before are seen, including emerging from two T-38 aircraft cockpits, suiting up, and leaving for the pad. The Tracking and Data Relay Satellite (TDRS) is seen close-up in the test cell in the Vertical Processing Facility.
CASI
Ignition; Prelaunch Tests; Spacecraft Launching; Crew Procedures (Preflight)

20000118262 NASA Kennedy Space Center, Lompoc, CA USA
STS–47/Vice President Dan Quayle's Visit to KSC for Launch
Sep. 12, 1992; In English; Videotape: 45 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118116; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the arrival of Vice President Dan Quayle to the Kennedy Space Center (KSC) for the launch of Endeavour. He is shown greeting the crowd on the runway and later, in the control room, thanking the KSC employees for all their hard work. He also wishes the Endeavour crew good luck shortly before the launch.
CASI
Integrated Mission Control Center; Personnel; Ground Based Control

20000118263 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–40 Temperature Probe and MDM
May 22, 1991; In English; Videotape: 2 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000118114; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows close-up shots of the temperature probe for the Columbia orbiter.
CASI
Columbia (Orbiter); Temperature Probes

20000118264 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–38 Rollback from Pad A to VAB
Aug. 09, 1990; In English; Videotape: 13 min. 46 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000113523; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollback of Atlantis, travelling from pad A to the Vehicle Assembly Building (VAB).
CASI
Atlantis (Orbiter); Space Shuttles

20000118265 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–38 Atlantis Crew Arrival
Nov. 13, 1990; In English; Videotape: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113531; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Atlantis crew maneuvering and landing five T-38 aircrafts at Kennedy Space Center and greeting the crowd on the runway.
CASI
Atlantis (Orbiter); Crew Procedures (Preflight); T-38 Aircraft

20000118266 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–38 Rollout to Pad A
Jun. 18, 1990; In English; Videotape: 5 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000113528; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage is shown of the slow rollout of Atlantis on pad A. Different close-up and panoramic shots of the orbiter are shown against a backdrop of the sunset.
CASI
Atlantis (Orbiter); Prelaunch Tests

20000119956 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Interviews: Michael J. Bloomfield
Nov. 01, 2000; In English; Videotape: 38 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000165429; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Pilot Michael J. Bloomfield is shown. The interview addresses many different questions including why Bloomfield became interested in the space program, the events and people that influence him and ultimately led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Bloomfield briefly discusses his responsibilities during the much-anticipated docking as well as during the scheduled space-walks.
CASI
Crew Procedures (Preflight); Flight Crews; Pilots (Personnel); Talking

20000119957 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Interviews: Brent W. Jett Jr.
Nov. 01, 2000; In English; Videotape: 45 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000165434; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Live footage of a preflight interview with Commander Brent W. Jett Jr. is shown. The interview addresses many different questions including why Jett became interested in the space program, the events that led to his interest, and his vigorous training in the astronaut program. Other interesting information that this one-on-one interview discusses are the main goals of the STS-97 mission, its scheduled docking with the new International Space Station (ISS), and its delivery of the first set of U.S.-provided solar arrays, batteries, and radiators. Jett mentions his responsibilities during the much-anticipated docking as well as during the scheduled space-walks.

CASI

Crew Procedures (Preflight); Flight Crews; Talking

20000121336 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–38: Landing at Kennedy Space Center/Crew Exit

Nov. 20, 1990; In English; VIDEOTAPE: 18 min., 48 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000113530; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage of the STS-38 touchdown at Kennedy Space Center is shown. The crew exits the spacecraft and is greeted by NASA personnel. The five member crew consists of Commander Richard Covey, Pilot Frank L. Culbertson. Mission Specialists: Robert C. Springer, Carl J. Meade, and Charles D. Gemar.

CASI

Space Transportation System; Spacecraft Landing; Touchdown; Spacecrews

20010001469 NASA Johnson Space Center, Houston, TX USA

STS–92 Crew Training

Sep. 28, 2000; In English; Videotape: 43 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000148106; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-92, Commander Brian Duffy, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur during various parts of their training. Clips are seen of the Shuttle bailout training, Shuttle arm and extravehicular activity (EVA) training at the Virtual Reality Lab, EVA training at the Neutral Buoyancy Lab, Shuttle operations training, EVA prep and post training in the Full Fuselage Trainer, ascent and post insertion training in the Guidance Navigation Simulator, and Mission Specialist Wakata in the Shuttle Engineering Dome and training on the Manipulator Development Facility.

CASI

Training Devices; Spacecrews; Astronaut Training; Crew Procedures (Preflight)

20010001515 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Interview: Marc Garneau, MS2

Nov. 01, 2000; In English; Videotape: 48 min. 24 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000165432; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Marc Garneau is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, its payload, the rendezvous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

20010001516 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Interview: Joseph Tanner, MS1

Nov. 01, 2000; In English; Videotape: 43 min. 37 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000165431; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Joseph Tanner is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, its payload, the rendez-vous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

International Space Station; Astronauts; Prelaunch Summaries

20010001517 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Interview: Carlos Noriega, MS3

Nov. 03, 2000; In English; Videotape: 45 min. 53 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000165430; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-97 Mission Specialist Carlos Noriega is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, its payload, the rendez-vous with the International Space Station (ISS), and what it will be like to work knowing there is already a crew on board the ISS.

CASI

Prelaunch Summaries; International Space Station; Astronauts

20010001525 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Activity Report/Flight Day 3 Highlights

Dec. 03, 2000; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000177365; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. Footage shows the docking of Endeavour with the ISS and the solar array truss on the robotic arm against a backdrop of Earth.

CASI

Endeavour (Orbiter); International Space Station; Solar Arrays; Spacecraft Docking

20010001526 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Activity Report/Flight Day 4 Highlights

Dec. 04, 2000; In English; Videotape: 29 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000177364; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-97 Endeavour mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) as Noriega and Tanner are seen during their spacewalk. The astronauts help Jett guide the P6 solar array truss into place in the ISS. Footage shows the deployment of the ISS's solar wings.

CASI

International Space Station; Deployment; Solar Arrays; Crew Procedures (Inflight); Installing; Extravehicular Activity

20010001527 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Activity Report/Flight Day 1 Highlights

Dec. 04, 2000; In English; Videotape: 19 min. 16 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000177363; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen at breakfast and while suiting up. The launch of the Endeavour Orbiter is shown.

CASI

Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010001528 NASA Johnson Space Center, Houston, TX USA

STS–97 Crew Activity Report/Flight Day 2 Highlights

Dec. 02, 2000; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000177362; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau continue to approach the International Space Station (ISS) in the Endeavour Orbiter. External views of Endeavour are seen against a backdrop of Earth, and the camera installed on the robotic arm pans of the payload bay. Tanner and Noriega are shown in the airlock inspecting their spacesuits.
CASI
Endeavour (Orbiter); Air Locks; Payloads; Crew Procedures (Inflight)

20010001529 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 5 Highlights
Dec. 05, 2000; In English; Videotape: 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000177361; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fifth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen answering questions about the mission and accomplishments thus far. Footage shows the International Space Station's (ISS) solar wing being deployed. Exterior views of the ISS are shown against a backdrop of Earth.
CASI
International Space Station; Deployment; Crew Procedures (Inflight); Solar Cells

20010001553 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 10 Highlights
Dec. 10, 2000; In English; Videotape: 23 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179199; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this tenth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are seen saying good-bye to the International Space Station's (ISS's) resident crew (Commander Bill Shepherd, Pilot Yuri Gidzenko and Flight Engineer Sergei Krikalev) and sealing the hatches between the Endeavour Orbiter and the ISS. Footage shows the ISS against a rotating Earth as it passes over China.
CASI
International Space Station; Spacecrews; Crew Procedures (Inflight)

20010001554 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 7 Highlights
Dec. 06, 2000; In English; Videotape: 20 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this seventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau answer questions about the mission and their accomplishments. Footage shows Tanner and Noriega in the airlock preparing for the next day's spacewalk.
CASI
International Space Station; Crew Procedures (Inflight)

20010001555 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 6 Highlights
Dec. 06, 2000; In English; Videotape: 23 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179197; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remained docked with the International Space Station (ISS) on the Endeavour Orbiter. Tanner and Noriega are seeing during their spacewalks, studying the solar wing and moving the S-band antenna assembly.
CASI
Extravehicular Activity; International Space Station

20010001556 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 9 Highlights
Dec. 08, 2000; In English; Videotape: 22 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179196; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this ninth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau are shown meeting the resident International Space Station (ISS) crew (Commander Bill Shepherd and Cosmonauts Yuri Gidzenko and Sergei Krikalev) for the first time. The two crews answer questions about the ISS and future missions, and what it is like living on the ISS.
CASI
International Space Station; Spacecrews

20010001557 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 11 Highlights
Dec. 11, 2000; In English; Videotape: 14 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179194; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this eleventh day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) on board the Endeavour Orbiter. Jett and Bloomfield are seen performing a check of the shuttle flight controls in preparation for tomorrow's landing. Jett, Noriega, and Tanner answer questions about the mission and the goals fulfilled. Footage shows the Earth at night as the camera on Endeavour sweeps the Mediterranean coastline, outlined by city lights, showing Spanish/French border, the French Riviera, the Alps, Italy, Switzerland, and the German/Austrian border.
CASI
International Space Station; Crew Procedures (Inflight)

20010002014 NASA Johnson Space Center, Houston, TX USA
STS–97 Crew Activity Report/Flight Day 8 Highlights
Dec. 07, 2000; In English; Videotape: 23 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000179195; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this eighth day of the STS-97 mission, Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau remain docked with the International Space Station (ISS) on the Endeavour Orbiter. Tanner and Noriega are seeing preparing for their spacewalks. Footage shows them removing debris from the outer shield of the Unity Module during their spacewalks.
CASI
Extravehicular Activity; International Space Station; Space Debris

20010010950 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 1 of 2)
Apr. 25, 1991; In English; Videotape: 62 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152226; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the rollout ceremonies for Endeavour, including the display of colors, invocation, and speeches by Sam Iacobellis, Executive Vice-President and CEO of Rockwell International, Richard H. Truly, Administrator for NASA, and Senator Jake Garn (Utah). The tape ends during the speech by Senator Garn and continues on part two (Input Processing ID 2000152220, Document ID 20010010951). Endeavour rolls out to music provided by the band on-site.
CASI
Endeavour (Orbiter); Prelaunch Summaries

20010010951 NASA Kennedy Space Center, Cocoa Beach, FL USA
Rollout of Endeavour at Palmdale, California (Part 2 of 2)
Apr. 25, 1991; In English; Videotape: 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152220; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

A continuation of the video 'Rollout of Endeavour at Palmdale, California (Part 1 of 2)' (Input Processing ID 2000152226, Document ID 20010010950), Senator Jake Garn (Utah) concludes his speech during the rollout ceremonies for the Endeavour Orbiter. Congressman Tom Lewis (Florida) and Dr. Robert Duce of the University of Rhode Island also give speeches. Commander Daniel C. Brandenstein introduces the crew of STS-49, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick, and gives an overview of the Endeavour Orbiter and the mission objectives.

CASI

Endeavour (Orbiter); Prelaunch Summaries

20010011085 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–56 Atlas–2/Breakfast, Suit–up, Depart O&C, Launch, On Orbit, Landing with ISOS

Apr. 17, 1993; In English; Videotape: 61min. 56 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001568; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-56 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. The deployment of Spartan-201 is seen against a backdrop of northeast Africa and Egypt. Kentucky is seen at night, as are New York City, Atlanta, and Philadelphia.

CASI

Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Crew Procedures (Inflight); Discovery (Orbiter); Spartan Satellites

20010011086 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–55 Crew Arrival

Mar. 17, 1993; In English; Videotape: 6 min. 46 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001577; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-55, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are introduced by Commander Steven R. Nagel, who comments on the mission and the liftoff delay. Each of the crewmembers gives a brief statement about their role and expectations for the mission.

CASI

Spacecrews; Crew Procedures (Preflight); Prelaunch Problems

20010011122 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–56 Astronaut Crew Arrival at KSC for Launch

Apr. 02, 1993; In English; Videotape: 11 min. 56 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001567; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa, is seen arriving and disembarking from T-38 aircraft. Commander Cameron introduces the crew and each member gives a brief statement about the mission.

CASI

Spacecrews; Crew Procedures (Preflight); Prelaunch Summaries

20010011123 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–56 Atlas–2/TCDT Activities

Mar. 18, 1993; In English; Videotape: 22 min. 56 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001571; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen landing the T-38 aircraft as part of the terminal countdown and demonstration test (TCDT). The crew is introduced by Commander Cameron and each member gives a brief statement about the upcoming mission and answers questions from the press. The crew is seen during various stages of training, including emergency egress training.

CASI

Crew Procedures (Preflight); Astronaut Training

20010011124 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–55 Mission Overview, Preflight Briefing from JSC

Feb. 03, 1992; In English; Videotape: 39 min. 9 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001574; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Gary Cohen, Lead Flight Director, gives an overview of the STS-55 Columbia mission activities, objectives, payload, crew, and Spacelab operations. Dr. H. Dodeck, D-2 Mission Manager, discusses Germany's contributions to the mission and describes the German aeronautics facilities. They then answer questions from the press.

CASI

Columbia (Orbiter); Prelaunch Summaries

20010011125 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–56 Launch Attempt Press Conference

Apr. 06, 1993; In English; Videotape: 7 min. 9 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001578; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Dick Young introduces Dr. Jack Kaye, Program Scientist for NASA, Brewster Shaw, Deputy Program Manager Space Shuttle, and Robert Sieck, Kennedy Space Center (KSC) Launch Director in a press conference regarding the failed launch attempt of the Discovery Orbiter. The hardware problem causing the failure is discussed, and questions from the press are answered.

CASI

Discovery (Orbiter); Failure; Spacecraft Launching; Prelaunch Problems

20010011126 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–56 Preflight Briefs/Mission Overview from MSFC

Mar. 19, 1993; In English; Videotape: 46 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001001579; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Chuck Shaw, Lead Flight Director, and Teresa Vanhooser, Mission Manager, each give an overview of of the STS-56 Discovery mission's objectives, activities, payloads (ATLAS-2, SPARTAN-201, etc.), and experiments. They then answer questions from the press.

CASI

Prelaunch Summaries; Spaceborne Experiments

20010011131 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–41 Ulysses Compiled Flow Tape

Oct. 01, 1990; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound (no narration)

Report No.(s): NONP–NASA–VT–2000118124; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the unloading and installation of the Ulysses spacecraft into the payload bay of the Discovery Orbiter. Discovery is then seen during the rollout to the launch site.

CASI

Discovery (Orbiter); Ulysses Mission; Installing

20010011174 NASA Kennedy Space Center, Cocoa Beach, FL USA

STS–51 Crew Briefing

Jul. 06, 1993; In English; Videotape: 62 min. 32 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000152236; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Frank L. Culbertson, Jr. introduces the crew of STS-51, Pilot William F. Readdy, and Mission Specialists James H. Newman Ph.D., Daniel W. Bursch, and Carl E. Walz, in a preflight conference. Each crew member gives an

overview of the mission activities, objectives, and payload (ACTS-TOS, ORFEUS-SPAS, etc.), and answers questions from the press.
CASI
Spacecrews; Crew Procedures (Preflight); Prelaunch Summaries

20010011175 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 TSS–1
Feb. 02, 1993; In English; Videotape: 4 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152235; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the Tethered Satellite System (TSS) is given. Simulations show the deployment and operation of TSS from the Atlantis Orbiter. The experimental applications and objectives are explained.
CASI
Atlantis (Orbiter); Deployment; Simulation; Tethered Satellites

20010011176 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51 Mission Overview
Jul. 06, 1993; In English; Videotape: 32 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152231; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Robert Castle, Lead Flight Director, gives an overview of the STS-51 Discovery mission, including details on the Space Shuttle, the payloads (ACTS-TOS, ORFEUS-SPAS, etc.), the crew, mission objectives, and the spacewalks to be performed. Simulations of the ACT-TS deployment and the ORPFEUS-SPAS operations are shown.
CASI
Deployment; Discovery (Orbiter); Prelaunch Summaries

20010011177 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour Landing
May 16, 1992; In English; Videotape: 51 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152227; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows the landing of the Endeavour Orbiter from various vantage points, including the deployment of the drag chute, which is used for the first time. The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick, are seen exiting the Orbiter. Footage of the landing taken with the infrared camera is seen.
CASI
Endeavour (Orbiter); Drag Chutes; Spacecraft Landing

20010011178 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Removal of Engine 2 at Pad B
Apr. 14, 1992; In English; Videotape: 5 min. 35 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000152225; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the removal of Engine 2 from the the Endeavour Orbiter at Pad B.
CASI
Endeavour (Orbiter); Spacecraft Equipment; Spacecraft Power Supplies; Removal

20010011179 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Compiled Video for Editors
May 01, 1992; In English; Videotape: 40 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152222; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Compiled footage includes shots taken of the rollout of Endeavour at Palmdale, CA, the departure and arrival of Endeavour for Kennedy Space Center (KSC), main engine three installation, solid rocket booster (SRB) segment lift and stack at the Vehicle Assembly Building (VAB), external tank mate to SRB, Intelsat rotation at the Vertical Processing Facility (VPF), Endeavour rollover from the Orbiter Processing Facility (OPF) to VAB, rollout to Pad B, and the flight readiness firing (FRF). The crew is seen during the Terminal Countdown and Demonstration Test (TCDT) training activities, at breakfast, suiting up, and exiting the Operations and Checkout (O&C) Building.
CASI
Endeavour (Orbiter); Checkout; Prelaunch Tests; Crew Procedures (Preflight)

20010011180 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour Overview
Apr. 07, 1992; In English; Videotape: 41 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152221; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Daniel Germany, Manager, Orbiter and GFE Projects, Johnson Flight Center, gives an overview of the STS-49 Endeavour mission. He discusses Endeavour's successful firing test, the upcoming launch, and the Endeavour Orbiter's recent enhancements. He then answers questions from the press.
CASI
Endeavour (Orbiter); Prelaunch Summaries

20010011186 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Astronaut Crew at Pad B for TCDT, Emergency Egress Training, and Photo Opportunity
Aug. 26, 1992; In English; Videotape: 37 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152218; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apt, and Mae C. Jemison, and Payload Specialist Mamoru Mohri are seen during emergency egress training. Then Commander Gibson introduces the members of the crew and they each give a brief statement about the mission and answer questions from the press.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

20010011187 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Crew Briefing
May 26, 1992; In English; Videotape: 48 min. 4 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000152217; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Commander Richard N. Richards introduces the crew of STS-50, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh, in a preflight conference. Each crew member gives an overview of the mission's activities, objectives, and payload (USML-01), and answers questions from the press.
CASI
Spacecrews; Crew Procedures (Preflight); Prelaunch Summaries

20010011188 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Breakfast/Suit–up/Depart O&C/Launch/On–Orbit/Landing with ISOS
May 01, 1992; In English; Videotape: 58 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152212; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-46 Endeavour launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities are shown, such as the Intelsat rescue and deployment on flight day 7, and some of the Space Station assembly techniques.
CASI
Endeavour (Orbiter); Intelsat Satellites; Spacecraft Launching; Rescue Operations; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010011189 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Eureca/TSS/Compiled Tape for Editors
Jul. 17, 1992; In English; Videotape: 58 min. 26 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148094; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Tethered Satellite System (TSS) lift in the Operations and Checkout (O&C) Building, TSS move onto satellite assembly section, the EURECA arrival and offload at Kennedy Space Center (KSC), EURECA instrument and tracker installation, the solar panel battery installation, and EURECA high-gain antenna deploy. The astronaut crew is seen at the O&C building for the TSS site test, and Atlantis rolls out to Pad B.
CASI
EURECA (ESA); Tethered Satellites; Atlantis (Orbiter)

20010011190 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 Crew Briefing
Jun. 26, 1991; In English; Videotape: 44 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148092; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander John E. Blaha introduces the crew of STS-43, Pilot Michael A. Baker, and Mission Specialists Shannon W. Lucid, James C. Adamson, and G. David Low, in a preflight conference. Each crew member gives an overview of the mission objectives and experiments and answers questions from the press.
CASI
Spacecrews; Crew Procedures (Preflight); Spaceborne Experiments; Prelaunch Summaries

20010011191 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Standard Mission Handout Tape
Aug. 08, 1992; In English; Videotape: 61 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148088; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage of various stages of the STS-46 Atlantis launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is shown from many vantage points, as is the landing. The EURECA deployment and the Tethered Satellite System (TSS-1) deployment and retrieval are seen.
CASI
EURECA (ESA); Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Atlantis (Orbiter)

20010011192 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Astronaut Crew Briefing
Oct. 28, 1991; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148085; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Commander Frederick D. Gregory introduces the crew of STS-44, Pilot Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco, Jr., and James S. Voss, and Payload Specialists Thomas J. Hennen, in a preflight conference. Each crew member gives an overview of the mission objectives, experiments, and his role in the mission. They then answer questions from the press.
CASI
Crew Procedures (Preflight); Prelaunch Summaries

20010011193 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–43 TDRS–E Sharp Edge Inspection at VPF
Jul. 22, 1991; In English; Videotape: 2 min. 5 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2000148077; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the inspection of the Tracking and Data Relay Satellite (TDRS) at the Vertical Processing Facility (VPF).
CASI
TDR Satellites; Inspection

20010011198 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–56 Atlas–2/Spartan O&C and Hangar AO
Feb. 01, 1993; In English; Videotape: 6 min. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001001580; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Close-up shots are seen of Atlas-2 and Spartan-201, the payload for the Discovery Orbiter.
CASI
Spartan Satellites; Payloads

20010011199 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–56/TCDT O&C Walkout
Mar. 18, 1993; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001581; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-56, Commander Kenneth D. Cameron, Pilot Stephen S. Oswald, and Mission Specialists C. Michael Foale Ph.D., Kenneth D. Cockrell, and Ellen Ochoa are seen exiting the Operations and Checkout (O&C) Building on their way to the bus that will take them to the launch pad.
CASI
Crew Procedures (Preflight); Spacecrews; Space Transportation System Flights

20010011200 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Columbia Rollover from OPF to VAB
Feb. 02, 1993; In English; Videotape: 8 min. 9 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001001582; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Columbia Orbiter is seen during the rollover from the Orbiter Processing Facility (OPF) to the Vehicle Assembly Building (VAB).
CASI
Columbia (Orbiter); Transferring

20010011201 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–56 Landing Replays at KSC
Apr. 17, 1993; In English; Videotape: 46 min. 50 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001001584; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The landing of the Discovery Orbiter at Kennedy Space Center (KSC) is shown from many different vantage points, including footage of the landing taken with infrared cameras.
CASI
Discovery (Orbiter); Spacecraft Landing

20010011202 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Emergency Egress Training/Photo Opportunity at Pad A
Feb. 11, 1993; In English; Videotape: 22 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001585; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-55, Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel are seen during emergency egress training. Then Commander Nagel introduces the members of the crew and they each give a brief statement about the mission and answer questions from the press.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

20010011203 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Downline Waste Water Tank Problem
Apr. 27, 1993; In English; Videotape: 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001586; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Onboard, in-flight close-up shots show the buckling of the waste water tank. Details are given on the problem.
CASI
Buckling; Tanks (Containers); Spacecraft Equipment

20010011853 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–92 Z–1 Truss Overview
Sep. 26, 2000; In English; Videotape: 45 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007189; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Robert Galvez, Launch Package Manager, gives an overview of the launch package of the STS-92 Discovery mission (Z-1 Truss, PMA-3, DDCU, etc.), and gives details on the configuration and equipment positioning on the Z-1 Truss. Simulations show the installation of the DDCU (DC to DC power converter) and the S-band Antenna.
CASI
Simulation; Trusses; Prelaunch Summaries; Spacecraft Equipment

20010011854 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–97 Countdown Status
Nov. 29, 2000; In English; Videotape: 17 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006468; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Priselac, Shuttle Weather Officer. Mr. Altemus describes the successful countdown thus far, and some of the prelaunch activities. Mr. Flowers gives an overview of the P-6 Truss and its role on the International Space Station (ISS). Mr. Priselac gives a forecast for good launching weather. The men then answer questions from the press.
CASI
Countdown; Weather Forecasting; Trusses; Spacecraft Launching

20010011855 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–97 Countdown Status
Nov. 28, 2000; In English; Videotape: 17 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006010; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, David Flowers, P-6 Truss Integration Engineer, and Ed Priselac, Shuttle Weather Officer. Mr. Spaulding discusses the Shuttle status, successful countdown, and preflight preparations. Mr. Priselac describes a good weather forecast for the upcoming STS-97 Endeavour launch. The men then answer questions from the press.
CASI
Countdown; Prelaunch Summaries; Prelaunch Tests; Weather Forecasting; Spacecraft Launching

20010011856 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–97 ISS Science Payloads Briefing
Nov. 13, 2000; In English; Videotape: 21 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006009; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

John Un, International Space Station (ISS) Lead Increment Scientist, gives an overview of the STS-97 Endeavour mission payload (PV Module P6) and Expedition 1 crew. He describes the research and experimentation to take place on the ISS in the following fields: (1) Life Sciences, (2) Microgravity Research, (3) Commercial, (4) Space Sciences, and (5) Earth Sciences. Observations of Earth include images of the Aral Sea in central Asia and fires in Mongolia. Mr. Un then answers questions from the press.
CASI
Spaceborne Experiments; Research and Development; International Space Station; Prelaunch Summaries

20010011857 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–92 Extravehicular Activity Overview
Sep. 26, 2000; In English; Videotape: 46 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006008; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Daryl Schuck, STS-92 Lead Extravehicular Activity (EVA) Officer, gives an overview of the four EVAs scheduled for the STS-92 mission. He discusses the construction phase of the International Space Station (ISS) and the equipment to be installed onto the ISS, such as the Z-1 Truss, PMA-3 (Third Pressurized Mating Adapter), S-Band Antenna, and the DC to DC Power Converter. Mr. Schuck describes the challenges of the mission, and the activities and objectives of the spacewalks. He then answers questions from the press.
CASI
Extravehicular Activity; Crew Procedures (Inflight); International Space Station; Prelaunch Summaries

20010011858 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–97 Prelaunch Press Conference
Nov. 29, 2000; In English; Videotape: 43 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Bruce Buckingham, NASA Public Affairs, introduces Ron Dittemore, NASA Shuttle Program Manager, Bob Cabana, International Space Station (ISS) Manager, International Operations, NASA, Michael Vachon, Canadian Space Agency, David King, NASA Director of Shuttle Processing, and Lieutenant Ken Ferland, 45th Weather Squadron, US Air Force. They each give a brief statement on the STS-97 Endeavour mission, launch, and weather status and answer questions from the press.
CASI
Spacecraft Launching; Weather Forecasting; Prelaunch Summaries

20010011860 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Training
Dec. 26, 2000; In English; Videotape: 10 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001004337; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the crew of STS-98 during various phases of their training, including an undocking simulation in the Fixed Bases Shuttle Mission Simulator (SMS), bailout training, and extravehicular activity (EVA) training at the NBL.
CASI
Astronaut Training; Crew Procedures (Preflight); Bailout; Extravehicular Activity

20010011861 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 Columbia/EDO Plate Installation
19920316; In English; Videotape: 3 min. 6 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001001583; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the installation of the Extended Duration Orbiter (EDO) plate onto the Columbia Orbiter at the Orbiter Processing Facility (OPF).
CASI
Columbia (Orbiter); Installing

20010011862 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Crew Briefing, Part 2 of 2
Feb. 04, 1993; In English; Videotape: 24 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001575; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of 'STS-55 Crew Briefing, Part 1 of 2', (internal processing ID 2001011306), the crew of STS-55,Commander Steven R. Nagel, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans

Schlegel, continue to answer questions from the press about the upcoming Columbia mission.
CASI
Prelaunch Summaries; Columbia (Orbiter)

20010011949 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Countdown Status Briefing
Sep. 07, 2000; In English; Videotape: 16 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152216; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higginbotham, KSC Payload Manager, and Ed Priselac, Shuttle Weather Officer. Mr. Spaulding discusses the successful countdown thus far and some of the prelaunch activities. Mr. Higginbotham describes the stow operations and possible changes in the payload configuration. Mr. Priselac forecasts good weather for the upcoming launch. The men then answer questions from the press.
CASI
Countdown; Weather Forecasting; Prelaunch Summaries

20010011950 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Prelaunch Activities, O&C and LCC Firing Room
Nov. 24, 1991; In English; Videotape: 6 min. 55 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000148100; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew of STS-44, Commander Frederick D. Gregory, Pilot Terence T. Henricks, Mission Specialists F. Story Musgrave, Mario Runco, Jr., and James S. Voss, and Payload Specialists Thomas J. Hennen, is seen at breakfast and suiting up before the launch of Atlantis. Footage shows the LCC Firing room shortly before launch, and the liftoff of Atlantis is seen.
CASI
Spacecraft Launching; Crew Procedures (Preflight); Atlantis (Orbiter)

20010011953 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Crew Briefing
Aug. 11, 1992; In English; Videotape: 32 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001011307; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apt, and Mae C. Jemison, and Payload Specialist Mamoru Mohri answer questions from the press about the upcoming Endeavour mission and the crew's personal views of the mission.
CASI
Spacecrews; Prelaunch Summaries

20010011954 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Crew Briefing, Part 1 of 2
Feb. 04, 1993; In English; Videotape: 62 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001011306; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Commander Steven R. Nagel introduces the crew of STS-55, Pilot Terence T. Henricks, Mission Specialists Jerry L. Ross, Charles J. Precourt, and Dr. Bernard A. Harris Jr., and Payload Specialists Dr. Ulrich Walter and Hans Schlegel. Each crew member gives an overview of the mission objectives, activities, spaceborne experiments, payload (Spacelab-D2, SAREX-II), and his role in the mission. They then answer questions from the press. The video ends during the questions and continues on 'STS-55 Crew Briefing, Part 2 of 2' (internal processing ID 2001001575).
CASI
Payloads; Spaceborne Experiments; Prelaunch Summaries

20010011955 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–41 Activity/Rollover Preparations/Lift Preparations in VAB/Mated
Aug. 28, 1990; In English; Videotape: 8 min. 54 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001011305; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the preparations for the Discovery Orbiter rollover to the Vehicle Assembly Building (VAB), the lift from the transport, and the mating of Discovery to the External Tank (ET).
CASI
Discovery (Orbiter); External Tanks

20010012036 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–92 Preflight Briefings Video Feed and International Space Station Overview
Sep. 26, 2000; In English; Videotape: 71 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007190; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The first half of this video is a collection of video feeds from various preflight conferences and simulations show the payload bay and payload equipment. The International Space Station's (ISS) structure is seen, as are close-up shots of the Z-1 truss. Footage shows extravehicular activity (EVA) underwater training. The second half of the video is a preflight conference on the mission objectives concerning the ISS. Tommy Halloway, Manager, ISS Program, and Robert Cabana, ISS Manager for International Operations, discuss the STS-92 mission in terms of the ISS and the role of ISS in the future. Mr. Cabana gives the status of present and future ISS hardware. The men then answer questions from the press.
CASI
International Space Station; Payloads; Prelaunch Summaries

20010012037 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–92 Crew News Conference
Sep. 26, 2000; In English; Videotape: 56 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007191; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Brian Duffy introduces the crew of STS-92, Pilot Pamela A. Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter J.K. Wisoff, Michael E. Lopez-Alegria, and William S. McArthur. They discuss the activities for each flight day and give details on the payload (PMA-3, Z-1 truss, etc.). They then answer questions from the press.
CASI
Payloads; Spacecrews; Prelaunch Summaries

20010012056 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–39 Activities in Orbiter Bay
Jan. 17, 1991; In English; Videotape: 3 min. 5 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000118022; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows people working in the payload of the Discovery Orbiter in the Orbiter Bay.
CASI
Discovery (Orbiter); Payloads

20010012057 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Special Events Resource Tape, Part 2 of 2
Nov. 17, 1992; In English; In French; Videotape: 45 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148074; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-46 Special Events Resource Tape, Part 1 of 2', the STS-46 Atlantis in-flight crew interviews proceed. Claude Nicollier is interviewed (in French) during a European Space Agency (ESA) VIP call and

ESA press conference. The entire crew answers questions (in English) in an in-flight crew press conference about the mission.
CASI
Postlaunch Reports; Atlantis (Orbiter)

20010012058 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Tethered Satellite System Mate to Deployer
Dec. 18, 1991; In English; Videotape: 6 min. 28 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000148075; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the mating of the Tethered Satellite System (TSS) to the Deployer.
CASI
Tethered Satellites; Spacecraft Equipment

20010012059 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45 Post Launch Press Conference
Mar. 23, 1992; In English; Videotape: 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148076; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the successful countdown and launch of the STS-45 Atlantis mission. He then answers questions from the press.
CASI
Spacecraft Launching; Countdown; Postlaunch Reports

20010012068 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–92 Mission Overview
Sep. 26, 2000; In English; Videotape: 55 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001006467; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Chuck Shaw, STS-92 Lead Flight Director, and Sally Davis, International Space Station (ISS) Lead Flight Director, give an overview of the STS-92 Discovery mission in this preflight conference. The mission objectives and activities are discussed, including details on the launch, Discovery rendezvous and docking with ISS, the crew, spacewalks, and payload (IMAX, Z-1 Truss, PMA-3, DDCU, etc.). Preflight activities are described and information on the ISS is given. Mr. Shaw and Ms. Davis then answer questions from the press.
CASI
Prelaunch Summaries; Discovery (Orbiter); Payloads

20010012100 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–56 Post Launch Press Conference
Apr. 08, 1993; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001573; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give an overview of the successful countdown and launch of the STS-56 Discovery Orbiter. They then answer questions from the press.
CASI
Countdown; Spacecraft Launching; Postlaunch Reports

20010012101 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–56 Post Landing Press Conference
Apr. 17, 1993; In English; Videotape: 20 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001569; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give brief statements about the successful STS-56 Discovery mission and landing. They then answer questions from the press.
CASI
Spacecraft Landing; Postmission Analysis (Spacecraft); Postflight Analysis

20010012124 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Interview: Ken Cockrell
Jan. 04, 2001; In English; Videotape: 48 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007206; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-98 Commander Ken Cockrell is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, and the payload and hardware it brings to the International Space Station (ISS). Mr. Cockrell discusses his role in the mission's spacewalks and activities.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

20010012125 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Interview: Tom Jones
Jan. 04, 2001; In English; Videotape: 51 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007204; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-98 Mission Specialist Tom Jones is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, and the payload and hardware it brings to the International Space Station (ISS). Mr. Jones discusses his role in the mission's spacewalks and activities.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

20010012126 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Interview: Marsha Ivins
Jan. 04, 2001; In English; Videotape: 29 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007203; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The STS-98 Mission Specialist Marsha Ivins is seen being interviewed. She answers questions about her inspiration to become an astronaut, her career path, and her training. She gives details on the mission's goals and significance, and the payload and hardware it brings to the International Space Station (ISS). Ms. Ivins discusses her role in the mission's spacewalks and activities.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads

20010012127 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Interview: Bob Curbeam
Jan. 04, 2001; In English; Videotape: 46 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001007202; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-98 Mission Specialist Bob Curbeam is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, and the payload and hardware it brings to the International Space Station (ISS). Mr. Curbeam discusses his role in the mission's spacewalks and activities.
CASI
Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Payloads; Extravehicular Activity

20010012128 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Post Launch Press Conference
Apr. 26, 1993; In English; Videotape: 19 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001001588; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, Professor Heinz Stoewer, D-2 Program Manager German Space Agency, and Bob Sieck, Launch Director, Kennedy Space Center, who give an overview of the mission and the launch countdown. They then answer questions from the press.
CASI
Countdown; Spacecraft Launching; Postlaunch Reports

20010012136 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–46 Special Events Resource Tape, Part 1 of 2
Nov. 17, 1992; In English; In Italian; In Spanish; Videotape: 42 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148087; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the inflight interviews of the crew of the STS-46 Atlantis Orbiter. An Italian VIP call and press conference (both spoken in Italian) are seen, and Mission Specialist Franklin R. Chang-Diaz participates in a Costa Rican VIP call (spoken in Spanish). See also 'STS-46 Special Events Resource Tape, Part 2 of 2'.
CASI
Postlaunch Reports; Atlantis (Orbiter)

20010012137 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Crew Training
Nov. 01, 1991; In English; Videotape: 20 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148089; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the various stages of STS-44 crew training, including KC-135 activities, Shuttle Activation Monitor (SAM) training, inertial upper stage orbital malfunction simulations, and 70 mm photo training.
CASI
Crew Procedures (Preflight); Astronaut Training; C-135 Aircraft

20010012138 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45 Post Launch Press Conference
Mar. 24, 1992; In English; Videotape: 19 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148096; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Admiral Richard Truly, who makes a brief statement about the STS-45 Atlantis Orbiter launch and answers questions from the press.
CASI
Spacecraft Launching; Postlaunch Reports

20010012139 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour/Intelsat Briefing
Apr. 07, 1992; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152209; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Lak Virdee of Intelsat, summarizes Intelsat's role in the STS-49 Endeavour mission. He discusses the reboost hardware, giving details on the capture arm and docker adapter assembly. He describes the rendezvous between Intelsat and the Endeavour Orbiter. Mr. Virdee then answers questions from the press.
CASI
Endeavour (Orbiter); Intelsat Satellites; Rendezvous

20010012140 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51 Main Engine Shutdown Playbacks from OTV
Aug. 12, 1993; In English; Videotape: 9 min. 17 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000152232; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The shutdown of the main engines is shown from different vantage points.
CASI
Playbacks; Shutdowns; Space Shuttle Main Engine

20010012141 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–50 TCDT Activities
Jun. 09, 1992; In English; Videotape: 62 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152237; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Terminal Countdown and Demonstration Test (TCDT) activities are shown, such as the STS-50 crew (Commander Richards, Pilot Kenneth D. Bowersox, Payload Commander Bonnie J. Dunbar, Mission Specialists Ellen S. Baker and Carl J. Meade, and Payload Specialists Lawrence J. DeLucas and Eugene H. Trinh) emerging from T-38 aircraft and being introduced by Commander Richards. Emergency egress training is seen, as is the crew's departure from the Operations and Checkout (O&C) Building. Footage shows the launch pad and launch control room as the countdown nears the engine ignition simulation.
CASI
Countdown; Crew Procedures (Preflight); Launching Pads; Columbia (Orbiter); Astronaut Training

20010012142 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Countdown Status Briefing
Sep. 09, 1992; In English; Videotape: 6 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152238; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

NASA officials answer questions from the press about the upcoming launch of the STS-47 Endeavour mission.
CASI
Endeavour (Orbiter); Countdown; Spacecraft Launching; Prelaunch Summaries

20010013076 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–44 Post Launch Press Conference
Nov. 24, 1991; In English; Videotape: 21 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001015360; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Dick Young, NASA Public Affairs, introduces Bob Sieck, Launch Director, Kennedy Space Center, who gives an overview of the STS-44 Atlantis countdown and launch. He discusses the hardware problem experienced shortly before liftoff (a replenishing valve for the liquid oxygen on the mobile launch platform had been leaking). He then answers questions from the press.
CASI
Postlaunch Reports; Countdown; Spacecraft Launching; Valves

20010013078 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Interview: Mark Polansky
Jan. 04, 2001; In English; Videotape: 48 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001015361; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-98 Pilot Mark Polansky is seen being interviewed. He answers questions about his inspiration to become an astronaut, his career path, and his training. He gives details on the mission's goals and significance, and the payload

(ORU, PDGF) and hardware it brings to the International Space Station (ISS). Mr. Polansky discusses his role in the mission's spacewalks and activities.
CASI
Payloads; Crew Procedures (Preflight); Prelaunch Summaries; Astronaut Training

20010013127 NASA Johnson Space Center, Houston, TX USA
STS–99 Mission Highlights Resource Tape, Part 1 of 2
Oct. 04, 2000; In English; Videotape: 87 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157334; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-99 Endeavour mission is given through footage of each flight day. Scenes from flight days one through ten show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Endeavour), launch, and on-orbit activities such as the deployment of the Shuttle Radar Topography Mission (SRTM) instrument. Crewmembers are seeing during such everyday activities as brushing their teeth, exercising (bicycle), and emerging from their sleeping bunks. One of the crewmembers shows the contents of the onboard medical kit. See 'STS-99 Mission Highlights Resource Tape, Part 2 of 2' for the activities of flight days 11-12 and the landing of Endeavour.
CASI
Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter); Earth Observations (From Space); Spacecraft Launching

20010013128 NASA Johnson Space Center, Houston, TX USA
STS–99 Mission Highlights Resource Tape, Part 2 of 2
Oct. 04, 2000; In English; Videotape: 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000157333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of 'STS-99 Mission Highlights Resource Tape, Part 1 of 2', footage shows the activities of flight days 11 and 12. The retraction of the Shuttle Radar Topography Mission (SRTM) is seen, and the landing of Endeavour is seen from several vantage points.
CASI
Crew Procedures (Inflight); Earth Observations (From Space); Endeavour (Orbiter); Spacecraft Landing

20010013129 NASA Johnson Space Center, Houston, TX USA
STS–101 Mission Highlights Resource Tape, Part 2 of 3
Sep. 19, 2000; In English; Videotape: 50 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000142667art2; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-101 Mission Highlights Resource Tape, Part 1 of 3', footage shows the activities of flight days five through ten. The crew of STS-101 (Commander James D. Halsell, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) are seen during ingress between the Atlantis Orbiter and the International Space Station (ISS) and as they transfer equipment from Atlantis to the ISS. The crew is shown working in the Zarya module and leaving ISS just before resealing the connecting hatches. Footage shows the successful undocking of Atlantis. The activities of flight day 11 and landing can be seen on 'STS-101 Mission Highlights Resource Tape, Part 3 of 3'.
CASI
Atlantis (Orbiter); International Space Station; Crew Procedures (Inflight); Orbital Assembly; Spacecraft Docking

20010013130 NASA Johnson Space Center, Houston, TX USA
STS–101 Mission Highlights Resource Tape, Part 3 of 3
Sep. 19, 2000; In English; Videotape: 17 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000142666art3; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A continuation of 'STS-101 Mission Highlights Resource Tape, Part 2 of 3', footage shows the activities of flight day 11. The crew of STS-101 (Commander James D. Halsell, Jr. and Mission Specialists Mary Ellen Weber, Jeffrey N. Williams, James S. Voss, Susan J. Helms, and Yuri Vladimirovich Usachev) are seen suiting up in preparation for landing and the nighttime landing of Atlantis is seen from several vantage points.
CASI
Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Inflight)

20010013131 NASA Johnson Space Center, Houston, TX USA
STS–101 Mission Highlights Resource Tape, Part 1 of 3
Sep. 19, 2000; In English; Videotape: 56 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000142665art1; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-101 Atlantis mission is given through footage of each flight day. Scenes from flight days one through four show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities including the robotic arm checkout, docking with the International Space Station, and Mission Specialists Jim Voss' and Jeff Williams' spacewalks. See 'STS-101 Mission Highlights Resource Tape, Part 2 of 3' and 'STS-101 Mission Highlights Resource Tape, Part 3 of 3' for the activities of flight days 5 through 11.
CASI
Spacecraft Docking; International Space Station; Atlantis (Orbiter); Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010013150 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–45 Atlas–1 Compiled Processing Footage
Feb. 20, 1992; In English; Videotape: 30 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001013662; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Compiled footage shows shots of the Atmospheric Laboratory for Applications and Science's (Atlas-1's) move to the test stand at the Operations and Checkout (O&C) Building, the sharp edge inspection, and the Atlas-1 press showing. The STS-45 Atlantis rollover to the Vehicle Assembly Building (VAB) and subsequent rollout to Pad A are seen.
CASI
Checkout; Inspection; Atlantis (Orbiter); Preparation

20010018389 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Paul Richards
Jan. 24, 2001; In English; Videotape: 32 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021777; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-102 Mission Specialist Paul Richards is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Richards discusses the upcoming transfer of the International Space Station's (ISS) crew Expedition 1 and Expedition 2.
CASI
Spacecrews; International Space Station; Crew Procedures (Inflight); Prelaunch Summaries

20010018391 NASA Johnson Space Center, Houston, TX USA
STS–106 Post Flight Presentation
Jan. 25, 2001; In English; Videotape: 23 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021820; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Various shots highlight the STS-106 Atlantis mission. Footage shows the crew suiting up and leaving the Operations and Checkout (O&C) Building, the launch, and landing. Various on-orbit activities are seen, such as docking with the International Space Station (ISS), the spacewalks, eating, exercising, sleeping, and the crew transferring equipment from Atlantis to ISS. Shots show the southern lights and several shots of Earth can be seen, including views of the Mediterranean Sea and the Italian coastline. Footage shows some areas of

interest on the ISS, such as the food preparation area, the sleeping rooms, and the toilet.
CASI
International Space Station; Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)

20010018392 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Jim Wetherbee
Jan. 24, 2001; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021823; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
STS-102 Commander Jim Wetherbee is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Wetherbee discusses the upcoming transfer of the International Space Station's (ISS) crew Expedition 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.
Author
Spacecrews; Crew Procedures (Inflight); Prelaunch Summaries; International Space Station

20010018393 NASA Johnson Space Center, Houston, TX USA
STS–97 Post Flight Presentation
Feb. 02, 2001; In English; Videotape: 17 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021822; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Various shots highlight the STS-97 Endeavour mission. Footage shows the crew suiting up and leaving the Operations and Checkout (O&C) Building, the launch, and landing. Various on-orbit activities are seen, such as docking with the International Space Station (ISS), the spacewalks (installing the PV Module P6), array deployment, meeting the Expedition 1 crew, eating, and undocking. Shots show the northern lights and a meteorite entering Earth's atmosphere from above. The Andes can be seen from the Orbiter while the P6 arrays are deploying.
CASI
Endeavour (Orbiter); International Space Station; Deployment; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)

20010018399 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–63 Commander Wetherbee Explains Five Minute Window and Mir Rendezvous
Jan. 26, 1995; In English; Videotape: 3 min. 18 sec. playing time, in color, wtih sound
Report No.(s): NONP–NASA–VT–2001016067; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In a preflight interview, Commander James B. Wetherbee of the STS-63 Discovery mission gives an overview of the upcoming rendezvous with Mir and the five minute window in which the rendezvous takes place. Computerized simulations show the docking of the Discovery Orbiter with Mir.
CASI
Discovery (Orbiter); Computerized Simulation; Spacecraft Docking; Mir Space Station; Prelaunch Summaries

20010018415 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Post Launch Press Conference
Oct. 22, 1992; In English; Videotape: 35 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017558; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Dick Young, NASA Public Affairs, introduces Brewster Shaw, Deputy Program Manager Space Shuttle, and Bob Sieck, Launch Director, Kennedy Space Center, who give brief statements about the countdown and launch of the STS-52 Columbia Orbiter. The problems encountered during countdown are discussed, including details on the hydrogen leak in the ground umbilical carrier tank, the 100% exceedance of load on the external tank, and the reasons why the flight rule for an upper limit of cross winds was waived. The men then answered questions from the press.
CASI
Columbia (Orbiter); Countdown; Leakage; Loads (Forces); Spacecraft Launching; Postlaunch Reports

20010018416 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Astronaut Crew Activities for TCDT
Oct. 02, 1992; In English; Videotape: 10 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows scenes of the Terminal Countdown and Demonstration Test (TCDT) activities for the STS-52 Columbia mission, including shots of emergency egress training and the flight of T-38 aircraft. Commander James B. Wetherbee introduces Pilot Michael A. Baker and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean, and gives a brief overview of the mission. The crew then answers questions from the press.
CASI
Spacecrews; Egress; Emergencies; Astronaut Training; Prelaunch Summaries; Crew Procedures (Preflight)

20010018417 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Lageos/Iris Apogee Kick Motor in SAEF–2
May 11, 1992; In English; Videotape: 3 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017551; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the apogee kick motor being moved via forklift at the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI
Columbia (Orbiter); Spacecraft Equipment

20010018436 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interviews/Andy Thomas
Jan. 24, 2001; In English; Videotape: 47 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021779; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
STS-102 Mission Specialist Andy Thomas is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Thomas discusses the upcoming transfer of the International Space Station's (ISS) crew Expedition 1 and Expedition 2 and the role of the Mir Space Station in the evolution and success of the ISS.
CASI
International Space Station; Spacecrews; Prelaunch Summaries; Crew Procedures (Inflight)

20010018437 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Interview/Jim Kelly
Jan. 24, 2001; In English; Videotape: 35 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021775; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
STS-102 Pilot Jim Kelly is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (ISS-07/5A1 (MPLM-1)), and spacewalks. Kelly discusses the upcoming transfer of the International Space Station's (ISS) crew Expedition 1 and Expedition 2.
CASI
Spacecrews; Crew Procedures (Inflight); International Space Station; Prelaunch Summaries

20010018491 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Countdown Status Briefing
Sep. 04, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023238; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Priselac, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Prelaunch activities and the payload status are described. The weather forecast for the upcoming launch is given. The men then answer questions from the press.
CASI
Countdown; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Weather Forecasting

20010018492 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 Discovery Rollout to Pad
Aug. 12, 1991; In English; Videotape: 3 min. 53 sec. playing time, in color, wtih sound (no narration)
Report No.(s): NONP–NASA–VT–2001023178; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the rollout of the Discovery Orbiter to the launching pad.
CASI
Discovery (Orbiter); Launching Pads

20010018493 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 UARS Release
Sep. 14, 1991; In English; Videotape: 62 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023170; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the Upper Atmosphere Research Satellite (UARS) at the end of the robotic arm attached to the Discovery Orbiter against a backdrop of Earth. The crew of STS-48, Commander John O. Creighton, Pilot Kenneth S. Reightler, and Mission Specialists James F. Buchli, Charles D. Gernar, and Mark N. Brown are seen during in-flight activities, such as eating and stowage procedures.
CASI
Upper Atmosphere Research Satellite (UARS); Crew Procedures (Inflight)

20010018494 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Hydraulic Work in Aft Section of Columbia
Mar. 10, 1993; In English; Videotape: 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023149; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the ground crew doing hydraulic work in the aft section of the Columbia Orbiter.
CASI
Columbia (Orbiter); Hydraulic Equipment

20010018495 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 D–2 Spacelab in Cargo Bay of Columbia in OPF Highbay 2
Jan. 14, 1992; In English; Videotape: 2 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023148; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the D-2 Spacelab in the cargo bay of the Columbia Orbiter in the Orbiter Processing Facility (OPF).
CASI
Columbia (Orbiter); Spacelab

20010018496 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Rollover to VAB
Apr. 14, 1994; In English; Videotape: 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023133; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the rollover of the Endeavour Orbiter to the Vehicle Assembly Building (VAB).
CASI
Endeavour (Orbiter); Spacecraft Maneuvers

20010018498 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Endeavour RSS Rollback, Edited for Media
Apr. 07, 1994; In English; Videotape: 2 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023112; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the rollback of the Endeavour Orbiter at the launch pad.
CASI
Endeavour (Orbiter); Launching Sites

20010018559 NASA Johnson Space Center, Houston, TX USA
Expedition 2 Crew Interview: Susan Helms
Jan. 24, 2001; In English; Videotape: 63 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021819; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Susan Helms is seen being interviewed. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses her upcoming stay on the International Space Station (ISS). Helms gives her thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.
CASI
Space Transportation System Flights; Crew Procedures (Inflight); Prelaunch Summaries

20010018564 NASA Johnson Space Center, Houston, TX USA
Expedition 2 Crew Interview: Yury Usachev
Jan. 24, 2001; In English; Videotape: 53 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021778; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 2 (the second resident crew of the International Space Station) Commander Yury Usachev is seen being interviewed. He answers questions about his inspiration to become an cosmonaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Usachev gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.
CASI
International Space Station; Prelaunch Summaries; Crew Procedures (Inflight)

20010018565 NASA Johnson Space Center, Houston, TX USA
STS–106 Expedition 2 Crew Interview: Jim Voss
Jan. 24, 2001; In English; Videotape: 57 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021776; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 2 (the second resident crew of the International Space Station) Flight Engineer Jim Voss is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the Space Shuttle mission and goals, including information on the spacewalks and transfer of Expedition crews, and discusses his upcoming stay on the International Space Station (ISS). Voss gives his thoughts on the international cooperation needed to successfully construct the ISS and some of the scientific experiments that will take place on the station.
CASI
International Space Station; Prelaunch Summaries; Crew Procedures (Inflight)

20010018578 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Post Launch Press Conference
Sep. 01, 2000; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023257; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Bruce Buckingham, NASA Public Affairs, introduces Bill Gerstenmaier, Shuttle Program Integration Manager, and Mike Leimbach, Kennedy Space Center Launch Director, who give an overview of the successful countdown and launch of STS-106 Atlantis. They then answer questions from the press.
CASI
Countdown; Spacecraft Launching

20010018587 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Countdown Status Briefing
Sep. 05, 2000; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023240; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Scott Higgenbotham, Kennedy Space Center Payload Manager, and Ed Priselac, Shuttle Weather Officer, who give an overview of the successful countdown for the STS-106 Atlantis mission thus far. Prelaunch activities are described, such as the engine preparations, the communications systems power up, final flight close outs, and payload status. The weather forecast for the upcoming launch is given. The men then answer questions from the press.
CASI
Countdown; Spacecraft Launching; Prelaunch Summaries; Prelaunch Tests; Payloads; Weather Forecasting

20010018603 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 Crew News Conference
Sep. 18, 2000; In English; Videotape: 57 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023239; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-106, Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen during an in-flight press conference. The crew answers questions about their mission, future work, and the Zvezda Service Module.
CASI
Service Module (Iss); Spacecrews; Crew Procedures (Inflight)

20010018666 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 TCDT Training and Press Q&A at Pad A
Nov. 12, 1992; In English; Videotape: 13 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the training activities for the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford), including Emergency Egress Training. Commander Walker introduces the crew and they answer questions from the press.
CASI
Spacecrews; Crew Procedures (Preflight); Astronaut Training; Emergencies; Prelaunch Summaries

20010018681 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–57 Landing at KSC
Jul. 01, 1993; In English; Videotape: 16 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016069; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the landing of STS-57 Endeavour at Kennedy Space Center (KSC) and the ground crew meeting the orbiter on the runway.
CASI
Endeavour (Orbiter); Spacecraft Landing

20010018682 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–58 Video Update Day 10: Crew Press Conference and View of California Fires
Oct. 27, 1993; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016065; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew of STS-58, Commander John E. Blaha, Pilot Richard A. Searfoss, Mission Specialists M. Rhea Seddon, William S. McArthur Jr., David A. Wolf, and Shannon W. Lucid, and Payload Specialist Martin Fettman are seen answering questions about the STS-58 mission during an inflight press conference. Footage shows the widespread fires of California from space.
CASI
Crew Procedures (Inflight); Postlaunch Reports

20010018683 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Endeavour Space Radar Lab I Antenna Installed on Pallet
Nov. 23, 1993; In English; Videotape: 5 min. 14 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001016064; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the installation of the Space Radar Lab I Antenna onto the Endeavour Orbiter.
CASI
Endeavour (Orbiter); Installing; Radar Antennas; Spacecraft Equipment

20010018684 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Space Radar Lab I Moved to Work Stand
Jan. 10, 1994; In English; Videotape: 7 min. 40 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001016061; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the Space Radar Lab 1 being moved to the workstand.
CASI
Endeavour (Orbiter); Space Laboratories

20010018705 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 TCDT O&C Exit
Nov. 13, 1992; In English; Videotape: 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the crew of STS-53 (Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford) leaving the Operations and Checkout (O&C) Building during the Terminal Countdown and Demonstration Test (TCDT).
CASI
Checkout; Spacecrews; Crew Procedures (Preflight)

20010018706 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Tracking and Data Relay Satellite
Jan. 06, 1993; In English; Videotape: 27 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023161; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Charles Vanek, Tracking and Data Relay Satellite (TDRS) Program Manager, who gives an overview of the TDRS program, satellite design, and TDRS system. He then answers questions from the press.
CASI
TDR Satellites; Satellite Design

20010018707 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Crew Arrival for TCDT
Dec. 14, 1992; In English; Videotape: 12 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023158; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the crew of STS-54, Commander John H. Casper, Pilot Donald R. McMonagle, and Mission Specialists Mario Runco, Jr., Gregory J.

Harbaugh, and Susan J. Helms landing and emerging from several T-38 aircraft during the Terminal Countdown and Demonstration Test (TCDT). Commander Casper introduces the crew and they each make a brief statement about the mission.
CASI
Spacecrews; Crew Procedures (Preflight); Prelaunch Summaries

20010018708 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 Launch and Landing
Dec. 09, 1992; In English; Videotape: 53 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023154; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-53 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew performing several medical experiments, such as taking a picture of the retina and measuring the pressure on the eyeball. One crewmember demonstrates how to use the rowing machine in an antigravity environment.
CASI
Spacecraft Launching; Spacecraft Landing; Crew Procedures (Preflight); Crew Procedures (Inflight); Spaceborne Experiments

20010018709 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 IUS Removal from Canister to Test Cell at VPF
Sep. 22, 1992; In English; Videotape: 7 min. 53 sec. playing time, in color, wtih sound
Report No.(s): NONP–NASA–VT–2001023153; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the removal of the Inertial Upper Stage (IUS) from the canister to the test cell at the Vertical Processing Facility (VPF).
CASI
Inertial Upper Stage; Cans

20010018710 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Diffuse X–Ray Spectrometer
Jan. 06, 1993; In English; Videotape: 37 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023152; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Louis Kaluzienski, Program Scientist, Wilton T. Sanders, Principal Investigator, and Chris Dunker, Diffuse X-Ray Spectrometer (DXS) Mission Manager, each give an overview of the DXS, including the purpose of the DXS, a brief description of x-ray astronomy, the scientific objectives of the DXS, and information on the STS-54 Endeavour mission, in which the DXS is part of the payload. The men then answer questions from the press.
CASI
Endeavour (Orbiter); X Ray Spectrometers; Payloads; Prelaunch Summaries

20010018718 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–60 Mission Update
Feb. 07, 1994; In English; Videotape: 18 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023145; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The activities of the STS-60 Discovery mission are reviewed, including details on the Wake Shield deployment, problems with the horizon sensor on the Shield, and the success of the thin film crystal growth experiment.
CASI
Deployment; Discovery (Orbiter); Crew Procedures (Inflight); Postlaunch Reports

20010018720 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–60 Firing Room Activities
Feb. 03, 1994; In English; Videotape: 18 min. 34 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001023131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the Ground Control Center during Firing Room Activities for the STS-60 Discovery mission.
CASI
Ground Based Control; Firing (Igniting)

20010018721 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Physics of Toys
Jan. 06, 1993; In English; Videotape: 32 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023121; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Greg Vogt, NASA Headquarters Education Specialist, and Carolyn Sumners, Houston Museum of Natural Science, give an overview of the spaceborne experiments that will take place on the STS-54 Endeavour mission. Mr. Vogt discusses the objectives and procedures of the experiments, which are structured around using toys to show the effects of microgravity. Mr. Vogt and Ms. Sumners then answer questions from the press.
CASI
Spaceborne Experiments; Gravitational Effects

20010018722 NASA Kennedy Space Center, Cocoa Beach, FL USA
Early Mission Blowups
Jan. 01, 1985; In English; Videotape: 12 min. 47 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001023108; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the explosions of many early model rockets and aircraft.
CASI
Explosions; Combustion

20010018724 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Astronaut Flight Crew
Feb. 22, 1992; In English; Videotape: 5 min. 45 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001017555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick putting equipment away in compartments in the payload bay of Endeavour.
CASI
Compartments; Spacecrews; Astronaut Training; Crew Procedures (Preflight)

20010018725 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Crew Arrival for Launch
Oct. 19, 1992; In English; Videotape: 16 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017552; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crewmembers of STS-52, Commander James B. Wetherbee, Pilot Michael A. Baker, and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean are seen landing and emerging from several T-38 aircraft. Commander Wetherbee introduces the crew and they each give a brief statement about the upcoming Columbia mission.
CASI
Crew Procedures (Preflight); Prelaunch Summaries

20010018726 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 UARS at PHSF
May 22, 1991; In English; Videotape: 9 min. 21 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001017549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the Upper Atmosphere Research Satellite (UARS) being moved at the Payload Hazardous Servicing Facility (PHSF).
CASI
Upper Atmosphere Research Satellite (UARS); Payloads

20010018754 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 TDRS–F in Cargo Bay at Pad B
Jan. 10, 1992; In English; Videotape: 5 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows close-up shots of the Tracking and Data Relay Satellite (TDRS) in the Endeavour Orbiter's cargo bay at Launch Pad B.
CASI
TDR Satellites; Cargo

20010018756 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 UARS Edited Flow Tape
Sep. 13, 1991; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023176; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the Upper Atmosphere Research Satellite being lifted into place in the payload bay of the Discovery Orbiter.
CASI
Discovery (Orbiter); Upper Atmosphere Research Satellite (UARS)

20010018971 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Columbia/Breakfast, Suit–up, Depart O&C, Launch, On–Orbit, Landing
Nov. 02, 1992; In English; Videotape: 62 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017546; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage of various stages of the STS-52 Columbia launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew during medical experiments using the Lower Body Negative Pressure unit.
CASI
Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

20010018972 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–62 Columbia/Breakfast, Suit–up, Depart O&C, Launch, On–Orbit, Landing
Mar. 18, 1994; In English; Videotape: 62 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001016062; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage of various stages of the STS-62 Columbia launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew performing medical experiments, such as using the Lower Body Negative Pressure unit, and during a demonstration of the effects of microgravity using M&Ms and marshmallows. The Gulf of Mexico and a hurricane are seen from the Orbiter.
CASI
Crew Procedures (Inflight); Crew Procedures (Preflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

20010019005 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–51 ACTS/TOS and SPAS Deploy
Sep. 13, 1993; In English; Videotape: 62 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023182; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows the deployment of the Advanced Communications Technology Satellite/Transfer Orbit Station (ACTS/TOS) and the Shuttle Pallet Satellite (SPAS) as seen from the Discovery Orbiter.
CASI
ACTS; Shuttle Pallet Satellites; Deployment

20010019006 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–48 Discovery/Prelaunch Activities with Isolated Views
Sep. 12, 1991; In English; Videotape: 48 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023180; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-48 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points.
CASI
Crew Procedures (Preflight); Spacecraft Launching

20010019007 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Astronaut Crew Emergency Egress Training, Press Q&A, TCDT
Dec. 15, 1992; In English; Videotape: 26 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-54, Commander John H. Casper, Pilot Donald R. McMonagle, and Mission Specialists Mario Runco, Jr., Gregory J. Harbaugh, and Susan J. Helms, is seen during a question and answer session with the press and during the Terminal Countdown and Demonstration Test (TCDT), including Emergency Egress Training.
CASI
Astronaut Training; Crew Procedures (Preflight); Prelaunch Summaries

20010019008 NASA Kennedy Space Center, Cocoa Beach, FL USA
Ban Joule Hi–8 Footage
Sep. 20, 1993; In English; Videotape: 2 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the exterior of the Ban Joule Hotel.
CASI
Buildings; Recreation

20010019009 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–47 Astronaut Crew Training Clip
Sep. 01, 1992; In English; Videotape: 30 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023132; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The crew of STS-47, Commander Robert L. Gibson, Pilot Curtis L. Brown, Payload Commander Mark C. Lee, Mission Specialists N. Jan Davis, Jay Apt, and Mae C. Jemison, and Payload Specialist Mamoru Mohri, is seen during various parts of their training, including SAREX training in the Full Fuselage Trainer (FFT), firefighting training. A familiarization flight in the KC-135, a food tasting, photo training in the Crew Compartment Trainer, and bailout training in the Weightless Environment Training Facility (WETF) are also shown.
CASI
Astronaut Training; Bailout; Fire Fighting; Training Devices

20010019010 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–69 TCDT/Crew Emergency Egress, Walk Down, and Press Showing
Jul. 19, 1995; In English; Videotape: 9 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023130; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew of STS-69, Commander David M. Walker, Pilot Kenneth D. Cockrell, Payload Commander James S. Voss, and Mission Specialists James H. Newman and Michael L. Gernhardt, is seen during emergency egress training and answer questions from the press during the press showing.
CASI
Egress; Crew Procedures (Preflight); Astronaut Training; Prelaunch Summaries

20010019011 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–69 Launch/Composite of Breakfast, Suiting, and Firing Room Activities
Sep. 07, 1995; In English; Videotape: 11 min. 44 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001023127; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew of STS-69, Commander David M. Walker, Pilot Kenneth D. Cockrell, Payload Commander James S. Voss, and Mission Specialists James H. Newman and Michael L. Gernhardt, is seen at breakfast and suiting up in preparation for the launch of Endeavour. Footage shows Firing Room activities shortly before launch.
CASI
Crew Procedures (Preflight); Ground Based Control

20010019012 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–60 Discovery/Breakfast, Suit–up, Depart O&C, Launch, On–Orbit, Landing
Feb. 11, 1994; In English; Videotape: 53 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023126; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-60 Discovery launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew performing medical experiments (metabolic tests, head movement sensory tests), and the deployment of Bremsat, part of the Discovery payload.
CASI
Deployment; Crew Procedures (Inflight); Crew Procedures (Preflight); Spaceborne Experiments; Spacecraft Launching; Spacecraft Landing

20010019013 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 TCDT Activities
Oct. 01, 1992; In English; Videotape: 17 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023119; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-53, Commander David M. Walker, Pilot Robert D. Cabana, and Mission Specialists Guion S. Bluford, James S. Voss, and Michael R. Clifford, is seen during Terminal Countdown Demonstration Test (TCDT) activities. Included is footage of Emergency Egress Training and a press question and answer session.
CASI
Astronaut Training; Crew Procedures (Preflight); Prelaunch Summaries

20010019020 NASA Kennedy Space Center, Cocoa Beach, FL USA
A New Beginning
Feb. 01, 1989; Videotape: 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001021125; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the Space Shuttle program is given, including scenes from the assembly, transfer, equipping, rollout, launch, and landing of the Space Shuttle. On-orbit activities are seen, such as satellite deployment and retrieval and spacewalks.
CASI
Space Shuttles; Spacecraft Launching; Spacecraft Landing

20010019055 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Crew Arrival
Apr. 04, 1994; In English; Videotape: 25 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023114; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-59, Commander Sidney M. Gutierrez, Pilot Kevin P. Chilton, Payload Commander Linda M. Godwin, and Mission Specialists Jay Apt, Michael R. Clifford, and Thomas D. Jones, emerge from several T-38 aircraft. Commander Gutierrez introduces the crew and they each make a brief statement about the upcoming Endeavour mission.
CASI
Crew Procedures (Preflight); Prelaunch Summaries; Astronaut Training

20010019056 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Mate Spacecraft to Payloads
Nov. 09, 1995; In English; Videotape: 19 min. 37 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001023113; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows close-up shots of the SOHO spacecraft in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI
Assembling; Spacecraft Modules

20010019057 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–54 Tracking Data and Relay Satellite Briefing
Jan. 06, 1993; In English; Videotape: 27 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023110; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Charles Vanek, Tracking Data and Relay Satellite (TDRS) Program Manager, who gives an overview of the TDRS program, operations, and system. He then answers questions from the press.
CASI
TDR Satellites; Prelaunch Summaries

20010019058 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–55 Columbia/Breakfast, Suit–up, Depart O&C, Launch, On–Orbit, Landing
May 01, 1993; In English; Videotape: 56 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023107; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage of various stages of the STS-55 Columbia launch is shown, including shots of the crew at breakfast, getting suited up, and departing to board the Orbiter. The launch is seen from many vantage points, as is the landing. On-orbit activities show the crew exercising on the bicycle and doing various medical experiments.
CASI
Crew Procedures (Inflight); Crew Procedures (Preflight); Spacecraft Launching; Spacecraft Landing; Spaceborne Experiments

20010019731 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–59 Endeavour Arrival and Move to MDD
May 02, 1994; In English; Videotape: 18 min. 19 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001016066; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the arrival and landing of the NASA aircraft that is mated to the Endeavour Orbiter.
CASI
Endeavour (Orbiter); Arrivals; Aircraft Landing

20010019755 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 ISS Overview Briefing
Sep. 05, 2000; In English; Videotape: 77 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152215; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Dwayne Brown, NASA Public Affairs, introduces Bob Cabana of NASA, Mikhail Sinelshikov of PKA, Vasily Tsibliev of GCTC, Steve Mozes of CSA, Ian Pryke of ESA, and Masaaki Komatsu of NASDA. Each man gives an overview of the status of the International Space Station (ISS), including details on the current configuration, future missions and what they will bring to the ISS, and

each space agency's contribution to the ISS. They then answer questions from the press.
CASI
International Space Station; Prelaunch Summaries

20010019759 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 3 Highlights
Feb. 09, 2001; In English; Videotape: 16 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024843; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this third day of the STS-98 mission, the Atlantis Orbiter approaches and docks with the International Space Station.
CASI
Atlantis (Orbiter); International Space Station; Spacecraft Docking

20010019760 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 1 Highlights
Feb. 08, 2001; In English; Videotape: 16 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024842; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this first day of the STS-98 mission, the crew of Atlantis, Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins, are seen during various prelaunch activities. Scenes include the crew at breakfast, suiting up, and leaving the Operations and Checkout (O&C) Building. The launch of Atlantis is also shown.
CASI
Spacecraft Launching; Crew Procedures (Preflight)

20010019849 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Endeavour Mission Highlights Resource Tape, Part 2 of 2
Nov. 24, 1997; In English; Videotape: 44 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000180489; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows the in-flight and landing activities of the STS-49 Endeavour crew, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, and Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick. Thornton and Akers are seen during their spacewalks as they begin assembly on the Space Station Freedom in the payload bay of Endeavour. The crew is shown during de-orbit preparations (such as suiting up and closing the payload bay doors) and Endeavour is seen landing. Shots of Earth from the Orbiter show the southern Atlantic Ocean, southern African continent, and Indian Ocean. The moon is seen above Earth's atmosphere and a storm is seen on the night side as lighting illuminates the clouds.
CASI
Crew Procedures (Inflight); Spacecraft Landing; Assembling

20010019851 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–49 Crew Press Conference, Part 1 of 2
Apr. 08, 1992; In English; Videotape: 62 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152224; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
The crew of STS-49, Commander Daniel C. Brandenstein, Pilot Kevin P. Chilton, Mission Specialists Pierre J. Thuot, Kathryn C. Thornton, Richard J. Hieb, Thomas D. Akers, and Bruce E. Melnick each give an overview of his or her part in the mission. Questions from the press are answered. This is part one of two videos.
CASI
Endeavour (Orbiter); Prelaunch Summaries; Crew Procedures (Preflight)

20010019852 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–53 Countdown Status Briefing
Nov. 30, 1992; In English; Videotape: 18 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023157; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
George Diller, NASA Public Affairs, introduces Mike Leinbach, Shuttle Test Director, and Ed Prisella, Shuttle Weather Officer, USAF. They give a summary of the countdown for the launch of STS-53 Discovery and information on the weather for the launch time. They then answer questions from the press.
CASI
Countdown; Weather Forecasting; Prelaunch Summaries

20010019855 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–52 Crew Briefing
Sep. 24, 1992; In English; Videotape: 44 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001017547; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Commander James B. Wetherbee introduces the crew of STS-52 Columbia, Pilot Michael A. Baker, and Mission Specialists Charles L. Veach, William M. Shepherd, Tamara E. Jernigan, and Steven G. MacLean, in a preflight conference. Each crew member gives an overview of the mission objectives, experiments, payload (LAGEOS-II), and his/her role in the mission. They then answer questions from the press.
CASI
Prelaunch Summaries; Spaceborne Experiments; Lageos (Satellite); Crew Procedures (Inflight)

20010019895 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 4 Highlights
Feb. 11, 2001; In English; Videotape: 27 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026557; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this fourth day of the STS-98 mission, Mission Specialists Bob Curbeam and Tom Jones are seen suiting up in preparation for their upcoming spacewalks and during the spacewalks. The Destiny Laboratory Module is shown as it is lifted out of the payload bay of Atlantis and is attached to the International Space Station (ISS) by Jones.
CASI
International Space Station; Extravehicular Activity; Installing; Destiny Laboratory Module

20010019898 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 5 Highlights
Feb. 12, 2001; In English; Videotape: 13 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024844; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
On this fifth day of the STS-98 mission, the crew of Atlantis (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins), the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev), and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev), are seen opening and entering the Destiny Laboratory Module.
CASI
International Space Station; Destiny Laboratory Module

20010019899 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 2 Highlights
Feb. 09, 2001; In English; Videotape: 24 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001024840; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this second day of the STS-98 mission, Atlantis continues to pursue the International Space Station (ISS). The unmanned Progress resupply spacecraft, loaded with trash, is sent into an orbit that will eventually drop the spacecraft into Earth's atmosphere, which will burn it up. Commander Cockrell and Mission

Specialist Tom Jones are seen answering questions about the Destiny Laboratory Module and the mission.
CASI
Atlantis (Orbiter); Crew Procedures (Inflight); Destiny Laboratory Module

20010020029 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 10 Highlights
Feb. 17, 2001; In English; Videotape: 15 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this tenth day of the STS-98 mission, Atlantis undocks from the International Space Station (ISS). Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins answer questions about the mission.
CASI
Spacecraft Docking; Crew Procedures (Inflight); International Space Station; Atlantis (Orbiter)

20010020030 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 11 Highlights
Feb. 18, 2001; In English; Videotape: 15 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028019; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-98 mission, Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialists Robert L. Curbeam, Thomas D. Jones, and Marsha S. Ivins answer questions about their mission. Footage shows the undocking of Atlantis from the International Space Station (ISS), which took place the day before. The coastline of South America along the Andes Mountains is seen from space.
CASI
Crew Procedures (Inflight); Spacecraft Docking

20010020031 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 9 Highlights
Feb. 16, 2001; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028017; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-98 mission, Expedition 1 crewmember Bill Shepherd gives a tour of the Density Laboratory Module, describing the equipment and functions. Mission Specialists Bob Curbeam and Tom Jones answer questions about their spacewalks and the Destiny Module. The rest of the Atlantis crew (Commander Kenneth D. Cockrell, Pilot Mark L. Polansky, and Mission Specialist Marsha S. Ivins) and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) join Curbeam and Jones to answer questions about the mission.
CASI
Crew Procedures (Inflight); Destiny Laboratory Module; Extravehicular Activity

20010020032 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 8 Highlights
Feb. 15, 2001; In English; Videotape: 25 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028016; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-98 mission, Mission Specialists Tom Jones and Bob Curbeam perform their first spacewalks of the mission. They are seen removing and installing the S-Band Antenna from the payload bay of Atlantis to the International Space Station (ISS). Jones and Curbeam commemorate the 100th spacewalk and say a few words about the accomplishments of spacewalkers in the past.
CASI
Extravehicular Activity; Crew Procedures (Inflight); International Space Station

20010020281 NASA Johnson Space Center, Houston, TX USA
STS–97 Mission Highlights Resource Tape, Part 1
Feb. 20, 2001; In English; Videotape: 46 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028105; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Various clips give an overview of the STS-97 Endeavour mission. Footage includes Endeavour on the launch pad, the crew of STS-97 (Commander Brent W. Jett, Pilot Michael J. Bloomfield, and Mission Specialists Joseph R. Tanner, Carlos I. Noriega, and Marc Garneau) suiting up, replays of the nighttime launch, Launch Control Center at Kenendy Space Center during countdown, and the activities of flight days one through three. The activities of flight days four through six can be seen on 'STS-97 Mission Highlights Resource Tape, Part 2 of 3' (document ID 20010020282). The activities of flight days seven through eleven and Endeavour's landing can be found on 'STS-97 Mission Highlights Resource Tape, Part 3 of 3' (document ID 20010020283).
CASI
Endeavour (Orbiter); Countdown; Spacecraft Launching; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010020282 NASA Johnson Space Center, Houston, TX USA
STS–97 Mission Highlights Resource Tape, Part 2
Feb. 20, 2001; In English; Videotape: 58 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028104; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-97 Mission Highlights Resource Tape, Part 1 of 3' (document ID 20010020281), the activities of flight days four through six are seen. Footage includes the spacewalks performed by Noriega and Tanner, the deployment of the Solar Array Blanket Box (SABB), various shots of Endeavour's payload bay and the International Space Station (ISS), and the deployment of the solar radiators on the ISS. Flight days seven through eleven and Endeavour's landing are shown in 'STS-97 Mission Highlights Resource Tape, Part 3 of 3' (document ID 20010020283).
CASI
Endeavour (Orbiter); International Space Station; Deployment; Crew Procedures (Inflight); Extravehicular Activity

20010020283 NASA Johnson Space Center, Houston, TX USA
STS–97 Mission Highlights Resource Tape, Part 3
Feb. 20, 2001; In English; Videotape: 58 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028103; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-97 Mission Highlights Resource Tape, Part 1 of 3' (document ID 20010020281) and 'STS-97 Mission Highlights Resource Tape, Part 2 of 3' (document ID 20010020282), the activities of flight days seven through eleven are seen. Footage includes the crew discussing repair procedures for the Solar Array Wing (SAW) with mission managers, shots of the shuttle's payload bay, the International Space Station (ISS) with Earth in the background, the Node Micrometeoroid/Orbital Debris Shield removal, the spacewalks performed by Mission Specialists Joseph Tanner and Carlos Noriega, the undocking of Endeavour and ISS, the Orbital Maneuvering System (OMS) firing, the payload bay doors closing, and the landing sequence of Endeavour. The Aurora Borealis and a night view of the French Rivera are seen from space.
CASI
International Space Station; Crew Procedures (Inflight); Extravehicular Activity; Spacecraft Landing; Spacecraft Docking

20010020287 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 7 Highlights
Feb. 14, 2001; In English; Videotape: 12 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028078; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this seventh day of the STS-98 mission, Pilot Mark L. Polansky and Mission Specialists Tom Jones, Bob Curbeam, and Marsha Ivins are seen

answering questions about the International Space Station (ISS), the mission's spacewalks, and the Destiny Laboratory Module. Footage shows external views of the Atlantis Orbiter and ISS with a backdrop of Earth.
CASI
Atlantis (Orbiter); International Space Station; Extravehicular Activity; Crew Procedures (Inflight); Destiny Laboratory Module

20010020288 NASA Johnson Space Center, Houston, TX USA
STS–98 Crew Activity Report/Flight Day 6 Highlights
Feb. 13, 2001; In English; Videotape: 18 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001028077; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
On this sixth day of the STS-98 mission, Mission Specialists Bob Curbeam and Tom Jones are seen finishing the installation of the Destiny Laboratory onto the International Space Station (ISS) during their spacewalks.
CASI
International Space Station; Installing; Destiny Laboratory Module; Extravehicular Activity; Crew Procedures (Inflight)

20010021196 NASA Kennedy Space Center, Cocoa Beach, FL USA
The Lighthouse that Never Fails
Jun. 01, 1958; In English; Videotape: 3 min. 58 sec. playing time, black and white, with sound
Report No.(s): NONP–NASA–VT–2001023129; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A fictional piece of work, the film shows a man taken into space when the lighthouse that he is in launches.
CASI
Lighting Equipment; Launching

20010021485 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Training
Feb. 27, 2001; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001029048; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows the crew of STS-102, Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards, during various parts of their training. Scenes include: (1) neutral buoyancy lab training; (2) undocking/fly-around training in the GNS (Navigation Simulator); (3) crew equipment interface test; (4) Remote Manipulator System (RMS) training in the GNS; and (5) docking training in the GNS.
CASI
Astronaut Training; Crew Procedures (Preflight); Remote Manipulator System; Simulation

20010022499 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 1 Highlights
Mar. 08, 2001; In English; Videotape: 20 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031588; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew of STS-102 (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen during the prelaunch breakfast, suiting up, leaving the Operations and Checkout (O&C) Building, and boarding the Discovery Orbiter. The launch of Discovery is seen from the ground and from an onboard camera.
CASI
Discovery (Orbiter); Checkout; Spacecraft Launching; Crew Procedures (Preflight)

20010022500 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 3 Highlights
Mar. 10, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows the docking of the Discovery Orbiter with the International Space Station (ISS). The STS-102 crew (Commander James D. Wetherbee, Pilot James M. Kelly, and Mission Specialists Andrew S. W. Thomas and Paul Richards) and the Expedition 2 crew (James S. Voss, Susan J. Helms, and Yuriy V. Usachev) are seen greeting the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) after Commander Wetherbee opens the hatch connecting Discovery to the ISS.
CASI
Discovery (Orbiter); International Space Station; Hatches; Spacecraft Docking; Crew Procedures (Inflight)

20010022501 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 2 Highlights
Mar. 09, 2001; In English; Videotape: 21 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031586; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Jim Voss and Yuriy Usachev are seen helping Susan Helms prepare for the Reflex Experiment: Effects of Altered Gravity on the Spinal Cord. External shots show the payload bay of Discovery and as Discovery orbits, China is seen from space. STS-102 Commander Jim Wetherbee and Expedition 2 Commander Yuriy V. Usachev answer questions from the President of the Italian Space Agency during an in-flight interview.
CASI
Spaceborne Experiments; Crew Procedures (Inflight); Discovery (Orbiter)

20010022779 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 7 Highlights
Mar. 14, 2001; In English; Videotape: 22 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032303; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows STS-102 Mission Specialist Andy Thomas, Expedition 1 crewmember Sergei Krikalev, and Expedition 2 crewmember Susan Helms transferring supplies from the Leonardo Module to the International Space Station (ISS). Then STS-102 Commander Jim Wetherbee joins the crew of Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev) for an on-orbit interview, where they answer questions about the spacewalks performed by Voss and Helms and about living on the ISS.
CASI
International Space Station; Crew Procedures (Inflight); Transferring

20010022780 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 6 Highlights
Mar. 12, 2001; In English; Videotape: 20 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032302; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Footage shows STS-102 Mission Specialists Andrew Thomas and Paul Richards preparing for and performing their spacewalks. The cameras in Discovery's payload bay show Discovery and the robotic arm against a backdrop of Earth.
CASI
Discovery (Orbiter); International Space Station; Extravehicular Activity; Crew Procedures (Inflight)

20010022781 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 5 Highlights
Mar. 12, 2001; In English; Videotape: 16 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001032301; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
External shots of Discovery and its payload show the robotic arm lifting and maneuvering the Leonardo Module into place on the Destiny Laboratory Module, which is part of the International Space Station (ISS). Footage shows Expedition 1 Commander Bill Shepherd opening the hatch between Destiny and Leonardo.
CASI
Destiny Laboratory Module; International Space Station; Discovery (Orbiter); Payloads

20010026231 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 9 Highlights
Mar. 16, 2001; In English; Videotape: 20 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038753; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-102 mission, three crews are on the International Space Station: (1) STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards); (1) Expedition 1 (William Shepherd, Yuri Gidzenko, and Sergei Krikalev); and (3) Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev). Mission Specialist Thomas, Commander Shepherd, and Commander Usachev are seen in the Leonardo Module stowing items for the trip home on Discovery. Then the three crews are seen together answering questions about the mission during an in-flight interview.
CASI
International Space Station; Crew Procedures (Inflight); Space Station Modules

20010026232 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 8 Highlights
Mar. 15, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038754; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-102 mission, Discovery Pilot James Kelly and Mission Specialist Andrew Thomas are seen in the Leonardo Module. The Expedition 2 crew (James Voss, Susan Helms, and Yuriy Usachev) work to set up the robotic workstations for the robotic arm. STS-102 Commander Jim Weatherbee, Pilot Kelly, and the Expedition 1 crew (William M. Shepherd, Yuri P. Gidzenko, and Sergei K. Krikalev) answer questions about the mission in an in-flight interview.
CASI
International Space Station; Crew Procedures (Inflight)

20010026233 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 10 Highlights
Mar. 17, 2001; In English; Videotape: 17 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038755; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 10th day of the STS-102 mission, Pilot James Kelly and Mission Specialists Andrew Thomas and Paul Richards are seen in the Destiny Laboratory Module as they answer questions about the mission in an in-flight interview.
CASI
Destiny Laboratory Module; International Space Station; Crew Procedures (Inflight)

20010026234 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 11 Highlights
Mar. 18, 2001; In English; Videotape: 17 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038756; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 11th day of the STS-102 mission, Discovery Mission Specialist Andrew Thomas and Expedition 1 Commander Bill Shepherd are seen closing the hatch of the Leonardo Module. External shots show the Leonardo Module undocking from the International Space Station (ISS) and being moved via robotic arm into the payload bay of Discovery.
CASI
International Space Station; Hatches; Space Station Modules; Crew Procedures (Inflight)

20010026235 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 13 Highlights
Mar. 20, 2001; In English; Videotape: 15 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038757; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 13th day of the STS-102 mission, the Expedition 1 crew, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, answers questions about their extended mission and the International Space Station (ISS).
CASI
International Space Station; Crew Procedures (Inflight)

20010026236 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 12 Highlights
Mar. 19, 2001; In English; Videotape: 20 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001038758; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 12th day of the STS-102 mission, the crews of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards), Expedition 1 (William Shepherd, Yuri Gidzenko, and Sergei Krikalev), and Expedition 2 (James Voss, Susan Helms, and Yuriy Usachev) are seen during the in-flight ceremony where Commander Shepherd transfers control of the International Space Station (ISS) to Commander Usachev. The hatch between the ISS and the Discovery Orbiter is closed, and Discovery is seen undocking from the ISS. External views of the ISS are shown against a backdrop of Earth. The Great Lakes area and Chicago are seen from space during night, when lights outline the city.
CASI
Discovery (Orbiter); International Space Station; Crew Procedures (Inflight); Hatches; Spacecraft Docking

20010027557 NASA Johnson Space Center, Houston, TX USA
STS–102 Crew Activity Report/Flight Day 4 Highlights
Mar. 11, 2001; In English; Videotape: 24 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001031585; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-102 mission, Expedition 2 crewmembers Jim Voss and Susan Helms are seen preparing for and performing their spacewalks. Discovery Pilot Jim Kelly is shown maneuvering the robotic arm as he helps Helms and Voss to install the Third Pressurized Mating Adapter (PMA-3) to the Unity Module on the International Space Station (ISS).
Author
International Space Station; Space Station Modules; Crew Procedures (Inflight); Extravehicular Activity; Installing

20010033308 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Umberto Guidoni
Apr. 03, 2001; In English; Videotape: 25 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047823; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Mission Specialist Umberto Guidoni is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Guidoni then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

20010033309 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Kent Rominger
Apr. 03, 2001; In English; Videotape: 23 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047825; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Commander Kent Rominger is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm,

UHF antenna, and Rafaello Logistics Module. Rominger then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Antennas

20010033310 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: John Phillips
Apr. 03, 2001; In English; Videotape: 28 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047826; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Mission Specialist John Phillips is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Phillips then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Antennas

20010033311 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Jeff Ashby
Apr. 03, 2001; In English; Videotape: 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047827; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Pilot Jeff Ashby is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Ashby then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Antennas

20010033314 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Scott Parazynski
Apr. 03, 2001; In English; Videotape: 42 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047877; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-100 Mission Specialist Scott Parazynski is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Parazynski then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

20010033315 NASA Kennedy Space Center, Cocoa Beach, FL USA
Multi–Purpose Logistics Module Briefing
Feb. 28, 2001; In English; Videotape: 23 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047878; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Silvanna Rabbi, MPLM Program Manager, Italian Space Agency, gives an overview of the Multi-Purpose Logistics Module (MPLM) in a prelaunch press conference. She describes the objectives, construction, specifications, and purpose of the three Italian-built modules, Leonardo, Rafaello, and Donatello. Ms. Rabbi then answers questions from the press.
CASI
Construction; Logistics; Space Station Modules; Specifications; Prelaunch Summaries

20010033316 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Yuri Lonchakov
Apr. 02, 2001; In English; Videotape: 24 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047879; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-100 Mission Specialist Yuri Lonchakov is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Lonchakov then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Prelaunch Summaries; Antennas; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

20010033317 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102/Expedition 2 Pre–Flight News Conference
Feb. 28, 2001; In English; Videotape: 45 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047880; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen during this prelaunch press conference. Each crewmember describes his or her role in the mission, describing the spacewalks and transfer of supplies from the Leonardo Multi-Purpose Logistics Module to the Destiny Laboratory. They then answer questions from the press.
CASI
Extravehicular Activity; Spacecrews; Prelaunch Summaries; Crew Procedures (Inflight); Loading Operations

20010033319 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102/Expedition 2 Mission Overview
Feb. 28, 2001; In English; Videotape: 1 hr. 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047882; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

John Shannon, STS-102 Lead Flight Director, Bernestine Dickey, STS-102 Launch Package Manager, and Rick La Brode, International Space Station (ISS) Lead Flight Director, give an overview of the STS-102 mission during a prelaunch press conference. Mr. Shannon discusses how the mission came into being and its objectives, including information on the launch and a day-by-day account of mission activities. Ms. Dickey gives details on the payload of STS-102, describing the system racks, cargo elements, and crew supplies delivered via the Leonardo Multi-Purpose Logistics Module. Mr. La Brode describes the current configuration of the ISS and upcoming changes. He also discusses the activities of the Expedition 2 crew during the next four months. Computer simulations show the ISS' current and future (after the STS-102 mission) configurations, the installations of Leonardo, and the move of the Pressurized Mating Adapter from one port to another on the Destiny Laboratory. The panel then answers questions from the press.
CASI
International Space Station; Prelaunch Summaries; Space Station Modules; Spacecraft Docking

20010033320 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Interview: Chris Hadfield
Apr. 03, 2001; In English; Videotape: 45 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047883; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-100 Mission Specialist Chris Hadfield is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, the rendezvous and docking of Endeavour with the International Space Station (ISS), the mission's spacewalks, and installation and capabilities of the Space Station robotic arm, UHF antenna, and Rafaello Logistics Module. Hadfield then discusses his views about space exploration as it becomes an international collaboration.
CASI
Extravehicular Activity; Antennas; Prelaunch Summaries; Installing; Orbital Rendezvous; Robot Arms; Spacecraft Docking

20010035849 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Expedition 2 Increment and Science Briefing
Feb. 28, 2001; In English; Videotape: 38 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Merri Sanchez, Expedition 2 Increment Manager, John Uri, Increment Scientist, and Lybrease Woodard, Lead Payload Operations Director, give an overview of the upcoming activities and objectives of the Expedition 2's (E2's) mission in this prelaunch press conference. Ms. Sanchez describes the crew rotation of Expedition 1 to E2, the timeline E2 will follow during their stay on the International Space Station (ISS), and the various flights going to the ISS and what each will bring to ISS. Mr. Uri gives details on the on-board experiments that will take place on the ISS in the fields of microgravity research, commercial, earth, life, and space sciences (such as radiation characterization, H-reflex, colloids formation and interaction, protein crystal growth, plant growth, fermentation in microgravity, etc.). He also gives details on the scientific facilities to be used (laboratory racks and equipment such as the human torso facsimile or 'phantom torso'). Ms. Woodard gives an overview of Marshall Flight Center's role in the mission. Computerized simulations show the installation of the Space Station Remote Manipulator System (SSRMS) onto the ISS and the installation of the airlock using SSRMS. Live footage shows the interior of the ISS, including crew living quarters, the Progress Module, and the Destiny Laboratory. The three then answer questions from the press.
CASI
International Space Station; Microgravity; Spaceborne Experiments; Prelaunch Summaries; Aerospace Sciences; Earth Sciences; Life Sciences

20010035850 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Expedition 2 Increment Crew News Conference
Feb. 28, 2001; In English; Videotape: 45 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048901; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 2 crewmembers Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms are introduced in this prelaunch press conference. They answer questions from the press about their expectations and activities for the upcoming mission on the International Space Station.
CASI
International Space Station; Spacecrews; Prelaunch Summaries; Crew Procedures (Inflight)

20010035853 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Prelaunch Press Conference
Mar. 06, 2001; In English; Videotape: 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048898; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Ron Dittemore, NASA Shuttle Program Manager, Tommy Holloway, NASA International Space Station Program Manager, Dave King, NASA Director of Shuttle Processing, and Captain Clif Stargardt, US Air Force Meteorologist, in this STS-102 prelaunch press conference. The men give an overview of the prelaunch processing for the Discovery Orbiter (such as the PRSD loading) and give a weather forecast for launch. They then answer questions from the press.
CASI
Discovery (Orbiter); Spacecraft Launching; Weather Forecasting; Prelaunch Summaries; Prelaunch Tests

20010035854 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Countdown Status
Mar. 05, 2001; In English; Videotape: 21 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048897; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Glenn Chin, Leonardo Payload Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Spaulding gives an overview of the status of the Discovery Orbiter, including the prelaunch procedures (payload inspection and closure, avionics check, and the loading of the onboard cyrogenic tanks), the countdown and built in time holds, launch window, Discovery launch, and the landing. Mr. Chin discusses the payload status, including specifications on the Multi-Purpose Logistics Module, and the hardware contamination inspection. Mr. Priselac describes the weather forecast for the upcoming launch. The men then answer questions from the press.
CASI
Discovery (Orbiter); Countdown; Launch Windows; Spacecraft Launching; Prelaunch Tests; Prelaunch Summaries; Payloads; Weather Forecasting

20010036656 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Countdown Status Briefing
Mar. 06, 2001; In English; Videotape: 18 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052179; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Glenn Chin, Leonardo Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-102 prelaunch press conference. Mr. Nickolenko gives an overview of the countdown and built-in hold times, the launch window, and prelaunch activities (such as activation and checkout of the onboard computer systems, closing the payload bay doors, servicing of the onboard cryogenic cell tanks, main engine tests, and power-up of the ground communications systems). Mr. Chin confirms that the payload is in the final flight configuration and is ready for launch. Mr. Priselac gives the weather forecast for the launch date. The men then answer questions from the press.
CASI
Checkout; Countdown; Spacecraft Launching; Weather Forecasting; Prelaunch Summaries; Prelaunch Tests

20010036658 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Flight Crew Post–Landing Press Conference
Mar. 21, 2001; In English; Videotape: 24 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052177; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces STS-102 Commander Jim Wetherbee in this post-landing press conference. Commander Wetherbee gives a brief statement about the success of the mission and answers questions from the press.
CASI
Astronaut Performance; Postlaunch Reports

20010036749 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–102 Extravehicular Activities Briefing
Feb. 28, 2001; In English; Videotape: 25 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052181; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Keith Johnson, STS-102 Lead Extravehicular Activities Officer, gives an overview of the mission's spacewalks in this prelaunch press conference. He describes the activities, objectives, and timeline of the spacewalks during the STS-102 mission. Computerized simulations show the move of the Third Pressurized Mating Adapter (PMA3) and the retrieval of the rigid umbilicals from the payload bay of Discovery. Mr. Johnson then answers questions from the press.
CASI
Extravehicular Activity; Prelaunch Summaries; Crew Procedures (Inflight)

20010036750 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–106 TCDT Photo Opportunity
Aug. 17, 2000; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052180; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-106 crewmembers Commander Terrence W. Wilcutt, Pilot Scott D. Altman, and Mission Specialists Daniel C. Burbank, Edward T. Lu, Richard A. Mastracchio, Yuri Ivanovich Malenchenko, and Boris V. Morukov are seen during the Terminal Countdown and Demonstration Test (TCDT) activity of meeting the press. Each crewmember introduces himself and then they answer questions from the press about the upcoming mission.
CASI
Spacecrews; Crew Procedures (Preflight)

20010036768 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–101 Mission Overview Briefing
Mar. 29, 2000; In English; Videotape: 53 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000076141; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Phil Engelauf, STS-101 Lead Flight Director, Paul Hill, STS-101 ISS Lead Flight Director, and Sharon Castle, STS-101 Package Manager, give an overview of the objectives and activities of the upcoming mission in this preflight press conference. Computerized animations show the configuration of the payload bay and the docking and flyaround of Atlantis and the International Space Station (ISS). Mr. Engelauf, Mr. Hill, and Ms. Castle then answer questions from the press.
CASI
International Space Station; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

20010037597 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Training
Apr. 05, 2001; In English; Videotape: 43 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001054057; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-100, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, during various parts of their training, including the crew photo session, postlanding egress, extravehicular activity (EVA) large tool training, EVA training in the Neutral Buoyancy Laboratory (NBL), secondary payload training, and during VHF training.
CASI
Astronaut Training; Crew Procedures (Preflight); Extravehicular Activity; Egress; Astronaut Performance

20010038418 NASA Johnson Space Center, Houston, TX USA
STS–98 Mission Highlights Resource Tape, Part 2 of 3
Apr. 13, 2001; In English; Videotape: 56 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001054059; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-98 Mission Highlights Resource Tape, Part 1 of 3' (internal ID 2001054058), this video shows the activities of flight days four through seven of the STS-98 mission on Atlantis. 'STS-98 Mission Highlights Resource Tape, Part 3 of 3' (internal ID 2001054060) shows footage from flight days 8-11.
CASI
Crew Procedures (Inflight); Astronaut Performance; Extravehicular Activity; International Space Station

20010038514 NASA Johnson Space Center, Houston, TX USA
STS–98 Mission Highlights Resource Tape, Part 3 of 3
Apr. 13, 2001; In English; Videotape: 59 min. 36 sec. playng time, in color, with sound
Report No.(s): NONP–NASA–VT–2001054060; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-98 Mission Highlights Resource Tape, Part 1 of 3' (internal ID 2001054058) and 'STS-98 Mission Highlights Resource Tape, Part 2 of 3' (internal ID 2001054059), this video concludes the overview of the STS-98 mission. Footage shows the activities of flight days 8 through 11 and the landing of Atlantis.
CASI
International Space Station; Spacecraft Landing; Atlantis (Orbiter); Crew Procedures (Inflight)

20010038724 NASA Johnson Space Center, Houston, TX USA
Space Shuttle: Ground Support
Dec. 13, 1993; In English; Videotape: 11 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001056989; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of the function and importance of the Ground Support System to the Space Station missions. Details are given on the individual responsibilities and contributions of each of the NASA centers, from the design and construction of the Space Shuttle to its launch, on-orbit performance, and landing.
CASI
Ground Support Systems; Space Shuttles; Spacecraft Design

20010038725 NASA Johnson Space Center, Houston, TX USA
Space Shuttle Propulsion
Jan. 01, 1993; In English; Videotape: 11 min. 30 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an overview of the Space Shuttle's propulsion system, giving details on the individual components, their specifications, and functions. Successful launches are shown.
CASI
Space Shuttles; Specifications; Spacecraft Propulsion

20010038858 NASA Johnson Space Center, Houston, TX USA
STS–98 Mission Highlights Resource Tape, Part 1 of 3
Apr. 13, 2001; In English; Videotape: 56 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001054058; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-98 mission is given through footage from each flight day, starting with the prelaunch preparations (crew breakfast, suitup, and boarding of Atlantis), countdown, and Atlantis' launch and ending with the activities of flight day four. Footage from the fourth flight day is continued on the video 'STS-98 Mission Highlights Resource Tape, Part 2 of 3' (internal ID 2001054059), which shows mission activities through flight day seven. 'STS-98 Mission Highlights Resource Tape, Part 3 of 3' (internal ID 2001054060) shows the end of the mission, including footage from flight days 8-11 and the landing of Atlantis.
CASI
Countdown; Spacecraft Launching; Crew Procedures (Inflight); Crew Procedures (Preflight); Astronaut Performance

20010038996 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 3 Highlights
Apr. 24, 2001; In English; Videotape: 24 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during preparations for the upcoming spacewalk, installation of the Canadian Robot Arm, and the docking of Endeavour with the International Space Station (ISS). The docking is shown, and

Endeavour is seen against a backdrop of Earth as it passes over the Pacific Ocean while it approaches the southern tip of South America.
CASI
Spacecraft Docking; Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

20010038997 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 1 Highlights
Apr. 19, 2001; In English; Videotape: 20 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059991; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen during various prelaunch activities, including the ceremonial breakfast, suit-up, departure from the Operations and Checkout (O&C) Building, and boarding Endeavour. The launch of the orbiter is shown.
CASI
Checkout; Endeavour (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010038998 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 8 Highlights
Apr. 25, 2001; In English; Videotape: 23 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059989; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-100 Endeavour mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen preparing for and performing their spacewalks as they check the connections between the Destiny Laboratory Module and the Canadian Robotic Arm, remove an early communications antenna from the Unity Module, and confirm power connections for the Canadian Robotic Arm. Commander Kent Rominger is seen during a workout on Endeavour's ergometer.
CASI
Ergometers; Robot Arms; Crew Procedures (Inflight); Extravehicular Activity; Endeavour (Orbiter); International Space Station

20010038999 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 5 Highlights
Apr. 24, 2001; In English; Videotape: 31 min. 03 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059988; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fifth day of the STS-100 mission, the crews of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) and the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen greeting each other after opening the connecting hatches between Endeavour and the International Space Station (ISS). Parazynski uses the newly installed Canadian Robotic Arm to lift the Rafaello Module out of the payload bay of Endeavour and install it onto the Destiny Laboratory Module on the ISS. Ashby, Hadfield, and Parazynski answer questions about the mission during an on-orbit press conference. Ashby and Parazynski give a guided video tour of the interior of the ISS/Endeavour complex.
CASI
Endeavour (Orbiter); International Space Station; Robot Arms; Crew Procedures (Inflight); Spacecrews

20010039000 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 2 Highlights
Apr. 20, 2001; In English; Videotape: 19 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059521; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-100 mission, the crewmembers of Endeavour (Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov) are seen during various preparations for the upcoming docking procedure with the International Space Station (ISS). Footage shows Hadfield and Parazynski checking their spacesuits and the tools they will use on the first spacewalk. The Shuttle's robotic arm is used to survey the payload bay of Endeavour and to check on the Canadian Robotic Arm. Expedition 2 crewmembers Susan Helms and Jim Voss are seen in the Destiny Laboratory Module. The Canadian Robotic Arm is shown against a backdrop of Earth after it unfolds from the payload bay.
Author
Robot Arms; Spacecrews; Crew Procedures (Inflight); Endeavour (Orbiter)

20010047481 NASA Johnson Space Center, Houston, TX USA
STS–106 Mission Highlights Resource Tape, Part 1 of 2
May 15, 2001; In English; Videotape: 1 hr. 26 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001072041; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-106 mission is given through footage of the activities of the first flight days of the mission, starting with flight day one and ending with flight day eight. The crewmembers of Atlantis, Commander Terrence Wilcutt, Pilot Scott Altman, and Mission Specialists Daniel Burbank, Edward Lu, Richard Mastracchio, Yuri Malenchenko, and Boris Morukov, are seen during various prelaunch activities, such as during the ceremonial breakfast, suit up, and boarding Atlantis. The launch is seen, as are the rendezvous and docking of the Orbiter to the International Space Station (ISS) and the spacewalks performed on flight day three by Lu and Malenchenko. Activities for flight days 9-12 can be seen on 'STS-106 Mission Highlights Resource Tape, Part 2 of 2' (internal ID 2001072040).
CASI
Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Atlantis (Orbiter); Crew Procedures (Inflight); Crew Procedures (Preflight)

20010047555 NASA Johnson Space Center, Houston, TX USA
STS–100 Flight Day 12 Highlights
May 04, 2001; In English; Videotape: 25 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001064667; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-100 mission, the crewmembers of Atlantis, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen in an on-orbit press conference as they answer questions from the press. Also shown is the approach and dock of the Russian Soyuz spacecraft to the International Space Station (ISS). The Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and the Soyuz crew greet each other and welcome space tourist Dennis Tito to the ISS.
CASI
Soyuz Spacecraft; International Space Station; Crew Procedures (Inflight); Spacecrews

20010047588 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Interview: Mike Gernhardt
May 13, 2001; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001071162; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Mission Specialist Mike Gernhardt is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Gernhardt describes his role in the rendezvous, docking, undocking, and flyaround of the

Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.
CASI
Air Locks; External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

20010047589 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Interview: Jim Reilly
May 13, 2001; In English; Videotape: 53 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001071161; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Mission Specialist Jim Reilly is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Reilly describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.
CASI
Air Locks; External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

20010047590 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Interview: Charlie Hobaugh
May 13, 2001; In English; Videotape: 44 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001071160; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Pilot Charlie Hobaugh is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Hobaugh describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.
CASI
Air Locks; Extravehicular Activity; Spacecraft Docking; Prelaunch Summaries; Crew Procedures (Inflight)

20010047594 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Interview: Janet Kavandi
May 13, 2001; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001070357; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-104 Mission Specialist Janet Kavandi is seen being interviewed. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the mission's goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Kavandi describes her role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.
CASI
Air Locks; External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

20010047595 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Interview: Steve Lindsey
May 13, 2001; In English; Videotape: 40 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001070356; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-104 Commander Steve Lindsey is seen being interviewed. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, its payload (the Joint Airlock and the external gas tanks), and the usefulness of the newly installed Canadian Robotic Arm (installed by STS-100 crew). Lindsey describes his role in the rendezvous, docking, undocking, and flyaround of the Atlantis Orbiter and the International Space Station (ISS) and discusses the mission's planned spacewalks.
CASI
Air Locks; External Tanks; Extravehicular Activity; Spacecraft Docking; Crew Procedures (Inflight); Prelaunch Summaries

20010047633 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 7 Highlights
Apr. 25, 2001; In English; Videotape: 22 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061752; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this seventh day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen as they unload equipment from the Rafaello Logistics Module. Guidoni and Rominger answer questions from the Italian and European Space Agencies in an on-orbit press conference. The computer glitch that delayed tests on the Canadian Robotic Arm and another boost to the International Space Station (ISS) is described.
CASI
International Space Station; Crew Procedures (Inflight); Space Station Modules; Loading Operations

20010047634 NASA Johnson Space Center, Houston, TX USA
STS–100 Flight Day 10 Highlights
Apr. 30, 2001; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061751; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-100 mission, the computer problems that delayed tests on the Canadian robotic arm are discussed between the Atlantis and Mission Ground Control. The Canadian robotic arm is seen after it lifts Spacelab from the pallet on Atlantis and moves to meet the Space Shuttle's robotic arm as it 'hands over' Spacelab to the smaller robotic arm. The Canadian robotic arm with Spacelab are seen against a backdrop of Earth as the Space Shuttle and International Space Station pass to the northeast of Australia.
CASI
International Space Station; Robot Arms; Crew Procedures (Inflight); Computer Systems Performance

20010047635 NASA Johnson Space Center, Houston, TX USA
STS–100 Flight Day 9 Highlights
Apr. 30, 2001; In English; Videotape: 27 mins. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061750; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-100 mission, Commander Kent Rominger and Mission Specialist Chris Hadfield answer questions about the mission in an on-orbit press conference. The Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, answer questions about their mission and the Canadian Robotic Arm in another on-orbit press conference. The Rafaello Logistics Module is removed from the Unity Module on the International Space Station and transfers it to the payload bay of Atlantis.
CASI
International Space Station; Crew Procedures (Inflight); Astronaut Performance; Space Station Modules

20010047636 NASA Johnson Space Center, Houston, TX USA
STS–100 Flight Day 11 Highlights
Apr. 30, 2001; In English; Videotape: 23 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001061749; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eleventh day of the STS-100 mission, the Atlantis Orbiter undocks from the International Space Station (ISS). The ISS is seen against a backdrop of Earth and space as Atlantis performs its flyaround of the station.
CASI
Atlantis (Orbiter); International Space Station; Spacecraft Docking

20010047641 NASA Johnson Space Center, Houston, TX USA
STS–100 Flight Day 8 Highlights
Apr. 26, 2001; In English; Videotape: 13 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059990; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this eighth day of the STS-100 mission, the crewmembers of Endeavour, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, are seen reloading the Rafaello Logistics Module. External views of the International Space Station (ISS) are shown against a backdrop of Earth as Mission Ground Control and the Atlantis crew discuss the efforts to fix the glitch in the ISS' computer system.
CASI
International Space Station; Computer Systems Performance; Astronaut Performance; Crew Procedures (Inflight)

20010047642 NASA Johnson Space Center, Houston, TX USA
STS–100 Crew Activity Report: Flight Day 4 Highlights
Apr. 24, 2001; In English; Videotape: 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059520; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-100 mission, Mission Specialists Chris Hadfield and Scott Parazynski are seen performing their spacewalks, where they work on the electrical connections between the Destiny Laboratory and the Canadian Robotic Arm, remove the ultrahigh frequency antenna from the pallet and install it onto Destiny, and raise the Robotic Arm to prepare it for deployment. The fully deployed Robotic Arm is seen against a backdrop of Earth.
CASI
Extravehicular Activity; Robot Arms; Crew Procedures (Inflight); International Space Station

20010047643 NASA Johnson Space Center, Houston, TX USA
Space Shuttle: The Orbiter
Jan. 01, 2001; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001059519; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video gives an overview of the components, systems, interior layout, and procedures associated with the Space Shuttle Orbiter. A rollout, launch, and landing of the Orbiter are shown.
CASI
Spacecraft Launching; Spacecraft Landing; Specifications; Space Shuttle Orbiters

20010047995 NASA Johnson Space Center, Houston, TX USA
STS–106 Mission Highlights Resource Tape, Part 2 of 2
May 15, 2001; In English; Videotape: 38 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001072040; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-106 Mission Highlights Resource Tape, Part 1 of 2' (internal ID 2001072041), footage shows the activities of flight days 9-12, including the undocking of Atlantis from the International Space Station (ISS) and the landing of the Space Shuttle.
CASI
International Space Station; Atlantis (Orbiter); Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflight)

20010060361 NASA Johnson Space Center, Houston, TX USA
STS–102 Mission Highlight Resource Tape, Tape 2 of 4, Part B
Jun. 21, 2001; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096941; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 1 of 2' (internal ID 2001096942), this video shows highlights from flight day five of STS-102, including the deployment of the Space Shuttle's Robotic Arm and the opening of the hatch between the Unity Module and Leonard Multipurpose Logistics Module by Expedition 1 Commander Bill Shepherd. The activities of flight days 6-14 can be seen on 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2' (internal ID 2001096943) and 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2' (internal ID 2001096940).
CASI
International Space Station; Robot Arms; Crew Procedures (Inflight); Deployment; Hatches

20010060390 NASA Johnson Space Center, Houston, TX USA
STS–102 Mission Highlight Resource Tape, Tape 4 of 4, Part B
Jun. 21, 2001; In English; Videotape: 13 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096940; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 1 of 2' (internal ID 2001096942), 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 2 of 2' (internal ID 2001096941), and 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2' (internal ID 2001096943), this video shows the activities of flight days 13 and 14 of the STS-102 mission. The landing of the Discovery orbiter is seen from several viewpoints, and the crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen as they disembark from Discovery.
CASI
Discovery (Orbiter); Spacecrews; Spacecraft Landing

20010060391 NASA Johnson Space Center, Houston, TX USA
STS–102 Mission Highlight Resource Tape, Tape 1 of 4, Part A
Jun. 21, 2001; In English; Videotape: 1 hr. 30 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096942; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video gives an overview of the first four flight days of the STS-102 mission through a compilation of footage from each day. The crew of STS-102 (Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards) and the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) are seen during the ceremonial breakfast, suitup, and as they board Discovery. The orbiter's launch is seen from several different viewpoints, and various in-flight activities are shown, such as the opening of Discovery's payload bay doors, Helms preparing for the 'H-Reflex Experiment: Effects of Microgravity on the Spine', the rendezvous and docking of Discovery with the International Space Station (ISS), and Helms and Voss preparing for and performing their spacewalks. The crew of STS-102 and both Expedition crews (E1 crew William Shepherd, Yuri Gidzenko, and Sergei Krikalev) are seen in the Destiny Laboratory Module. Activities for flight day five can be seen on 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 2 of 2' (internal ID 2001096941). Flight days 6-14 activities can be seen on 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 1 of 2' (internal ID 2001096943) and 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2' (internal ID 2001096940).
CASI
International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight); Spacecraft Launching

20010060392 NASA Johnson Space Center, Houston, TX USA
STS–102 Mission Highlight Resource Tape, Tape 3 of 4, Part A
Jun. 21, 2001; In English; Videotape: 1 hr. 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001096943; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 1 of 2' (internal ID 2001096942) and 'STS-102 Mission Highlight Resource Tape, Part 1 of 2, Tape 2 of 2' (internal ID 2001096941), this video shows the activities of flight days 6-12 of the STS-102 mission. Various on-orbit activities are seen, such as STS-102 Mission Specialists Andrew Thomas and Paul Richards suiting up and performing their spacewalks, Thomas in the Leonardo Multipurpose Logistics Module preparing for the unloading activities, the change of command from the International Space Station's (ISS's)

Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) to the Expedition 2 crew (Yuriy Usachev, James Voss, and Susan Helms), and the undocking of the Discovery Orbiter from the ISS. Activities for flight days 13 and 14 can be found on 'STS-102 Mission Highlight Resource Tape, Part 2 of 2, Tape 2 of 2' (internal ID 2001096940).
CASI
Extravehicular Activity; Unloading; Crew Procedures (Inflight); Spacecraft Docking

20010063884 NASA Johnson Space Center, Houston, TX USA
STS–92 Post–Flight Presentation
Dec. 06, 2000; In English; Videotape: 20 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001101178; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video gives an overview of the STS-92 mission. The crew of the Discovery Orbiter, Commander Brian Duffy, Pilot Pam Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur, narrate as footage of the launch, on-orbit activities (including rendezvous and docking with the International Space Station (ISS), the mission's four spacewalks, in-flight maintenance, undocking, and the crew playing in a zero-gravity environment), and the landing of Discovery are seen.
CASI
Discovery (Orbiter); Extravehicular Activity; International Space Station; Spacecraft Docking; Spacecraft Launching; Spacecraft Landing; Crew Procedures (Inflight)

20010063885 NASA Johnson Space Center, Houston, TX USA
STS–104 Crew Training Clips
Jun. 22, 2001; In English; Videotape: 58 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001101177; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen during various stages of their training. Footage shows the following: (1) Water Survival Training at the Neutral Buoyancy Laboratory (NBL); (2) Rendezvous and Docking Training in the Shuttle Mission Simulator; (3) Training in the Space Station Airlock; (4) Training in the Virtual Reality Lab; (5) Post-insertion Operations in the Fixed Base Simulator; (6) Extravehicular Activity Training at the NBL; (7) Crew Stowage Training in the Space Station Mock-up Training Facility; and (8) Water Transfer Training in the Crew Compartment Trainer.
CASI
Astronaut Training; Extravehicular Activity; Shuttle Mission Simulator; Spacecrews; Training Devices; Virtual Reality

20010066319 NASA Johnson Space Center, Houston, TX USA
STS–100 Post Flight Presentation
May 26, 2001; In English; Videotape: 19 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001107902; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-100, Commander Kent Rominger, Pilot Jeffrey Ashby, and Mission Specialists Chris Hadfield, Scott Parazynski, John Phillips, Umberto Guidoni, and Yuri Valentinovich Lonchakov, narrate this video as footage from the ceremonial breakfast, crew suitup, and launch of Endeavour are seen. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Endeavour with the International Space Station (ISS), the installation and deployment of the ISS' Canadian Robotic Arm, the spacewalks, and a video tour through the length of the ISS. The video ends with Endeavour's undocking from the ISS and the landing of the orbiter.
CASI
Extravehicular Activity; International Space Station; Orbital Rendezvous; Robot Arms; Spacecraft Docking; Crew Procedures (Inflight); Spacecraft Launching; Endeavour (Orbiter)

20010066320 NASA Johnson Space Center, Houston, TX USA
STS–98 Post Flight Presentation
May 26, 2001; In English; Videotape: 19 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001107901; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-98, Commander Kenneth Cockrell, Pilot Mark Polansky, and Mission Specialists Bob Curbeam, Tom Jones, and Marsha Ivins, narrate this video as footage of from the ceremonial breakfast, crew suitup, and launch of Atlantis are seen. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Atlantis with the International Space Station (ISS), the spacewalks, the installation of the Destiny Laboratory Module, and the crew playing in microgravity. The video ends with Atlantis undocking from the ISS and the landing of the orbiter.
CASI
Destiny Laboratory Module; Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Atlantis (Orbiter); Crew Procedures (Inflight)

20010066321 NASA Johnson Space Center, Houston, TX USA
STS–102 Post Flight Presentation
Jun. 18, 2001; In English; Videotape: 20 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001107900; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-102, Commander James Wetherbee, Pilot James Kelly, and Mission Specialists Andrew Thomas and Paul Richards, narrate this video as footage of from the ceremonial breakfast, crew suitup, and launch of Discovery are seen. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Discovery with the International Space Station (ISS), the spacewalks, and the transfer operations of moving cargo from the Leonardo Multipurpose Logistics Module. The video ends with Discovery undocking from the ISS and the landing of the orbiter.
CASI
Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecraft Launching; Crew Procedures (Inflight)

20010066389 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 1 Highlights
Jul. 13, 2001; In English; Videotape: 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108017; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-104 mission, the crewmembers of Atlantis, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, are seen during the ceremonial breakfast before launch. The launch of Atlantis is shown, and exterior video scans of the orbiter show the payload bay after the bay doors are opened.
CASI
Atlantis (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010066390 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 2 Highlights
Jul. 13, 2001; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108018; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-104 mission, the Space Shuttle Atlantis continues its approach to the International Space Station. External scans of the orbiter show the robotic arm checkout as it passes over the southern Pacific Ocean and Australia.
CASI
Robot Arms; Atlantis (Orbiter)

20010066392 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 3 Highlights
Jul. 14, 2001; In English; Videotape: 18 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108020; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-104 mission, the Atlantis Orbiter approaches and docks with the International Space Station (ISS). The crew of STS-104,

Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, and the Expedition 2 crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen as they open the hatches between Atlantis and the ISS. External video shows the Quest airlock in the payload bay of Atlantis.
CASI
Air Locks; Atlantis (Orbiter); International Space Station; Crew Procedures (Inflight)

20010066393 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 4 Highlights
Jul. 15, 2001; In English; Videotape: 29 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108022; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fourth day of the STS-104 mission, Mission Specialists Michael Gernhardt and James Reilly are seen during their spacewalks as they attach equipment to the Quest airlock before the robotic arm of the International Space Station (ISS) lifts the airlock out of Atlantis' payload bay and moves it into position to be installed by Gernhardt and Reilly. The ceremonial cutting of the ribbon to Quest by STS-104 Commander Steven Lindsey and Expedition 2 Commander Yuriy Usachev is shown.
CASI
Air Locks; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

20010066998 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 6 Highlights
Jul. 17, 2001; In English; Videotape: 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109806; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 2 Flight Engineer Jim Voss is seen opening the hatch between the Unity Module and the Quest Airlock. An on-orbit interview with Expedition 2 Commander Yuriy Usachev and STS-104 Commander Steve Lindsey and Mission Specialist Charlie Hobaugh is shown as they answer questions about some problems with a previous spacewalk. As exterior shots of the International Space Station are seen, the air leak in the Unity Modules node pressure valve is described.
CASI
Air Locks; Extravehicular Activity; International Space Station; Leakage; Valves; Crew Procedures (Inflight)

20010066999 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 5 Highlights
Jul. 16, 2001; In English; Videotape: 19 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109807; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Michael Gernhardt, James Reilly, and Janet Kavandi, and Expedition 2 Flight Engineer Susan Helms are seen during an on-orbit press conference, where they answer questions about the mission.
CASI
Spacecrews; Crew Procedures (Inflight); Extravehicular Activity

20010067000 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 8 Highlights
Jul. 19, 2001; In English; Videotape: 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109808; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 2 Flight Engineer Jim Voss and STS-104 Commander Steve Lindsey are seen in between the Unity Module and the Quest Airlock in the International Space Station as they replace the intermodular ventilation valve. Footage shows STS-104 Mission Specialist Janet Kavandi and Expedition 2 Flight Engineers Susan Helms and Jim Voss outfitting the Quest Airlock after Voss and Lindsey are finished with the repairs.
CASI
Air Locks; International Space Station; Valves; Crew Procedures (Inflight)

20010067025 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 7 Highlights
Jul. 18, 2001; In English; Videotape: 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001109810; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

External shots of the International Space Station (ISS) show the ISS' robotic arm in grappling position in preparation for lifting an oxygen tank out of the payload bay of Atlantis. Mission Specialists Michael Gernhardt and Jim Reilly are seen as they perform their spacewalks, installing the oxygen tank in place on the ISS.
CASI
Extravehicular Activity; International Space Station; Installing; External Tanks; Crew Procedures (Inflight)

20010067032 NASA Johnson Space Center, Houston, TX USA
Expedition 3 Crew Interview: Frank Culbertson, Jr.
Jul. 15, 2001; In English; Videotape: 55 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108189; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Commander Frank Culbertson is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Culbertson gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.
CASI
Extravehicular Activity; International Space Station; Spacecrews; Spaceborne Experiments; Space Station Modules

20010067041 NASA Johnson Space Center, Houston, TX USA
Expedition 3 Crew Interview: Mikhail Turin
Jul. 15, 2001; In English; Videotape: 41 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108191; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Flight Engineer Mikhail Turin is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Turin gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.
CASI
International Space Station; Spacecrews; Spaceborne Experiments; Extravehicular Activity

20010067042 NASA Johnson Space Center, Houston, TX USA
Expedition 3 Crew Interview: Vladimir Dezhurov
Jul. 15, 2001; In English; Videotape: 39 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001108190; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 3 Pilot Vladimir Dezhurov is seen being interviewed before leaving to become part of the third resident crew on the International Space Station (ISS). He answers questions about his inspiration to become an astronaut and his career path. He discusses his expectations for life on the ISS and the experiments he will be performing while on board. Dezhurov gives details on the spacewalks that will take place during the STS-105 mission (the mission carrying the Expedition 3 crew up to the ISS) and the unloading operations for the Multipurpose Logistics Module.
CASI
International Space Station; Spacecrews; Extravehicular Activity; Spaceborne Experiments; Loading Operations

20010067382 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Scott Horowitz
Jul. 23, 2001; In English; Videotape: 26 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110186; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-105 Commander Scott Horowitz is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission's activities. He gives details on the mission's goals, which include the transfer of supplies from the Discovery Orbiter to the International Space Station (ISS) and the change-over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS). Horowitz discusses the importance of the ISS in the future of human spaceflight.
CASI
Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)

20010067389 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Dan Barry
Jul. 23, 2001; In English; Videotape: 34 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110140; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-105 Mission Specialist Dan Barry is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission's activities. He gives details on the mission's goals, which include the transfer of supplies from the Discovery Orbiter to the International Space Station (ISS) and the change-over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS). Barry discusses the importance of the ISS in the future of human spaceflight.
CASI
Astronaut Training; Education; Astronauts; Crew Procedures (Inflight)

20010067429 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 9 Highlights
Jul. 20, 2001; In English; Videotape: 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110044; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-104 mission, Mike Gernhardt and Jim Reilly are seen in the newly installed Quest Airlock performing a dry run for flight day ten's spacewalks' preparations. The crews of STS-104 (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) and Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) answer questions about the STS-104 mission, the next day's spacewalks, and Expedition 2's stay on the International Space Station during an on-orbit interview. An external shot of the Atlantis Orbiter shows a water dump as it leaves the Shuttle and dissipates into space. Commander Lindsey gives a guided video tour of the Quest Airlock, displaying equipment and summarizing its purpose.
CASI
Air Locks; International Space Station; Spacecrews; Crew Procedures (Inflight)

20010067437 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Pat Forrester
Jul. 23, 2001; In English; Videotape: 24 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110188; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-105 Mission Specialist Pat Forrester is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission's activities. He gives details on the mission's goals, which include the transfer of supplies from the Discovery Orbiter to the International Space Station (ISS) and the change-over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS). Forrester discusses the importance of the ISS in the future of human spaceflight.
CASI
Astronaut Training; Education; Astronauts

20010067483 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 10 Highlights
Jul. 21, 2001; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110046; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-104 mission, Mission Specialists Mike Gernhardt and Jim Reilly are seen as they perform their spacewalks, where they install Nitrogen Tank 3 on the Quest Airlock after the Canadarm lifts the tank out of the payload bay of Atlantis.
CASI
Extravehicular Activity; Spacecrews; Crew Procedures (Inflight); International Space Station

20010067484 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 11 Highlights
Jul. 22, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110045; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 11th day of the STS-104 mission, Expedition 2 crewmembers, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen in the Destiny Laboratory Module as they prepare for the departure of the STS-104 crew. Both the Expedition 2 crew and the STS-104 crew (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) are seen as they say their farewells and the STS-104 crew returns to the Space Shuttle. The undocking of Atlantis is shown and the International Space Station is seen against Earth and space as the orbiter flys around the station. The STS-104 crew answers questions about the mission in an on-orbit interview.
CASI
International Space Station; Spacecrews; Crew Procedures (Inflight); Spacecraft Docking

20010067505 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Interview: Rick Sturckow
Jul. 23, 2001; In English; Videotape: 11 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110189; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-105 Pilot Rick Sturckow is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, training for the mission, and his role in the mission's activities. He gives details on the mission's goals, which include the transfer of supplies from the Discovery Orbiter to the International Space Station (ISS) and the change-over of the Expedition 2 and Expedition 3 crews (the resident crews of ISS). Sturckow discusses the importance of the ISS in the future of human spaceflight.
CASI
Astronaut Training; Crew Procedures (Inflight); Astronauts

20010067506 NASA Johnson Space Center, Houston, TX USA
STS–104 Flight Day 12 Highlights
Jul. 23, 2001; In English; Videotape: 9 min. playing time, in color, with sound; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this 12th day of the STS-104 mission, the crew of Atlantis (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) continue their journey back to Earth after their departure from the International Space Station the day before. External shots of Atlantis are seen, as is a sunrise from orbit.
CASI
Spacecrews; Atlantis (Orbiter)

20010070272 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 2 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117678; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-100 Mission Resource Tape, Part 1 of 4' (internal ID 2001117677), this video shows highlights from flight days four through six, including footage of the installation of the Canadarm (ISS' robotic arm) on the

International Space Station (ISS), the spacewalks involved in this process, and the robotic arm lifting the Rafaello Multipurpose Logistics Module from the payload bay of Endeavour. The activities of flight days 6 (continued) - 11 can be found on 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117680) and 'STS-100 Mission Resource Tape, Part 4 of 4' (internal ID 2001117681).
CASI
Extravehicular Activity; Installing; International Space Station; Robot Arms; Crew Procedures (Inflight)

20010070273 NASA Johnson Space Center, Houston, TX USA
STS–105 Crew Training Clip
Jul. 31, 2001; In English; Videotape: 57 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117679; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The STS-105 crewmembers, Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester, are seeing during various stages of their training. Footage includes Post-Insertion Training, Virtual Reality Laboratory Remote Manipulator System Training, Emergency Egress Training in the CCT, Neutral Buoyancy Laboratory Training, Post Egress Landing Training at FFT, Long Rendezvous Training in the GNS (Navigation Simulator), and Post Insertion Operations Training at FFT.
CASI
Astronaut Training; Egress; Spacecrews

20010070274 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 3 of 4
Jul. 31, 2001; In English; Videotape: 57 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117680; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of 'STS-100 Mission Resource Tape, Part 1 of 4' (internal ID 2001117677) and 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), this video shows footage from flight days six through nine. Scenes include the spacewalks involved with the installation of a platform on the end of the Space Shuttle's Robotic Arm and the preparation of the Unity Module for the Quest Airlock to be installed during the next mission. The unloading of the Rafaello Multipurpose Logistics Module is seen, as is the replacement of the module in Endeavour's payload bay. Footage from flight days 10 - 11 can be found on 'STS-100 Mission Resource Tape, Part 4 of 4' (internal ID 2001117681).
CASI
Extravehicular Activity; Installing; Loading Operations; Unloading; Crew Procedures (Inflight)

20010070275 NASA Johnson Space Center, Houston, TX USA
Expedition 3 Crew Training Clips
Jul. 30, 2001; In English; Videotape: 41 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117683; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The Expedition 3 crewmembers, Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov, are seen during various stages of their training. Footage includes Extravehicular Activity (EVA) Training at the Neutral Buoyancy Laboratory (NBL), EVA Preparation and Post Training in the International Space Station Airlock Mock-up, in the NBL Space Station Remote Manipulator System Workstation, and during the T-38 flight at Ellington Field.
CASI
Astronaut Training; Space Stations; Extravehicular Activity

20010070277 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 1 of 4
Jul. 31, 2001; In English; Videotape: 59 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117677; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
An overview of the STS-100 Endeavour mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Endeavour), the countdown and launch of the orbiter, and on-orbit activities, including the opening of the orbiter's payload bay doors, the checkout of the equipment to be used in the mission's spacewalks, and the rendezvous and docking of Endeavour with the International Space Station. A collection of views of the Earth from space include Lake Michigan and Lake Superior, Lake Erie and Ontario, the St. Lawrence River, the US Eastern Shore, Lake Manicouagan, Ile d'Anticosti, Gaspe Peninsula, Island of Newfoundland, Labrador, and the US West Coast. Additional shots show sunlight on the Indian Ocean, cloud cover over the Pacific Ocean, and a night view of an electrical storm over Africa. Footage from flight days 4-11 can be found on 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117680), and 'STS-100 Mission Resource Tape, Part 4 of 4' (internal ID 2001117681).
CASI
Earth Observations (From Space); Endeavour (Orbiter); International Space Station; Spacecraft Launching; Crew Procedures (Inflight); Crew Procedures (Preflight); Orbital Rendezvous; Spacecraft Docking

20010070289 NASA Johnson Space Center, Houston, TX USA
STS–100 Mission Highlights Resource Tape, Part 4 of 4
Jul. 31, 2001; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001117681; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of 'STS-100 Mission Resource Tape, Part 1 of 4' (internal ID 2001117677), 'STS-100 Mission Resource Tape, Part 2 of 4' (internal ID 2001117678), and 'STS-100 Mission Resource Tape, Part 3 of 4' (internal ID 2001117680), this video shows footage from flight days 10 - 11. The undocking of Endeavour from the International Space Station is seen, and the landing of the orbiter is shown from various viewpoints.
CASI
Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight); Spacecraft Docking; Spacecraft Landing

20010071396 NASA Johnson Space Center, Houston, TX USA
STS–92 Mission Highlights Resource Tape, Part 1 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120375; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
An overview of the STS-92 Discovery mission (crew: Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur) is given through footage of each flight day. Scenes from flight days one through five show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Discovery), launch, rendezvous and dock with the International Space Station, an various on-orbit activities such as the installation of the Z1 truss and the spacewalks performed by Chiao and McArthur. Footage from flight days 6-14 can be seen on 'STS-92 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001120373), 'STS-92 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001120376), and 'STS-92 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001120371).
CASI
Extravehicular Activity; International Space Station; Trusses; Spacecraft Launching; Discovery (Orbiter); Crew Procedures (Preflight); Crew Procedures (Inflight); Installing

20010071398 NASA Johnson Space Center, Houston, TX USA
STS–92 Mission Highlights Resource Tape, Part 2 of 4
Aug. 02, 2001; In English; Videotape: 31 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120373; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
A continuation of 'STS-92 Mission Highlights Resource Tape, Part 1 of 2' (internal ID 2001120375), this video shows footage from flight day six of the STS-92 mission. Mission Specialists Jeff Wisoff and Mike Lopez-Alegria are seen as they perform their spacewalks to work on the Third Pressurized Mating Adapter and Z1 truss. Additional scenes show Mission Specialist Pam Melroy washing her hair and Commander Brian Duffy shaving. For footage from flight

days 7-14, see 'STS-92 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001120376) and 'STS-92 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001120371).
CASI
Extravehicular Activity; Spacecrews; International Space Station; Crew Procedures (Inflight)

20010071399 NASA Johnson Space Center, Houston, TX USA
STS–92 Mission Highlights Resource Tape, Part 4 of 4
Aug. 02, 2001; In English; Videotape: 11 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120371; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A continuation of 'STS-92 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001120375), 'STS-92 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001120373), and 'STS-92 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001120376), this video shows footage from flight days 11-14 of the STS-92 mission. The landing of the Discovery Orbiter is seen.
CASI
Discovery (Orbiter); Spacecraft Landing

20010071529 NASA Johnson Space Center, Houston, TX USA
STS–92 Mission Highlights Resource Tape, Part 3 of 4
Aug. 02, 2001; In English; Videotape: 1 hr. 23 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001120376; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of 'STS-92 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001120375) and 'STS-92 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001120373), this video shows footage from flight days 7-10 of the STS-92 mission. Scenes include the spacewalks performed by Mission Specialists Leroy Chiao and Bill McArthur to prepare the International Space Station (ISS) for the solar arrays that will be arriving with the next mission, the undocking of Discovery from the ISS, and the crewmembers (Commander Brian Duffy, Pilot Pamela Melroy, and Mission Specialists Koichi Wakata, Leroy Chiao, Peter Wisoff, Michael Lopez-Alegria, and William McArthur) are heard as they answer questions about the mission in an on-orbit interview. Several crewmembers are also seen as they shave and then have a meal. For footage from flight days 11-14 of the mission, see 'STS-92 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001120371).
CASI
Extravehicular Activity; International Space Station; Crew Procedures (Inflight); Spacecraft Docking

20010073358 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 3 Highlights
Aug. 12, 2001; In English; Videotape: 35 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001124967; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this third day of the STS-105 mission, footage shows Discovery docking with the International Space Station (ISS). The Expedition 2 crewmembers, Yuriy Usachev, James Voss, and Susan Helms, are seen as they work in the Destiny Laboratory Module on the ISS. The STS-105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester), Expedition 2 crew, and Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as the connecting hatches are opened between the ISS and Discovery and the crews meet.
CASI
International Space Station; Spacecraft Docking; Discovery (Orbiter); Crew Procedures (Inflight)

20010073365 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 4 Highlights
Aug. 14, 2001; In English; Videotape: 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125047; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-105 mission, footage shows the Shuttle's robotic arm as it moves into position to grapple the Leonardo Multipurpose Module (LMPM) out of Discovery's payload bay and into position to be installed to the Unity Module on the International Space Station (ISS). The STS-105 crew (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester), Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen as they unload LMPM and transfer racks to and from the Destiny Laboratory Module and the Space Shuttle.
CASI
Destiny Laboratory Module; International Space Station; Loading Operations; Crew Procedures (Inflight)

20010073373 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 5 Highlights
Aug. 15, 2001; In English; Videotape: 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001125050; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-105 mission, the transfer of supplies from the Leonardo Multipurpose Logistics Module to the International Space Station (ISS) and the handover of control of the ISS from the Expedition 2 crew (Yuriy Usachev, Jim Voss, and Susan Helms) to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) continue. Commanders Usachev and Culbertson answer questions about the ISS in an on-orbit interview, and the Expedition 3 crewmembers give a video tour of their new sleeping quarters on the ISS. The north Pacific Ocean and the USA Pacific northwest are seen from space.
CASI
International Space Station; Loading Operations; Crew Procedures (Inflight)

20010073374 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 2 Highlights
Aug. 12, 2001; In English; Videotape: 19 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001124966; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this second day of the STS-105 mission, Discovery continues to approach the International Space Station (ISS) and the crewmembers of the orbiter (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) are seen as they participate in various on-orbit activities, including the set-up and performance of the experiment 'Effects of Microgravity on Spinal Chord Excitability' and maneuver the Shuttle's robotic arm to its docking configuration. The Rocky Mountains are seen as Discovery passes over the USA.
CASI
Spaceborne Experiments; Crew Procedures (Inflight); Discovery (Orbiter)

20010073449 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 1 Highlights
Aug. 11, 2001; In English; Videotape: 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001124968; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-105 mission, the crew of the Discovery Orbiter (Commander Scott Horowitz, Pilot Frederick Sturckow, and Mission Specialists Daniel Barry and Patrick Forrester) and the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) are seen during various prelaunch activities, including suitup, leaving the Operations and Checkout (O&C) Building, and boarding the the Orbiter. The countdown and launch of Discovery are shown.
CASI
Countdown; Discovery (Orbiter); Crew Procedures (Preflight); Spacecraft Launching

20010076021 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 8 Highlights
Aug. 18, 2001; In English; Videotape: 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001128339; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-105 mission, Expedition 2 crewmember Susan Helms and Expedition 3 crewmember Vladimir Dezhurov are seen

working in the Destiny Laboratory Module. The three crews gather (STS-105 crew Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, Expedition 2 crew Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, and Expedition 3 crew Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) for the change of command ceremony, where the Expedition 3 crew officially takes control of the International Space Station from the Expedition 2 crew, and the three crews answer questions about the mission in an on-orbit interview. Footage shows Hawaii from space.
CASI
International Space Station; Spacecrews; Crew Procedures (Inflight)

20010076266 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 9 Highlights
Aug. 19, 2001; In English; Videotape: 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001128338; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this ninth day of the STS-105 mission, Mission Specialists Dan Barry and Pat Forrester are seen during their spacewalks as they work on the exterior of the Destiny Laboratory Module, installing handrails and connecting cables.
CASI
Destiny Laboratory Module; Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

20010076390 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 7 Highlights
Aug. 17, 2001; In English; Videotape: 31 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001126405; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-105 mission, Mission Specialists Dan Barry and Pat Forrester are seen as they perform their spacewalks to install the Early Ammonia Servicer to the International Space Station (ISS). A brief ceremony is shown as Expedition 3 crewmembers Mikhail Turin and Vladimir Dezhurov commemorate the 1000th flight day anniversary of the ISS.
CASI
Extravehicular Activity; International Space Station; Orbital Servicing; Crew Procedures (Inflight)

20010076472 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 6 Highlights
Aug. 16, 2001; In English; Videotape: 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001126406; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this sixth day of the STS-105 mission, Expedition 2 crewmember Susan Helms answers questions about her long-duration flight on the International Space Station (ISS) in this on-orbit interview. Footage shows portions of Canada and the northern USA from space as the orbiter flies over, including Idaho, Montana, and North Dakota.
CASI
International Space Station; Crew Procedures (Inflight)

20010077940 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 11 Highlights
Aug. 21, 2001; In English; Videotape: 29 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001130665; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this 11th day of the STS-105 mission, the three crews, Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), Expedition 3 (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov), and STS-105 (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester), gather to say a few words about the changeover of the control of the International Space Station (ISS). Footage shows the undocking of Discovery from the ISS. STS-105 and E2 crews answer questions about the stay on the ISS in an on-orbit interview.
CASI
International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight)

20010077947 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 10 Highlights
Aug. 19, 2001; In English; Videotape: 30 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001130666; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-105 mission, footage shows the Leonardo Multipurpose Logistics Module packed and ready to return to Earth before it is grappled using the robotic arm and returned to the payload bay of Discovery. As the orbiter and the International Space Station fly over Earth, Florida is seen, as are Washington and Oregon (where the forest fires blaze), Lake Winnipeg, and the border between Ontario and Quebec.
CASI
International Space Station; Space Station Modules; Crew Procedures (Inflight)

20010077948 NASA Johnson Space Center, Houston, TX USA
STS–105 Flight Day 12 Highlights
Aug. 22, 2001; In English; Videotape: 20 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001130664; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 12th day of the STS-105 mission, Discovery continues to fly towards Earth after the previous day's undocking from the International Space Station (ISS). Several on-orbit interviews are conducted, including questions to the STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) about spaceflight, questions to the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) about their stay on the ISS, and questions to the Expedition 3 crew (Frank Culbertson, Jr., Mikhail Turin, and Vladimir Dezhurov) about some of the experiments on board the ISS. Typhoon 14 is seen from above as Discovery passes over the storm.
CASI
International Space Station; Space Flight; Spacecrews; Crew Procedures (Inflight)

20010080461 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Countdown Status Briefing
Aug. 06, 2001; In English; Videotape: 20 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133694; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, Glenn Chin, STS-105 Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-105 prelaunch press conference. An overview is given of the launch countdown, payload status (Leonardo Multipurpose Logistics Module), and weather forecast. The men then answer questions from the press.
CASI
Countdown; Payloads; Weather Forecasting; Prelaunch Summaries

20010080462 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Pre–Launch Press Conference
Aug. 07, 2001; In English; Videotape: 28 min. 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133691; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

George Diller, NASA Public Affairs, introduces Bill Gerstenmaier, Deputy Manager of the ISS Program, Dave King, NASA Director of Shuttle Processing, and Judy Konecky, Staff Meteorologist, in this STS-105 press conference. An overview is given of the success of the Expedition 2 crew, the expectations of the

Expedition 3 crew, the launch countdown status, and the weather forecast for the Shuttle launch. They then answer questions from the press.
CASI
Countdown; Weather Forecasting; Prelaunch Summaries; Astronaut Performance

20010080463 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Pre–Launch Press Conference
Jul. 10, 2001; In English; Videotape: 35 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133690; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
George Diller, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, Dave King, NASA Director of Shuttle Processing, Michael Hawes, Deputy Associate Administrator for ISS, and John Weems, Launch Weather Officer, in this STS-104 press conference. An overview is given of the launch and mission activities, International Space Station activities during the mission, and the weather forecast for the launch. The men then answer questions from the press.
CASI
Weather Forecasting; Prelaunch Summaries

20010080464 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Countdown Status Briefing
Jul. 10, 2001; In English; Videotape: 15 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133689; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
George Diller, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Scott Higginbotham, STS-104 Mission Manager, and Ed Priselac, Shuttle Weather Officer, in this STS-104 launch minus two days press conference. An overview is given of the launch vehicle status, countdown procedures, payload status, and weather forecast. The men then answer questions from the press.
CASI
Countdown; Launch Vehicles; Weather Forecasting; Prelaunch Summaries

20010080465 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Flight Crew Post–Landing Press Conference
Jul. 25, 2001; In English; Videotape: 19 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133688; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces the STS-104 crew, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi, in this post-landing press conference. Commander Lindsey makes a brief statement about the mission and each crewmember's role in the activities. The crew then answers questions from the press.
CASI
Spacecrews; Postflight Analysis; Astronaut Performance

20010080466 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Countdown Status Briefing
Jul. 11, 2001; In English; Videotape: 10 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133687; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
George Diller, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Louie Garcia, STS-104 Operations Engineer, and Ed Priselac, Shuttle Weather Officer, in this launch minus one day press conference. An overview is given of the launch vehicle status, countdown procedures, payload status, and weather forecast. The men then answer questions from the press.
CASI
Countdown; Launch Vehicles; Weather Forecasting; Prelaunch Summaries

20010080470 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Countdown Status Briefing
Jul. 09, 2001; In English; Videotape: 25 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133693; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Joel Wells, NASA Public Affairs, introduces Jeff Spaulding, NASA Test Director, Gregory Horvath, STS-104 Mission Integration Engineer, and Ed Priselac, Shuttle Weather Officer, in this STS-104 prelaunch press conference. An overview is given of the launch countdown, payload status, and weather forecast. The men then answer questions from the press.
CASI
Countdown; Payloads; Weather Forecasting; Prelaunch Summaries

20010080471 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Countdown Status Briefing
Aug. 08, 2001; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133692; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Bruce Buckingham, NASA Public Affairs, introduces Steve Altemus, NASA Test Director, and Glenn Chin, STS-105 Mission Manager, in this STS-105 prelaunch press conference. An overview is given of the launch countdown, payload status, and weather forecast. The men then answer questions from the press.
CASI
Countdown; Payloads; Weather Forecasting; Prelaunch Summaries

20010081597 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–104 Post–Launch News Conference
Jul. 12, 2001; In English; Videotape: 5 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001133695; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
George Diller, NASA Public Affairs, introduces Jim Halsell, Director of Shuttle Launch Integration, and Mike Leinbach, Shuttle Launch Director, in this STS-104 post-launch press conference. The men give an overview of the successful launch of Atlantis and answer questions from the press.
CASI
Spacecraft Launching; Postlaunch Reports

20010082529 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Post–Landing Crew Press Conference
Aug. 22, 2001; In English; Videotape: 13 min. 47 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001137225; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Bruce Buckingham, NASA Public Affairs, introduces STS-105 Commander Scott Horowitz and Mission Specialists Dan Barry, who each make a brief statement about the mission. They then answer questions from the press.
CASI
Spacecrews; Postflight Analysis

20010082535 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Post–Launch Press Conference
Aug. 09, 2001; In English; Videotape: 16 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001137227; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Lisa Malone, NASA Public Affairs, introduces Jim Halsell, Shuttle Program Launch Integration Manager, and Mike Leinbach, Shuttle Launch Director, who give an overview of the successful launch of the STS-105 Discovery Orbiter. The men then answer questions from the press.
CASI
Spacecraft Launching; Postlaunch Reports

20010082536 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–105 Countdown Status Briefing
Aug. 07, 2001; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001137226; No Copyright; Avail: CASI;

B01, Videotape-Beta; V01, Videotape-VHS

Joel Wells, NASA Public Affairs, introduces Pete Nickolenko, NASA Test Director, Glen Chin, STS-105 Mission Manager, and Ed Priselac, Shuttle Weather Officer. They give an overview of the countdown to the STS-105 Discovery Orbiter launch, including details on prelaunch tests (activate and check on-board avionics software, payload bay closeout, prepare and clear launch pad, etc.), payload bay status (Leonardo Multipurpose Logistics Module), and the weather forecast. The men then answer questions from the press.

CASI

Countdown; Spacecraft Launching; Prelaunch Tests; Weather Forecasting; Prelaunch Summaries

20010091706 NASA Johnson Space Center, Houston, TX USA

STS–104 Post Flight Presentation

Sep. 15, 2001; In English; Videotape: 18 min. 41 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001150972; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-104, Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi, are heard narrating this video as footage is shown from various points in the mission. The crew is seen during suit-up, boarding the Shuttle, during launch, and performing many on-orbit activities, including the rendezvous with the International Space Station (ISS) (live and a computer animation), the three spacewalks (installing Quest Airlock and three external gas tanks), and the opening and outfitting of Quest. As the mission ends the crew bids farewell to the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) and the Atlantis Orbiter undocks from ISS, performs the fly-around of the space station, and lands.

CASI

Extravehicular Activity; International Space Station; Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight)

20010115089 NASA Johnson Space Center, Houston, TX USA

Expedition 4 Crew Interviews: Yury I. Onufrienko

Nov. 04, 2001; In English; Videotape: 26 min. 10 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001189092; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 4 Commander Yury Onufrienko is seen during a prelaunch interview. He gives details on the mission's goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the S0 truss will mean to ISS. Onufrienko ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews; Prelaunch Summaries

20010115224 NASA Johnson Space Center, Houston, TX USA

Expedition 4 Crew Interviews: Dan Bursch

Nov. 04, 2001; In English; Videotape: 53 min. 47 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001190435; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Dan Bursch is seen during a prelaunch interview. He gives details on the mission's goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the S0 truss will mean to ISS. Bursch ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews; Prelaunch Summaries

20010115230 NASA Johnson Space Center, Houston, TX USA

Expedition 4 Crew Interviews: Carl Walz

Nov. 04, 2001; In English; Videotape: 41 min. 57 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001189529; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 4 Flight Engineer Carl Walz is seen during a prelaunch interview. He gives details on the mission's goals and significance, his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 4 crew in place of the Expedition 3 crew on the International Space Station (ISS)), the day-to-day life on an extended stay mission, the experiments he will be conducting on board, and what the S0 truss will mean to ISS. Walz ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

International Space Station; Spacecrews; Prelaunch Summaries

20010116595 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Training Clip

Nov. 15, 2001; In English; Videotape: 55 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001194277; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the crew of STS-108, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, during various parts of their training, including T-38 operations at Ellington, bail-out training (with the Expedition 4 crew: Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) in CCT2, extravehicular activity (EVA) preparations, Space Station Mockup and Test/Training Facility (SSMTF) transfer and hands-on familiarization (also with E4), Remote Manipulator System training, EVA training in the Neutral Buoyancy Laboratory, and in a payload training class.

CASI

Astronaut Training; Extravehicular Activity; Spacecrews

20010116600 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Dom Gorie

Nov. 11, 2001; In English; Videotape: 30 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001194280; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Commander Dom Gorie is seen during a prelaunch interview. He answers questions about the mission's goals and significance, explaining the meaning of 'utilization flight 1' (UF-1) as opposed to an 'assembly flight'. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Gorie ends with his thoughts on the short-term and long-term future of the International Space Station.

CASI

Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010116601 NASA Johnson Space Center, Houston, TX USA

STS–108 Crew Interviews: Linda Godwin

Nov. 11, 2001; In English; Videotape: 30 min. 3 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2001194276; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Mission Specialist Linda Godwin is seen during a prelaunch interview. She answers questions about the mission's goals and significance, explaining the meaning of 'utilization flight 1' (UF-1) as opposed to an 'assembly flight'. She gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), her role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how she will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews

of ISS will exchanged. Godwin ends with her thoughts on the short-term and long-term future of the International Space Station.
CASI
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010116602 NASA Johnson Space Center, Houston, TX USA
STS–108 Crew Interviews: Mark Kelly
Nov. 11, 2001; In English; Videotape: 26 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001194275; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-108 Pilot Mark Kelly is seen during a prelaunch interview. He answers questions about the mission's goals and significance, explaining the meaning of 'utilization flight 1' (UF-1) as opposed to an 'assembly flight'. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Kelly ends with his thoughts on the short-term and long-term future of the International Space Station.
CASI
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010116603 NASA Johnson Space Center, Houston, TX USA
STS–108 Crew Interviews: Dan Tani
Nov. 11, 2001; In English; Videotape: 35 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001194274; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-108 Mission Specialist Dan Tani is seen during a prelaunch interview. He answers questions about the mission's goals and significance, explaining the meaning of 'utilization flight 1' (UF-1) as opposed to an 'assembly flight'. He gives details on the payload (Starshine Satellite, Avian Development Facility, and Rafaello Multipurpose Logistics Module (MPLM)), his role in the rendezvous, docking, and undocking of the Endeavour Orbiter to the International Space Station (ISS), how he will participate in the unloading and reloading of the MPLM, and the way in which the old and new resident crews of ISS will exchanged. Tani ends with his thoughts on the short-term and long-term future of the International Space Station.
CASI
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Prelaunch Summaries

20010117169 NASA Johnson Space Center, Houston, TX USA
STS–105 Post–Flight
Oct. 28, 2001; In English; Videotape: 16 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001188060; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-105, Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester, narrate this video as footage from the mission is seen, starting with the boarding and launch of Discovery. Various on-orbit activities are shown, including on-orbit activities (H Reflex Experiment), the rendezvous and docking of Discovery with the International Space Station (ISS), the transfer of materials from the Multipurpose Logistics Module, extravehicular activities, and the exchange of resident ISS crews. The video ends with Discovery undocking from the ISS and the landing of the orbiter.
CASI
Extravehicular Activity; International Space Station; Spacecraft Launching; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight); Discovery (Orbiter)

20010122948 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day Highlights: Flight Day 1
Dec. 06, 2001; In English; Videotape: 23 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001206814; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this first day of the STS-108 mission, the crewmembers of Endeavour, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, are seen during various prelaunch activities, including the ceremonial breakfast, suitup, departing the Operations and Checkout (O&C) Building, and boarding the orbiter. The launch of Endeavour is shown. The payload bay doors open once in orbit and Pilot Kelly is seen as the solid rocket boosters ignite.
CASI
Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight); Endeavour (Orbiter)

20020001348 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 2 Highlights
Dec. 07, 2001; In English; Videotape: 9 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001206813; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this second day of the STS-108, Endeavour continues to approach the International Space Station. A camera on the end of the Remote Manipulator System robotic arm scans the side of Endeavour and shows the Rafaello Multipurpose Logistics Module.
CASI
Endeavour (Orbiter); Remote Manipulator System; Crew Procedures (Inflight)

20020002232 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 7 Highlights
Dec. 12, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001216283; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of the STS-108 mission, NASA Ground Control, STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) are seen during a ceremony of remembrance on the three-month anniversary of the September 11th tragedy. The three crews also answer questions from the press on their missions. They are seen as they transfer supplies and equipment from the Rafaello Multipurpose Logistics Module.
CASI
Spacecrews; International Space Station; Crew Procedures (Inflight); Loading Operations

20020002326 NASA Johnson Space Center, Houston, TX USA
STS–104 Mission Highlights Resource Tape, Part 2 of 4
Dec. 12, 2001; In English; Videotape: 59 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214902; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-104 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001214904), this video shows footage from flight days four through seven of the STS-104 mission. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, Pilot Charles Hobaugh and Mission Specialists Janet Kavandi, Mike Gernhardt, and Jim Reilly, and Expedition 2 Flight Engineer Susan Helms work inside the newly installed Quest Airlock. Expedition 2 Flight Engineer Jim Voss is seen as he works to outfit the vestibule between the Unity Module and Quest and opening the hatch between the two components of the International Space Station. Flight days seven (continued) though twelve can be found on the videos 'STS-104 Mission Highlights

Resource Tape, Part 3 of 4' (internal ID 2001214906) and 'STS-104 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001214905).
CASI
Air Locks; Extravehicular Activity; International Space Station; Spacecrews; Crew Procedures (Inflight)

20020002331 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 6 Highlights
Dec. 11, 2001; In English; Videotape: 39 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001217633; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this sixth day of the STS-108 mission, Mission Specialists Linda Godwin and Daniel Tani perform their spacewalks, where they place insulating blankets on the two Beta Gimbal Assemblies.
CASI
Extravehicular Activity; International Space Station; Crew Procedures (Inflight)

20020002378 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 8 Highlights
Dec. 13, 2001; In English; Videotape: 22 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001216282; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-108 mission, the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) work to reload the Rafaello Multipurpose Logistics Module. Commander Culbertson is seen on the International Space Station's treadmill.
CASI
International Space Station; Crew Procedures (Inflight); Loading Operations

20020002385 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 4 Highlights
Dec. 10, 2001; In English; Videotape: 33 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214921; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-108 mission, the robotic arm is seen as it moves towards the Rafaello Multipurpose Logistics Module to prepare for the grapple and transfer of the module from Endeavour to the International Space Station (ISS). Expedition 4 Flight Engineer Carl Walz and STS-108 Mission Specialist Linda Godwin are shown during preparations to open the hatch between ISS and Rafaello. Expedition 3 Commander Frank Culbertson, Expedition 4 Commander Yuri Onufrienko, and STS-108 Pilot Mark Kelly are seen during an on-orbit press conference, where they answer questions about the supply transfer between Rafaello and ISS and share their thoughts about the September 11th tragedy.
CASI
Endeavour (Orbiter); International Space Station; Crew Procedures (Inflight)

20020002387 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 3 Highlights
Dec. 08, 2001; In English; Videotape: 28 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214917; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this third day of the STS-108 mission, the Endeavour Orbiter is seen docking with the International Space Station. The crew of STS-108 (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) and Expedition 4 (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) greet the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) in the Destiny Laboratory Module.
CASI
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight)

20020002389 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 5 Highlights
Dec. 10, 2001; In English; Videotape: 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214915; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-108 mission, the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani), Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), and Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) join in an on-orbit conference to honor those who lost loved ones in the September 11th tragedy. They are also seen moving equipment from the Rafaello Multipurpose Logistics Module to the International Space Station.
CASI
International Space Station; Spacecrews; Crew Procedures (Inflight)

20020002390 NASA Johnson Space Center, Houston, TX USA
STS–104 Mission Highlights Resource Tape, Part 1 of 4
Dec. 11, 2001; In English; Videotape: 59 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-104 mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Atlantis), launch, and on-orbit activities such as the opening of the payload bay doors, rendezvous and docking of the Orbiter to the International Space Station (ISS), and the opening of the hatches separating the Orbiter from ISS. The STS-104 crew (Commander Steven Lindsey, Pilot Charles Hobaugh, and Mission Specialists Mike Gernhardt, Jim Reilly, and Janet Kavandi) greets the Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms). Footage from flight days four through twelve can be found on the following videos: 'STS-104 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001214902), 'STS-104 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001214906), and 'STS-104 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001214905).
CASI
International Space Station; Spacecraft Launching; Orbital Rendezvous; Spacecraft Docking; Crew Procedures (Inflight); Crew Procedures (Preflight)

20020002391 NASA Johnson Space Center, Houston, TX USA
STS–104 Mission Highlights Resource Tape, Part 4 of 4
Dec. 12, 2001; In English; Videotape: 47 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-104 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001214904), 'STS-104 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001214902), and 'STS-104 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2001214906), this video shows footage from flight days ten (continued from part three) through twelve. The Atlantis Orbiter undocks from the International Space Station and performs the fly-around before landing back on Earth. Various unspecified views of Earth are seen from space.
CASI
Atlantis (Orbiter); International Space Station; Spacecraft Docking; Spacecraft Landing

20020002392 NASA Johnson Space Center, Houston, TX USA
STS–104 Mission Highlights Resource Tape
Dec. 12, 2001; In English; Videotape: 56 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001214906; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-104 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2001214904) and 'STS-104 Mission Highlights Resource Tape, Part 2 of 4' (internal ID 2001214902), this video shows footage from flight days seven (continued from part two) through ten. Mission Specialists Mike Gernhardt and Jim Reilly are seen during their spacewalks, and Expedition 2 Flight Engineer Jim Voss and STS-104 Commander Steven Lindsey replace a leaking intermodular valve in the vestibule between the Unity Module and Quest Airlock. Voss is seen checking for further leaks the next day. Flight day ten is

continued on 'STS-104 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2001214905), which also shows flight days eleven and twelve.
CASI
Extravehicular Activity; Valves; Crew Procedures (Inflight); International Space Station

20020005644 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 11 Highlights
Dec. 15, 2001; In English; Videotape: 35 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001220094; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this eleventh day of the STS-108 mission, the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen as the E3 crew bids farewell to the International Space Station (ISS) that has been their home for the previous several months. Endeavour undocks from ISS and performs the customary flyaround. The STS-108 crew and Commander Culbertson answer questions from the press in an on-orbit interview.
CASI
International Space Station; Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Docking

20020005646 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 10 Highlights
Dec. 15, 2001; In English; Videotape: 24 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001220096; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this tenth day of the STS-108 mission, STS-108 Mission Specialist Linda Godwin is seen during unloading operations in the Rafaello Multipurpose Logistics Module (MPLM). The exterior of Endeavour and the International Space Station are shown as the Canadarm grapples the MPLM and transfers it to the payload bay of the orbiter.
CASI
International Space Station; Loading Operations; Crew Procedures (Inflight); Space Station Modules

20020005890 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 9 Highlights
Dec. 14, 2001; In English; Videotape: 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001218089; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On this ninth day of the STS-108 mission, the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch), and STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen during a ceremony where the E3 crew officially hands over the control of the International Space Station of the E4 crew. Kelly, Godwin, and Tani are seen on the middeck of Endeavour stowing equipment.
CASI
International Space Station; Spacecrews; Loading Operations; Crew Procedures (Inflight)

20020005897 NASA Johnson Space Center, Houston, TX USA
STS–108 Flight Day 12 Highlights
Dec. 17, 2001; In English; Videotape: 26 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001220095; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth day of the STS-108 mission, the deployment of the Starship-3 satellite is shown. Expedition 3 Commander Frank Culbertson, STS-108 Commander Dominic Gorie, Expedition 3 Flight Engineers Mikhail Turin and Vladimir Dezhurov, and STS-108 Pilot Mark Kelly are seen in an on-orbit interview, where they answer questions about their missions. Gorie, Kelly, and STS-108 Mission Specialist Linda Godwin are seen as they stow equipment on the middeck of Endeavour.
CASI
Crew Procedures (Inflight); Spacecrews

20020022943 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews – Altman
Feb. 04, 2002; In English; Videotape: 34 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033710; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 crew Commander Scott D. Altman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, which are all related to maintenance of the Hubble Space Telescope (HST). After the Columbia Orbiter's rendezvous with the HST, extravehicular activities (EVA) will be focused on several important tasks which include: (1) installing the Advanced Camera for Surveys; (2) installing a cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer); (3) repairing the reaction wheel assembly; (4) installing additional solar arrays; (5) augmenting the power control unit; (6) working on the HST's gyros. The reaction wheel assembly task, a late addition to the mission, may necessitate the abandonment of one or more of the other tasks, such as the gyro work.
CASI
Prelaunch Summaries; Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance; Crew Procedures (Inflight); Spacecrews

20020022944 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews – Carey
Feb. 04, 2002; In English; Videotape: 37 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033709; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 pilot Duane G. Carey is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goals and significance, as well as an extended description of his role in the Orbiter's return landing. As its primary objective, this mission has the maintenance of the Hubble Space Telescope (HST). Following the Columbia Orbiter's rendezvous with the telescope, extravehicular activities (EVA) will focus on repairs to and augmentation of the HST.
CASI
Prelaunch Summaries; Spacecrews; Hubble Space Telescope; Spacecraft Maintenance; Spacecraft Landing

20020026805 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews: James H. Newman
Feb. 04, 2002; In English; Videotape: 45 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033712; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist James H. Newman is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, and his most memorable experiences. He gives details on the mission's goals and objectives, which focus on the refurbishing of the Hubble Space Telescope, and his role in the mission. He provides a brief background on the Hubble Space Telescope, and explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He gives further explanation of each of these pieces of equipment. He also describes the break-out plan in place for these spacewalks. The interview ends with Newman explaining the details of a late addition to the mission's tasks, which is to replace a reaction wheel on the Hubble Space Telescope.
CASI
Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries; Spacecrews; Orbital Rendezvous; Extravehicular Activity

20020026806 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews: Michael J. Massimino
Feb. 05, 2002; In English; Videotape: 36 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033713; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist Michael J. Massimino is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut, his career path, and his most memorable experiences. He gives details on the mission's goals and objectives, which focus on the refurbishing of the Hubble Space Telescope, and his role in the mission. He explains the plans for the rendezvous of the Columbia Orbiter with the Hubble Space Telescope. He provides details and timelines for each of the planned Extravehicular Activities (EVAs), which include replacing the solar arrays, changing the Power Control Unit, installing the Advanced Camera for Surveys (ACS), and installing a new Cryocooler for the Near Infrared Camera and Multi-Object Spectrometer (NICMOS). He also describes the break-out plan in place for these spacewalks. The interview ends with Massimino explaining the details of a late addition to the mission's tasks, which is to replace a reaction wheel on the Hubble Space Telescope.
CASI
Columbia (Orbiter); Hubble Space Telescope; Prelaunch Summaries; Spacecrews; Orbital Rendezvous; Extravehicular Activity

20020026807 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews – Linnehan
Feb. 05, 2002; In English; Videotape: 44 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033715; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 3 (MS3) Richard M. Linnehan is seen during a prelaunch interview. He answers questions about his lifelong desire to become an astronaut and his career path, which included becoming a zoo veterinarian. He gives details on the Columbia Orbiter mission, which has as its main purpose the maintenance and augmentation of the Hubble Space Telescope (HST). As MS3, his primary role in the mission pertains to EVAs (Extravehicular Activities) 1, 3, and 5. During EVA 1, Linnehan and another crewmember will replace one of two flexible solar arrays on the HST with a smaller, more efficient rigid solar array. The second solar array will be replaced on EVA 2 by other crewmembers. EVA 3 will involve the replacement of the Power Control Unit (PCU), and will require the first complete powering down of HST since its deployment. The possibility of a serious problem occurring is greatest during this portion of the mission because the original PCU was not built to be replaced. In EVA 5, Linnehan and another crewmember will install a replacement cooling system on NICMOS (Near Infrared Camera Multi-Object Spectrometer), which has not been operational. Linnehan discusses his role during the mission as well as that of his crewmates, and provides an abbreviated timeline, including possible contingencies.
CASI
Prelaunch Summaries; Crew Procedures (Inflight); Extravehicular Activity; Hubble Space Telescope; Astronauts; Columbia (Orbiter); Spacecraft Maintenance

20020026912 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interviews – Currie
Feb. 05, 2002; In English; Videotape: 42 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002033714; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Mission Specialist 2 Nancy Jane Currie is seen during a prelaunch interview. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the Columbia Orbiter mission which has as its main tasks the maintenance and augmentation of the Hubble Space Telescope (HST). While she will do many things during the mission, the most important will be her role as the primary operator of the robotic arm, which is responsible for grappling the HST, bringing it to the Orbiter bay, and providing support for the astronauts during their EVAs (Extravehicular Activities). Additionally, the robotic arm will be responsible for transferring new and replacement equipment from the Orbiter to the HST. This equipment includes: two solar arrays, a Power Control Unit (PCU), the Advanced Camera for Surveys, and a replacement cooling system for NICMOS (Near Infrared Camera Multi-Object Spectrometer).
CASI
Prelaunch Summaries; Crew Procedures (Inflight); Loading Operations; Spacecraft Docking; Extravehicular Activity; Columbia (Orbiter); Hubble Space Telescope; Spacecraft Maintenance; Robot Arms; Orbital Rendezvous

20020026954 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Training
Feb. 15, 2002; In English; Videotape: 51 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002034928; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-109 (Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) during various parts of their training. Scenes show the crew's photo session, Post Landing Egress practice, training in Dome Simulator, Extravehicular Activity Training in the Neutral Buoyancy Laboratory (NBL), and using the Virtual Reality Laboratory Robotic Arm. The crew is also seen tasting food as they choose their menus for on-orbit meals.
CASI
Extravehicular Activity; Spacecrews; Training Simulators; Astronaut Training

20020027074 NASA Johnson Space Center, Houston, TX USA
STS–109 Crew Interview: Grunsfeld
Feb. 05, 2002; In English; Videotape: 1 hr. 2 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002032711; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

STS-109 Payload Commander John Grunsfeld is seen during a prelaunch interview answering questions about his inspiration to become an astronaut and his career path. He gives details on the mission's goal (which is to service the Hubble Space Telescope (HST)), his role during the mission, the five scheduled spacewalks, the Columbia Orbiter's recent upgrades, and what he sees as the challenges of the mission. Grunsfeld describes how his experience on the STS-103 mission, a previous HST servicing mission, has helped prepare him for the STS-109 mission. The interview ends with Grunsfeld explaining why the servicing of the Reaction Wheel Assembly, a task added late in his training, is so important.
CASI
Astronauts; Extravehicular Activity; Hubble Space Telescope; Payloads; Crew Procedures (Inflight)

20020027135 NASA Johnson Space Center, Houston, TX USA
STS–108 Post Flight Presentation
Feb. 06, 2002; In English; Videotape: 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002030466; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-108, Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani, narrate this video as footage from the mission is shown. The crew is seen flying into Kennedy Space Center, suiting up, boarding the Endeavour Orbiter, and during launch. Various mission highlights are seen, including the rendezvous with the International Space Station (ISS) and docking of Endeavour, the unloading of the Multipurpose Logistics Module (MPLM), and the spacewalk to install thermal blankets over the Beta Gimbal Assemblies (BGAs) at the bases of the Space Station's solar panels. A glimpse is given into the difficulties of working in a microgravity environment as the crewmembers attempt to eat food before it floats away from them and drink water from a bag. The exchange of the Expedition 4 (Yuri I. Onufrienko, Carl E. Walz, and Daniel W. Bursch) for the Expedition 3 crew (Frank L. Culbertson, Mikhail Turin, and Vladimir N. Dezhurov) is also seen. The Endeavour undocks from the ISS, which is seen over the Caribbean Sea. Endeavour passes over Cuba, and footage of the Swiss Alps is shown. The video ends with the landing of the spacecraft.
CASI
Extravehicular Activity; International Space Station; Orbital Rendezvous; Spacecraft Launching; Spacecraft Docking; Crew Procedures (Inflight); Endeavour (Orbiter); Spacecraft Landing

20020028932 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 1 Highlights
Mar. 01, 2002; In English; Videotape: 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002043979; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

While in orbit around Earth, the crew of STS-109 aboard the Columbia Orbiter will service the Hubble Space Telescope (HST) in five extravehicular activities (EVA). In this video, prelaunch activities are shown including the positioning of the astronauts in their seats prior to liftoff. Liftoff is also shown, as is the escape flight. A comment is also made concerning the announcement shortly after liftoff that there was restricted flow in one of two freon loops in the Orbiter's radiator.
CASI
Astronauts; Columbia (Orbiter); Spacecraft Launching; Hubble Space Telescope

20020029262 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 3 Highlights
Mar. 03, 2002; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002043977; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This footage from the third day of the STS-109 mission to service the Hubble Space Telescope (HST) begins with the grappling of the HST by the robotic arm of the Columbia Orbiter, operated by Mission Specialist Nancy Currie. During the grappling, numerous angles deliver close-up images of the telescope which appears to be in good shape despite many years in orbit around the Earth. Following the positioning of the HST on its berthing platform in the Shuttle bay, the robotic arm is used to perform an external survey of the telescope. Some cursory details are given about different equipment which will be installed on the HST including a replacement cooling system for the Near Infrared Camera Multi-Object Spectrometer (NICMOS) and the Advanced Camera for Surveys. Following the survey, there is footage of the retraction of both of the telescope's two flexible solar arrays, which was successful. These arrays will be replaced by rigid solar arrays with decreased surface area and increased performance.
CASI
Hubble Space Telescope; Robot Arms; Solar Arrays; Spacecraft Docking

20020029263 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 4 Highlights
Mar. 04, 2002; In English; Videotape: 36 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002043976; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-109 Payload Commander John Grunsfeld and Mission Specialist Richard Linnehan are seen suiting up in preparation for their spacewalk with the assistance of Mission Specialists Michael Massimino and James Newman. Linnehan and Grunsfeld move the old solar arrays from the Hubble Space Telescope (HST) into the cargo bay of the Columbia Orbiter for storage. Grunsfeld is seen maneuvering around the HST to remove the connections to the diode box controller. Linnehan is seen controlling the new rigid solar array as he moves it into position onto the HST and Grunsfeld locks it into place. Footage is shown of Linnehan unfolding the solar array and Grunsfeld attaching the cables to the diode box controller to supply power to the solar array. Scenes of the HST with its new starboard rigid solar array are shown. The video concludes with footage of the activities of Nancy Currie, James Newman, and Michael Massimino during the spacewalk.
CASI
Extravehicular Activity; Hubble Space Telescope; Solar Arrays; Crew Procedures (Inflight)

20020029264 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 2 Highlights
Mar. 02, 2002; In English; Videotape: 18 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002043975; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the cargo bay of the Columbia Orbiter, including the rigid array carrier, the solar arrays to be installed on the Hubble Space Telescope, and the robotic arm. Close-up shots show several components of the flight support system. STS-109 Commander Scott Altman, Payload Commander John Grunsfeld, and Mission Specialist Nancy Currie are seen on the flight deck, and they answer questions about the stabilization of the freon flow, details of the upcoming rendezvous and capture of the Hubble Space Telescope, the scheduled spacewalks, and the social dynamics of the flight crew.
CASI
Columbia (Orbiter); Solar Arrays; Robot Arms; Support Systems

20020029884 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 7 Highlights
Mar. 07, 2002; In English; Videotape: 32 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002045007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Hubble Space Telescope (HST) is seen on its berthing platform on the rear of the cargo bay of the Columbia Orbiter. Additional footage shows the port solar array of the HST as well as the area where the new thermal blanket was installed. Mission Specialists James Newman and Michael J. Massimino are performing their spacewalk. The footage includes Newman unbolting and sliding out the Faint Object Camera, moving it into storage, then lifting the Advanced Camera for Surveys (ACS) out of the cargo bay, and Massimino installing the ACS. The second stage of their spacewalk shows Newman retrieving the Electronic Support Module out of the cargo bay, and assisting Massimino as he installs the module and its connectors in front of the ACS. As they return to Columbia, additional members of the crew are seen preparing spacesuits for the following day's spacewalk and cleaning the seals on the airlock. The video concludes with Pilot Duane G. Carey interviewing Massimino about his spacewalk using internet questions from school children.
CASI
Extravehicular Activity; Columbia (Orbiter); Hubble Space Telescope; Crew Procedures (Inflight); Spacecraft Maintenance

20020029885 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 9 Highlights
Mar. 09, 2002; In English; Videotape: 30 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002047889; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Hubble Space Telescope (HST) against a backdrop of Earth. The grappling of the HST with the robotic arm is seen, and payload bay cameras show different angles of the HST in its deploy orientation. The deployment of the HST from the Columbia Orbiter is seen, followed by footage of the HST flying freely over the Earth's horizon. All seven crew members are gathered together during an in-flight interview as they answer questions about the mission, the experiences of being in space, and their lives as astronauts. Additional footage of the crew working during the deployment of the HST is shown. Duane Carey is seen interviewing Nancy Currie with Internet questions from young students. The video concludes with the view from Columbia of the Pacific Ocean, the coast of Northwestern Chile, and a sunrise.
CASI
Hubble Space Telescope; Columbia (Orbiter); Crew Procedures (Inflight)

20020030205 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 5 Highlights
Mar. 05, 2002; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002044999; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the fifth day of the STS-109 mission, the crewmembers and Commander Scott Altman of the Columbia Orbiter are shown in their servicing mission to the Hubble Space Telescope (HST). Selected footage is presented of the extravehicular activities (EVA) of Mission Specialists Jim Newman and Mike Massimino, who installed a new port solar array on the HST. Information is presented on the size and power capacity of the array. The reaction wheel assembly, one of four gyroscopic devices used to maneuver the HST, is also

shown being replaced by the astronauts. A new insulation blanket panel was also installed at the end of the spacewalk because the astronauts had extra time.
CASI
Extravehicular Activity; Hubble Space Telescope; Reaction Wheels; Solar Arrays; Thermal Insulation; Space Maintenance; Spacecraft Maintenance

20020030206 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 6 Highlights
Mar. 06, 2002; In English; Videotape: 33 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046548; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the sixth flight day of the STS-109 mission, the crewmembers of the Columbia Orbiter (Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) are shown in selected footage of their servicing mission to the Hubble Space Telescope (HST). The third of five extravehicular activities (EVA) is performed in which Linnehan and Grunsfeld replaced the HST's Power Control Unit (PCU). The astronauts' egress from the Orbiter was delayed after water was found in Grunsfeld's suit. The removal of the old unit was particularly difficult, given the difficulty of demating the PCU's 36 connectors encumbered by the heavy gloves of the astronaut's suit. During this space walk, the HST was powered down to a completely dormant state for the first time since its launch in 1990. Following the successful installation of the new PCU, the HST's power was restarted by engineers at the Goddard Space Flight Center (GSFC). There had been some concern about the telescope's possible failure to restart, but everything went smoothly.
CASI
Control Equipment; Extravehicular Activity; Hubble Space Telescope; Spacecraft Maintenance

20020030208 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 10 Highlights
Mar. 10, 2002; In English; Videotape: 29 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002047888; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the view of Earth from the Columbia Orbiter. A video conference of the crew members of STS-109 (Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino) and of the International Space Station is seen as they discuss and share their experiences in space. Carey and Currie are seen as they answer questions sent from school children. Additional footage of the view of Earth is shown as the crew members answer more questions about the mission during an on-orbit interview. The view of the Hubble Space Telescope in the distance is seen. The video concludes with a view of the Galapagos Islands.
CASI
Earth Observations (From Space); Spacecrews

20020030739 NASA Johnson Space Center, Houston, TX USA
STS–105 Mission Highlights Resource Tape: Flight Days 4–6, Part 2 of 4
Mar. 05, 2002; In English; Videotape: 56 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046549; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-105 Mission Highlights Resource Tape: Flight Days 1-3' (internal ID 2002046550), this video shows footage from flight days four through six of the STS-105 mission. Commander Scott Horowitz helps Mission Specialist Pat Forrester maneuver the Space Shuttle's robotic arm as it grapples the Multipurpose Logistics Module (MPLM) from Discovery's payload bay to the International Space Station (ISS). The three crews, STS-105 (Commander Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Forrester), Expedition 2 (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms), and Expedition 3 (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), are seen during unloading operations as they transfer equipment from the MPLM to the ISS. Forrester and Barry check their equipment and suits for the next day's spacewalks. The E2 crew shows the E3 crew around ISS. The crescent moon and the end of a sunset are seen from space. For activities from flight days 7-13, see 'STS-105 Mission Highlights Resource Tape: Flight Days 7-9' (internal ID 2002046552) and 'STS-105 Mission Highlights Resource Tape: Flight Days 10-13' (internal ID 2002046551).
CASI
International Space Station; Spacecrews; Loading Operations; Crew Procedures (Inflight); Space Station Modules

20020030740 NASA Johnson Space Center, Houston, TX USA
STS–105 Mission Highlights Resource Tape: Flight Days 7–9, Part 3 of 4
Mar. 05, 2002; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046552; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of 'STS-105 Mission Highlights Resource Tape: Flight Days 1-3' (internal ID 2002046550) and 'STS-105 Mission Highlights Resource Tape: Flight Days 4-6' (internal ID 2002046549), this video shows footage from flight days seven through nine of the STS-105 mission. Mission Specialists Dan Barry and Pat Forrester are seen preparing for and performing their spacewalks, where they install an Early Ammonia Servicer on the International Space Station (ISS). The Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) hands control of the ISS over to the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) in a short ceremony. Barry and Forrester return to space the next day for another spacewalk to install handrails and heater cables. Hawaii is seen from space as ISS passes over, and the smoke from forest fires in Oregon and Idaho is shown. For footage from flight days 10-13, see 'STS-105 Mission Highlights Resource Tape: Flight Days 10-13' (internal ID 2002049551).
CASI
Extravehicular Activity; International Space Station; Orbital Servicing; Crew Procedures (Inflight)

20020030741 NASA Johnson Space Center, Houston, TX USA
STS–105 Mission Highlights Resource Tape: Flight Days 10–13, Part 4 of 4
Mar. 05, 2002; In English; Videotape: 1 hr. 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046551; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A continuation of 'STS-105 Mission Highlights Resource Tape: Flight Days 1-3' (internal ID 2002046550), 'STS-105 Mission Highlights Resource Tape: Flight Days 4-6' (internal ID 2002046549), and 'STS-105 Mission Highlights Resource Tape: Flight Days 7-9' (internal ID 2002046552), this video shows footage from flight days 10 through 13 of the STS-105 mission. The Multipurpose Logistics Module (MPLM) is moved from the International Space Station (ISS) to the payload bay of Discovery. The STS-105 crew (Commander Scott Horowitz, Pilot Fred Sturckow, and Mission Specialists Dan Barry and Pat Forrester) and Expedition 2 crew (Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms) bid farewell to the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov), who are to remain on ISS. ISS is seen against the Earth as Discovery performs its fly-around after the orbiter undocks. There is no flight day footage from flight day 12. Discovery is seen landing.
CASI
International Space Station; Spacecrews; Spacecraft Docking; Crew Procedures (Inflight); Discovery (Orbiter)

20020030742 NASA Johnson Space Center, Houston, TX USA
STS–105 Mission Highlights Resource Tape: Flight Days 1–3, Part 1 of 4
Mar. 04, 2002; In English; Videotape: 1 hr. 15 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002046550; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-105 mission is given through footage of each flight day. Scenes from flight days one through three show activities such as astronaut prelaunch procedures (breakfast, suit-up, and boarding Discovery), the launch from multiple vantage points, and various on-orbit activities. Expedition 3 (E3) Commander Frank Culbertson, Jr. and Flight Engineer Mikhail Turin perform the H-Reflex Experiment, an experiment to test the effects of microgravity on the human spinal cord. As Discovery approaches the International Space Station (ISS), the Expedition 2 (E2) crew, Commander Yuriy Usachev and Flight Engineers James Voss and Susan Helms, are seen working in the Destiny

Laboratory Module aboard ISS. Discovery docks to the space station and the three crews (STS-105, E2, and E3) greet each other after the hatches between the orbiter and ISS are opened. As Discovery passes over the USA, Utah, Wyoming, South Dakota, and Minnesota are seen through patchy clouds. Footage from flight days 4-13 can be found on 'STS-105 Mission Highlights Resource Tape: Flight Days 4-6' (internal ID 2002046549), 'STS-105 Mission Highlights Resource Tape: Flight Days 7-9' (internal ID 2002046552), and 'STS-105 Mission Highlights Resource Tape: Flight Days 10-13' (internal ID 2002046551).
Derived from text
International Space Station; Spacecraft Launching; Spacecrews; Crew Procedures (Preflight); Crew Procedures (Inflight)

20020030743 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 8 Highlights
Mar. 08, 2002; In English; Videotape: 41 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002047890; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage of the eighth day of STS-109 is shown during which Mission Specialists John Grunsfeld and Rick Linnehan service the Hubble Space Telescope (HST). A broad overview of the Columbia Orbiter mission is presented. On the fifth extravehicular activity (EVA) of the mission, Grunsfeld and Linnehan installed a new cryogenic cooling system and radiator on HST for NICMOS (Near Infrared Camera and Multi-Object Spectrometer) which had not been previously operational due to the failure of an earlier cooling system. Linnehan and Grunsfeld are both shown on the end of the Orbiter's robot arm, the Remote Manipulator System, which was controlled by Commander Scott Altman. Following the completion of their spacewalks, the two Mission Specialists make statements which include thanking the numerous support personnel. Linnehan answers questions on the differences between training simulation at facilities such as the Neutral Buoyancy Lab (NBL) and his actual experiences in space.
CASI
Cooling Systems; Cryogenic Cooling; Extravehicular Activity; Hubble Space Telescope; Space Maintenance; Heat Radiators; Spacecraft Maintenance

20020030755 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interviews: Lee Morin
Mar. 12, 2002; In English; Videotape: 42 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049337; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-110 Mission Specialist Lee Morin is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Morin outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Morin discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries

20020030893 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interviews: Ellen Ochoa
Mar. 12, 2002; In English; Videotape: 27 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049333; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-110 Mission Specialist Ellen Ochoa is seen during this preflight interview, where she gives a quick overview of the mission before answering questions about her inspiration to become an astronaut and her career path. Ochoa outlines her role in the mission in general, and specifically her use of the robotic arm during the extravehicular activities (EVAs). She describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Ochoa discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). She ends with thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Robot Arms; Prelaunch Summaries

20020030894 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interview: Rex Walheim
Mar. 12, 2002; In English; Videotape: 31 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049335; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-110 Mission Specialist Rex Walheim is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Walheim outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Walheim discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries

20020030895 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interview: Mike Bloomfield
Mar. 12, 2002; In English; Videotape: 32 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049336; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-110 Commander Mike Bloomfield is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Bloomfield outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Bloomfield discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries

20020030896 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interview: Jerry Ross
Mar. 12, 2002; In English; Videotape: 43 min. 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049338; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-110 Mission Specialist Jerry Ross is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Ross outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Ross discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries

20020030897 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interview: Stephen Frick
Mar. 11, 2002; In English; Videotape: 25 min. 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049340; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-110 Pilot Stephen Frick is seen during this preflight interview, where

he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Frick outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Frick discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Crew Procedures (Inflight); Prelaunch Summaries

20020030898 NASA Johnson Space Center, Houston, TX USA
STS–110 Crew Interviews: Steve Smith
Mar. 12, 2002; In English; Videotape: 42 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049341; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-110 Mission Specialist Steve Smith is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Smith outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S0 Truss and Mobile Transporter) and the dry run installation of the S0 truss that will take place the day before the EVA for the actual installation. Smith discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts on the most valuable aspect of the ISS.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries

20020030913 NASA Johnson Space Center, Houston, TX USA
STS–109 Flight Day 11 Highlights
Mar. 11, 2002; In English; Videotape: 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049131; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the 11th day of the STS-109 mission, Commander Scott Altman, Pilot Duane Carey, Payload Commander John Grunsfeld, and Mission Specialists Nancy Currie, James Newman, Richard Linnehan, and Michael Massimino are seen answering questions from students in an on-orbit interview. Various shots of the Earth are shown as Columbia orbits over the north of the Australian coast, the west coast of Mexico, Madagascar and the southern Indian Ocean, and the Atlantic coast of Africa.
CASI
Spacecrews; Crew Procedures (Inflight); International Space Station

20020033111 NASA Johnson Space Center, Houston, TX USA
STS–108 Mission Highlights Resource Tape
Mar. 06, 2002; In English; Videotape: 59 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049331; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This is Part 1 of a three part video series which provides highlights of the STS-108 mission during which the Expedition Three crew (Commander Frank Culbertson) of the International Space Station (ISS) was relieved by the Expedition Four crew (Commander Yury Onfrienko). For the other parts of the series, refer to 'STS-108 Mission Highlights Resource Tape, Part 2 of 3' (Internal ID 2002049330) and 'STS-108 Mission Highlights Resource Tape, Part 3 of 3' (Internal ID 2002049329). During this video, the STS-108 crew of the Space Shuttle Endeavour (Commander Dom Gorie), as well as the Expedition Four crew, are shown preparing for liftoff at Kennedy Space Center (KSC). Preparations include preflight suiting up, and the strapping in of the crew by support staff. The launch is shown from the Launch Control Center. Following the orbital entry of Endeavour, there is an inspection of the shuttle's payload bay. There is some flight deck activity as the crew prepares for the rendezvous and docking of Endeavour with the ISS. Following the docking, the Expedition Three crew welcomes the others aboard the station, and both crews are briefed. There is an unobstructed view of the South Atlantic Ocean and the coast line of Argentina which includes Peninsula Valdes and Golfo Nuevo. The Raffaello Multipurpose Logistics Module (MPLM) is unberthed from the shuttle payload bay and attached to the ISS.
CASI
Endeavour (Orbiter); International Space Station; Orbital Rendezvous; Spacecraft Docking; Spacecrews; Crew Procedures (Inflight)

20020033426 NASA Johnson Space Center, Houston, TX USA
STS–108 Mission Highlights Resource Tape, Part 2 of 3
Mar. 06, 2002; In English; Videotape: 57 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049330; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video is a continuation of 'STS-108 Mission Highlights Resource Tape: Part 1 of 3' (Internal ID 2002049331). Flight day four footage continues with a video tour of the International Space Station (ISS). During flight day five, an exterior view of the Multipurpose Logistics Module (MPLM) is seen, followed by the crew unloading the supplies and equipment from the MPLM. Commander Dominic Gorie and Mission Specialist Linda Godwin are seen making preparations for the Extravehicular Activity (EVA) scheduled for the following day. Footage of an exterior view of the ISS is also shown. Flight day six footage includes Godwin and Mission Specialist Daniel Tani suiting up for their EVA and the installation of thermal blankets around the solar array wings of the ISS. Expedition 3 Commander Frank Culbertson is seen working in the ISS laboratory during flight day seven. Views are shown of Saudi Arabia and the Red Sea, the western coast of Australia, Cuba and Florida, and Switzerland and Northern Italy. During flight day eight, the crew is seen stowing objects in the MPLM for return to earth. The video concludes with footage of the treadmill used by the astronauts for physical exercise. Flight days nine through twelve are included in 'STS-108 Mission Highlights Resource Tape: Part 3 of 3' (Internal ID 2002049329).
CASI
International Space Station; Spacecrews; Extravehicular Activity; Earth Observations (From Space); Crew Procedures (Inflight)

20020039062 NASA Johnson Space Center, Houston, TX USA
STS–108 Mission Highlights Resource Tape, Part 3 of 3
Mar. 07, 2002; In English; Videotape: 58 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002049329; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS-108 Mission Highlights Resource Tape, Part 1 of 3' (internal ID 2002049331) and 'STS-108 Mission Highlights Resource Tape, Part 2 of 3' (internal ID 2002049330), this video shows footage from flight days 9-12. The control of the International Space Station (ISS) is handed from the Expedition 3 crew (Commander Frank Culbertson, Jr. and Flight Engineers Mikhail Turin and Vladimir Dezhurov) to the Expedition 4 crew (Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch) in an on-orbit ceremony. Both Expedition crews and the STS-108 crew (Commander Dominic Gorie, Pilot Mark Kelly, and Mission Specialists Linda Godwin and Daniel Tani) are seen reloading the Rafaello Multipurpose Logistics Module (MPLM). External shots show the MPLM demating from the ISS and returning to the payload bay of Endeavour. The three crews bid farewell to each other before closing the hatches between ISS and Endeavour. The orbiter undocks from ISS and performs its flyarounds. ISS is seen against a backdrop of stars as Endeavour flies away. On the return flight to Earth, the Starshine 2 satellite is deployed. The video ends with the orbiter's landing as seen from several viewpoints.
CASI
Endeavour (Orbiter); International Space Station; Spacecraft Docking; Spacecraft Landing; Crew Procedures (Inflight)

20020082881 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews – Magnus
Aug. 15, 2002; In English; 43 min., 9 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137519; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-112 Mission Specialist 2 Sandra H. Magnus is seen during a prelaunch interview. She answers questions about her inspiration to become an astronaut and her career path. She gives details on the mission's goals, the most significant of which will be the installation of the S-1 truss structure on the International

Space Station (ISS). The installation, one in a series of truss extending missions, will be complicated and will require the use of the robotic arm as well as extravehicular activity (EVA) by astronauts. Magnus also describes her function in the performance of transfer operations. Brief descriptions are given of experiments on board the ISS as well as on board the Shuttle.
CASI
International Space Station; Trusses; Astronauts; Space Shuttles; Prelaunch Summaries; Loading Operations

20020082890 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews: Sellers
Aug. 16, 2002; In English; 41 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137511; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Piers Sellers is an Astronaut from Crowborough, UK. His Bachelor of Science degree is in Ecological science from Scotland's University of Edinburgh and his doctorate is in biometeorology from Leeds University in the UK. After two years of intense training, Sellers's first assignment as a Mission Specialist is on Flight 111 STS-112. The goal of this flight is to continue building the International Space Station. Sellers, accompanied by five astronauts, will install the S1 truss of the space station which will take three EVA's, or Extra Vehicular Activities to complete. In EVA 1, the highest priority, the S1 truss will be attached to the space station. EVA 2, the electrical work, will set up the radiator and cooling equipment for the station. EVA 3, the final process of the flight, will prepare the station for the next mission. The primary reason for installing the truss is to change the center of gravity of the station so when the next truss is installed, it will be at a symmetrical point.
CASI
Space Transportation System; Space Stations; International Space Station; Extravehicular Activity

20020082898 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews: Ashby
Aug. 15, 2002; In English; 25 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137582; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-112 Mission Commander Jeffrey Ashby is seen during this preflight interview, answering questions about his inspiration in becoming an astronaut and his career path and provides an overview of the mission. Ashby outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (S1 truss) and the importance that the S1 truss will have in the development of the International Space Station (ISS). Ashby discusses the delivery and installation of the S1 truss scheduled to be done in the planned EVAs in some detail. He touches on the use and operation of the Canadarm 2 robotic arm in this process and outlines what supplies will be exchanged with the resident crew of the ISS during transfer activities. He ends with his thoughts on the value of the ISS in fostering international cooperation.
CASI
Astronauts; Trusses; Crew Procedures (Inflight); Prelaunch Summaries; Integrated Truss Structure S1

20020082934 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 09 Highlights
Jun. 13, 2002; In English; 27 min., 29 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137516; No Copyright; Avail: CASI; V02, Videotape-VHS

The STS-111 flight crew consists of Kenneth D. Cockrell, Commander, Paul S. Lockhart, Pilot, Franklin R. Chang-Diaz, Mission Specialist, Philippe Perrin, (CNES), Mission Specialist, Valery G. Korzun, (RSA), ISS Up, Peggy A. Whitson, ISS Up , Sergei Y. Treschev (RSC), ISS Up, Yuri I. Onufriyenko (RSA), ISS Down, Carl E. Walz, and Daniel W. Bursch (ISS) Down. The main goal on this ninth day of flight STS-111, is to replace the wrist roll joint of the Robotic Arm on the International Space Station. Live footage of the wrist roll joint replacement is presented. Paul Lockhart is the spacewalk coordinator for this mission. Franklin Chang-Diaz and Philippe Perrin, are responsible for replacing the wrist roll joint and performing maintenance activities. The spacewalk to repair this joint occurs outside the Space Station's Quest Airlock. The wrist roll joint was replaced successfully. The spacewalk took approximately 7 hours and 17 minutes to complete.
CASI
Extravehicular Activity; International Space Station; Robot Arms; Space Transportation System

20020082946 NASA Johnson Space Center, Houston, TX USA
Expedition 5 Crew Interviews: Peggy Whitson
May 08, 2002; In English; 38 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137655; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 5 Flight Engineer Peggy Whitson is seen during a prelaunch interview. She gives details on the mission's goals and significance, her role in the mission, what her responsibilities will be, what the crew activities will be like (docking and undocking of two Progress unpiloted supply vehicles, normal space station maintenance tasks, conducting science experiments, installing the CETA (Crew and Equipment Translation) cart, and supporting the installation of the International Truss Structure S1 segment), the day-to-day life on an extended stay mission, the experiments she will be conducting on board, and what the S1 truss will mean to the International Space Station (ISS). Whitson ends with her thoughts on the short-term and long-term future of the ISS.
CASI
International Space Station; Prelaunch Summaries; Astronauts; Crew Procedures (Inflight); Manned Orbital Laboratories

20020082948 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews: Yurchikhin
Aug. 20, 2002; In English; 37 min., 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137523; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A preflight interview with mission specialist Fyodor Yurchikhin is presented. He worked for a long time in Energia in the Russian Mission Control Center (MCC). Yurchikhin discusses the main goal of the STS-112 flight, which is to install the Integrated Truss Assembly S1 (Starboard Side Thermal Radiator Truss) on the International Space Station. He also talks about the three space walks required to install the S1. After the installation of S1, work with the bolts and cameras are performed. Yurchikhin is involved in working with nitrogen and ammonia jumpers. He expresses the complexity of his work, but says that he and the other crew members are ready for the challenge.
CASI
International Space Station; Space Transportation System; Integrated Truss Structure S1; Installing

20020083229 NASA Johnson Space Center, Houston, TX USA
STS–113 Crew Interviews: John Herrington, Mission Specialist 2
Oct. 07, 2002; In English; 29 min., 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137662; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

STS-113 Mission Specialist 2 John Herrington is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path, as well as his thoughts on becoming the first Native American in space. He gives details on the mission's goals and significance, which include the transfer of the International Space Station's (ISS) Expedition 6 crew for the Expedition 5 crew, as well as the installation of the ISS's P-1 integrated truss structure. Herrington, who will participate in three EVAs (extravehicular activity), provides details on the installation of the truss structure. He also describes the process of crew transfer, which also involves the transfer of soft goods and scientific experiments, such as the MEMS (microelectromechanical systems)-based Picosatellite Inspector (MEPSI) which will be ejected from the shuttle shortly after it undocks from the ISS.
CASI
Astronauts; International Space Station; Prelaunch Summaries; Crew Procedures (Inflight)

20020083230 NASA Johnson Space Center, Houston, TX USA
STS–113 Crew Interviews: Jim Wetherbee, Commander
Sep. 27, 2002; In English; 47 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137656; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-113 Commander Jim Wetherbee is seen during this preflight interview

where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Wetherbee outlines his role in the mission, what his responsibilities will be, what the crew exchange will be like (transferring the Expedition 6 crew in place of the Expedition 5 crew on the International Space Station (ISS)) and what the importance of the primary payload (the P1 truss) will be. He also provides a detailed account of the three planned extravehicular activities (EVAs) and additional transfer duties. He ends by offering his thoughts on the success of the ISS as the second anniversary of continuous human occupation of the ISS approaches.
CASI
Prelaunch Summaries; Spacecrews; Trusses; Astronauts; International Space Station

20020083313 NASA Johnson Space Center, Houston, TX USA
STS–111 Crew Interviews: Phillippe Perrin, Mission Specialist 1
May 01, 2002; In English; 30 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137584; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-111 Mission Specialist 1 Phillippe Perrin is seen during this preflight interview, where he gives a quick overview of his mission before answering questions about his inspiration to become an astronaut and his career path. Perrin outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes what the crew exchange will be like (transferring the Expedition 5 crew in place of the Expedition 4 crew on the International Space Station (ISS)) and the payloads (Mobile Base System (MBS) and the Leonardo Multi-Purpose Logistics Module). Perrin discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew of the ISS. He also provides his thoughts about the significance of the mission to France and the value of the ISS.
CASI
Spacecrews; Prelaunch Summaries; Crew Procedures (Inflight); International Space Station; Astronauts

20020083314 NASA Johnson Space Center, Houston, TX USA
Expedition 6 Crew Interviews: Don Pettit, Flight Engineer 2/ International Space Station (ISS) Science Officer (SO)
Oct. 09, 2002; In English; 21 min., 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137661; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 6 member Don Pettit (Flight Engineer 2/ International Space Station (ISS) Science Officer (SO)) is seen during a prelaunch interview. He answers questions about his inspiration to become an astronaut and his career path. Pettit, who had been training as a backup crewmember, discusses the importance of training backups for ISS missions. He gives details on the goals and significance of the ISS, regarding experiments in various scientific disciplines such as the life sciences and physical sciences. Pettit also comments on the value of conducting experiments under microgravity. He also gives an overview of the ISS program to date, including the ongoing construction, international aspects, and the routines of ISS crewmembers who inhabit the station for four months at a time. He gives a cursory description of crew transfer procedures that will take place when STS-113 docks with ISS to drop off Pettit and the rest of Expedition 6, and retrieve the Expedition 5 crew.
CASI
Astronauts; International Space Station; Spaceborne Experiments; Prelaunch Summaries; Experimentation; Microgravity

20020084569 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 5 Highlights
Apr. 12, 2002; In English; 20 min., 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139360; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The fifth day of the STS-110 mission begins with live footage of the International Space Station. Commander Yuri Onufrienko, and Flight Engineers Carl Walz and Dan Bursch are shown on the Station. The STS-110 crewmembers consist of: Commander Michael Bloomfield, Pilot Stephen Frick, Mission Specialists Steven Smith, Rex Walheim, Ellen Ochoa, Jerry Ross and Lee Morin. Dan Bursch, Jerry Ross and Steven Smith answer questions from the media about interactions among the crewmembers. A live shot of the Space Shuttle Atlantis and the International Space Station over the Southern Pacific Ocean is also presented.
CASI
Space Transportation System; International Space Station; Manned Space Flight; Space Shuttle Missions

20020084570 NASA Johnson Space Center, Houston, TX USA
STS–113 Crew Interviews: Paul Lockhart, Pilot
Sep. 27, 2002; In English; 34 min., 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137658; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-113 Pilot Paul Lockhart is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Lockhart outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the primary mission payload (the P1 truss) and the crew transfer activities (Expedition 6 crew will replace the Expedition 5 Crew). Lockhart discusses the planned EVAs in detail and mentions what supplies will be left for the resident crew of the International Space Station (ISS). He ends with his thoughts about the importance of the ISS as the second anniversary of continuous human occupation of the space station approaches.
CASI
Astronauts; Extravehicular Activity; Prelaunch Summaries; International Space Station

20020084571 NASA Johnson Space Center, Houston, TX USA
STS–113 Crew Interviews: Michael Lopez–Alegria, Mission Specialist 1
Oct. 18, 2002; In English; 38 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137654; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-113 Mission Specialist 1 Michael Lopez-Alegria is seen during this preflight interview where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Lopez-Alegria outlines his role in the mission in general, and specifically during the docking and extravehicular activities (EVAs). He describes the payload (P1 truss) and the crew transfer activities (the crew of Expedition Six is replacing the crew of Expedition Five on the International Space Station (ISS)). Lopez-Alegria discusses the planned EVAs in detail and outlines what supplies will be left for the resident crew. He ends with his thoughts on the importance of the ISS as the second anniversary of human occupation of the Space Station approaches.
CASI
Astronauts; International Space Station; Extravehicular Activity; Prelaunch Summaries

20020084573 NASA Johnson Space Center, Houston, TX USA
STS–111 Crew Interviews: Franklin Chang–Diaz, Mission Specialist 2
May 01, 2002; In English; 32 min., 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137581; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-111 Mission Specialist 2 Franklin Chang-Diaz is seen during this interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Chang-Diaz outlines his role in the mission in general, and specifically during the extravehicular activities (EVAs). He describes in great detail his duties in the three EVAs which involved preparing the Mobile Remote Servicer Base System (MBS) for installation onto the Space Station's Mobile Transporter, attaching the MBS onto the Space Station and replacing a wrist roll joint on the station's robot arm. Chang-Diaz also discusses the science experiments which are being brought on board the Space Station by the STS-111 mission. He also offers thoughts on how the International Space Station (ISS) fits into NASA's vision and how his previous space mission experience will benefit the STS-111 flight.
CASI
International Space Station; Astronauts; Extravehicular Activity; Prelaunch Summaries

20020084620 NASA Johnson Space Center, Houston, TX USA
Expedition 5 Crew Interviews: Valery Korzun, Commander
Apr. 29, 2002; In English; 46 min., 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137579; No Copyright; Avail: CASI;

B03, Videotape-Beta; V03, Videotape-VHS

Expedition 5 Commander Valery Kozun is seen during a prelaunch interview. He gives details on the mission's goals and significance, his role in the mission and what his responsibilities will be as commander, what the crew exchange will be like (the Expedition 5 crew will replace the Expedition 4 crew on the International Space Station (ISS)), the daily life on an extended stay mission, the loading operations that will take place, the experiments he will be conducting on board, and the planned extravehicular activities (EVAs) scheduled for the mission. Kozun discusses the EVAs in greater detail and explains the significance of the Mobile Base System and the Crew Equipment Translation Aid (CETA) cart for the ISS. He also explains at some length the science experiments which will be conducted on board by the Expedition 5 crew members. Korzun also touches on how his previous space experience on Mir (including dealing with a very serious fire) will benefit the Expedition 5 mission.

CASI

Prelaunch Summaries; Cosmonauts; Astronauts; International Space Station; Manned Orbital Laboratories

20020084968 NASA Johnson Space Center, Houston, TX USA

STS 110 Mission Highlights Resource Tape, Part 3 of 4

Jun. 14, 2002; In English; 57 min., 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002137574; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS 110 Mission Highlights Resource Tape'. This video, Part 3 of 4, shows footage from flight days 6 through 9 of STS-110. The spacecrew includes Michael J. Bloomfield, Commander Stephen N. Frick, Pilot; Jerry L. Ross, Mission Specialist; Steven L. Smith, Mission Specialist; Ellen Ochoa, Mission Specialist; Lee M.E. Morin, Mission Specialist; Rex J. Walheim, Mission Specialist. On flight day 6, Ross and Morin conduct an EVA (extravehicular activity) to secure a tripod like strut to the S0 Truss of the International Space Station (ISS). They also move the drag link and keel pins from one face of the Truss to the other to free the rail on the truss for a railcar to move. Smith installs a camera onto the CANADARM robotic arm on flight day 7, and on flight day 8 the restraints are removed from the railcar connected to the S0 Truss in preparation for checkout. The checkout of the railcar is shown, including its inaugural run. Ross and Morin conduct another EVA on flight day 9 to complete the outfitting of the S0 Truss Structure. Notable footage includes views of Ross and Morin at work from the helmet-mounted camera on Ross' EVA suit, including close-ups of the pistol grip tool, CANADARM 2 onboard the ISS lit at sunrise, a 'diamond ring' effect formed by the Sun between the Earth's limb and the ISS, a brief shot of the Yucatan peninsula, and a end-to-end pan down the length of the ISS. The activities from other flights days can be seen on "STS 110 Mission Highlights Resource Tape" Part 1 of 4 (internal ID 2002137575), "STS 110 Mission Highlights Resource Tape" Part 2 of 4 (internal ID 2002137573), and "STS 110 Mission Highlights Resource Tape" Part 4 of 4 (internal ID 2002137517).

CASI

International Space Station; Spacecrews; Extravehicular Activity; Space Station Structures; Orbital Assembly

20020084969 NASA Johnson Space Center, Houston, TX USA

STS 110 Mission Highlights Resource Tape, Part 2 of 4

Jun. 14, 2002; In English; 58 min., 17 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002137573; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS 110 Mission Highlights Resource Tape'. This video, Part 2 of 4, shows footage from flight days 3 through 5 of STS-110. The flight crew includes Michael J. Bloomfield, Commander; Stephen N. Frick, Pilot; Jerry L. Ross, Mission Specialist; Steven L. Smith, Mission Specialist; Ellen Ochoa, Mission Specialist; Lee M.E. Morin, Mission Specialist; Rex J. Walheim, Mission Specialist. The coverage from flight day 3 includes docking replays of Atlantis and the International Space Station (ISS), and postdocking procedures, as well as intermingling of the flight crew with the Expedition 4 crew (Yury I. Onufrienko, Commander; Daniel W. Bursch, Flight Engineer; Carl E. Walz, Flight Engineer) of the ISS. Flight day 4 includes an EVA (extravehicular activity) in which Walheim and Smith lift the S0 Truss from the payload bay, and temporarily clamp it onto the Destiny laboratory. On flight day 5 a suite of spaceborne experiments (not shown) arrives at Destiny, including protein crystal growth and wheat plant growth experiments. Notable footage includes Hawaii, New Zealand, and sunrise on Atlantis. An unknown object steaks across the field of view during the video, with the Earth in the background. The activities of the other flight days can be seen on 'STS 110 Mission Highlights Resource Tape, Part 1 of 4' (internal ID 2002137575), 'STS 110 Mission Highlights Resource Tape, Part 3 of 4' (internal ID 2002137574), and 'STS 110 Mission Highlights Resource Tape, Part 4 of 4' (internal ID 2002137517).

CASI

International Space Station; Spacecrews; Trusses; Spacecraft Docking; Extravehicular Activity; Orbital Assembly

20020084970 NASA Johnson Space Center, Houston, TX USA

Crew Training STS–110

Mar. 20, 2002; In English; 37 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002137533; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crewmembers are shown being suited for the STS-110 flight. The STS-110 crews are shown in training for four EVA's on the International Space Station. The crewmembers consist of: Michael J. Bloomfield, mission commander; Stephen N. Frick, pilot; and mission specialists: Ellen Ochoa, Lee M.E. Morin, Rex J. Walheim, Steven L. Smith, and Jerry Ross. Crew ascent middeck operations and Orbiter Skills Training in a fixed Based Simulator are the training areas shown. The STS-110 crew and Expedition four are seen during training at the Johnson Space Center Space Station Training Facility (SSTF). A photo session of the crew is also presented.

CASI

International Space Station; Space Transportation System; Space Flight Training; Space Missions; Extravehicular Activity

20020084971 NASA Johnson Space Center, Houston, TX USA

STS 110 Mission Highlights Resource Tape, Part 4 of 4

Jun. 14, 2002; In English; 48 min., 2 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002137517; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A continuation of 'STS 110 Mission Highlights Resource Tape'. This video, Part 4 of 4, shows footage from flight days 10 through 12 of STS-110. The spacecrew includes Michael J. Bloomfield, Commander; Stephen N. Frick, Pilot; Jerry L. Ross, Mission Specialist; Steven L. Smith, Mission Specialist; Ellen Ochoa, Mission Specialist; Lee M.E. Morin, Mission Specialist; Rex J. Walheim, Mission Specialist. Flight day 10 includes an exchange of farewells with the Expedition 4 crew (Yury I. Onufrienko, Commander; Daniel W. Bursch, Flight Engineer; Carl E. Walz, Flight Engineer) of the International Space Station (ISS), and undocking. The video includes many views of the ISS as Atlantis departs, including cloud cover and the Earth's limb as backgrounds. There is also a view of Atlantis with its payload bay open. On flight day 11, in preparation for landing, the crew conducts a checkout of flight controls and a test firing. A spaceborne wheat plant experiment onboard the ISS is briefly shown. Flight day 12 includes closing the payload bay, suit-up, and landing. Kennedy Space Center is seen from the air, and the video shows landing replays, as well as a heads-up display view of the landing. Earth views include clear views of Western Sahara, Morocco, Mauritania, and Algeria, with the Atlantic Ocean, a cloud obstructed view of Newfoundland and the Atlantic, Pacific Ocean sun glint, and an excellent view of the Chicago area and Lake Michigan at night. The activities from other flights days can be seen on "STS 110 Mission Highlights Resource Tape" Part 1 of 4 (internal ID 2002137575), "STS 110 Mission Highlights Resource Tape" Part 2 of 4 (internal ID 2002137573), and "STS 110 Mission Highlights Resource Tape" Part 3 of 4 (internal ID 2002137574).

CASI

Spacecrews; International Space Station; Spacecraft Landing; Spacecraft Docking; Atlantis (Orbiter); Space Station Structures; Orbital Assembly; Spacecrew Transfer; Crew Procedures (Inflight); Manned Space Flight

20020084972 NASA Johnson Space Center, Houston, TX USA

STS–110 Flight Day 6 Highlights

Apr. 13, 2002; In English; 41 min., 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2002137515; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the sixth day of the STS-110 mission, Mission Specialists Jerry Ross and Lee Morin are seen in the second extravehicular activity (EVA) of this mission to the International Space Station (ISS). The video opens with the two astronauts preparing for the EVA, which will be Ross' eighth, thereby making him the most experienced space-walker in history. This pair of astronauts has

been dubbed the Silver Team, largely because they both have grandchildren. As Ross and Morin prepare for the EVA by breathing pure oxygen and experiencing reduced pressure, Mission Specialist Ellen Ochoa maneuvers the robotic arm towards the hatch of the Space Shuttle Atlantis. There is video footage of the astronauts exiting the hatch and preparing their tools and work areas. During this EVA the astronauts will install two tripod-like struts, which will serve as structural attachments between the S-0 truss segment and the Destiny Laboratory Module. While the construction takes place, helmet mounted cameras on the spacesuits provide live video of the astronauts at work, most often using a pistol grip tool used as an electric ratcheting-type drill to loosen and tighten bolts. Following the installation of the struts, Ross and Morin remove the draglinks and keelpins that had functioned to hold the S0 truss structure securely in Atlantis' payload bay during the launch sequence of the mission. They move these to temporary storage positions, bolted on the outside of the ISS. They then install an umbilical system that will provide power to the Mobile Transporter (MT).
CASI
Astronauts; Extravehicular Activity; International Space Station; Orbital Assembly

20020084982 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 4 Highlights Replay
Jun. 09, 2002; In English; 20 min., 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139358; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The most significant highlights of flight day 4 of STS-111 are the lifting of the Leonardo Multi Purpose Logistics Module (MPLM) out of Endeavour's payload bay, and its temporary attachment to the Unity module of the International Space Station (ISS). The lifting and attachment are shown. Also shown is the testing of cameras on the CANADARM2 robotic arm on the ISS, an ISS extravehicular activity (EVA) suit, and an interview with the outgoing Expedition 4 crew of the ISS. Earth views include the ISS and Earth limb, and cloud formations.
CASI
International Space Station; Endeavour (Orbiter); Unity Connecting Module; Spacecraft Docking Modules; Spacecraft Docking; Payload Transfer

20020084984 NASA Johnson Space Center, Houston, TX USA
STS 110 Mission Highlights Resource Tape, Part 1 of 4
Jun. 15, 2002; In English; 59 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137575; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video, Part 1 of 4, shows footage from flight days 1 and 2, and part of day 3, of STS-110. The spacecrew includes Michael J. Bloomfield, Commander; Stephen N. Frick, Pilot; Jerry L. Ross, Mission Specialist; Steven L. Smith, Mission Specialist; Ellen Ochoa, Mission Specialist; Lee M.E. Morin, Mission Specialist; Rex J. Walheim, Mission Specialist. They are shown at their pre-launch meal, introducing themselves and talking about their roles on the coming flight. The launch of Atlantis is shown, with replays. On flight day 2, the crew conducts a checkout of the CANADARM robotic arm. Flight day 3 includes Atlantis docking with the International Space Station (ISS), firing its thrusters to reach it. The approach and docking are shown. Other notable footage includes CANADARM with the Earth's limb in the background, Atlantis moving over a cloud cover background, sunlight from behind the Earth's limb, showing the "diamond ring" effect, sunrise upon Atlantis, and the docking hatches of the two spacecraft during approach. The activities from other flights days can be seen on "STS 110 Mission Highlights Resource Tape" Part 2 of 4 (internal ID 2002137573), "STS 110 Mission Highlights Resource Tape" Part 3 of 4 (internal ID 2002137574), and "STS 110 Mission Highlights Resource Tape" Part 4 of 4 (internal ID 2002137517).
CASI
International Space Station; Spacecrews; Liftoff (Launching); Spacecraft Docking; Orbital Maneuvers

20020084985 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 7 Highlights
Apr. 14, 2002; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137514; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the seventh day of STS-110, Mission Specialists Steven Smith and Rex Walheim are shown preparing for their second extravehicular activity (EVA) and the third of the mission, with the assistance of Mission Specialist Jerry Ross. Following this mission, Ross and Smith will be the first and second most experienced spacewalkers, respectively, in history. A camera mounted on the Space Shuttle Atlantis shows footage of the International Space Station. While Smith and Walheim are on EVA, Mission Specialists Ross and Lee Morin will provide choreography from inside the Atlantis crew cabin, Pilot Stephen Frick will operate the robotic arm, and Commander Mike Bloom will control the cameras on the robotic arm. Smith and Walheim are shown exiting the airlock hatch and then installing an PFR (Portable Foot Restraint) on the end of the robotic arm, from which much of the work will be done. Following the switching off of a circuit breaker, the main EVA task of rewiring umbilical cables that provide power, commands, and video is begun. These cables will be connected to the Mobile Transporter's (MT) robotic arm. The MT, an external transportation system which runs on rails, is seen with a helmet mounted camera as the astronauts work to release bolts that had served to secure the MT during launch. After a final check of the umbilical connections mated, the Umbilical Reconfiguration Panel is fitted over the cables, and the astronauts make their way to the airlock hatch.
CASI
Astronauts; Extravehicular Activity; International Space Station; Orbital Assembly

20020084986 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 10 Highlights Replay
Jun. 15, 2002; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137583; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The most important highlight of flight day 10 of STS-111 was the undocking of the Leonardo Multi Purpose Logistical Module (MPLM) from the Unity module of the International Space Station (ISS). The undocking is shown, as is Leonardo resting in Endeavour's payload bay. The video also includes an interview, and footage of the West Africa and the Atlantic Ocean, Gibraltar and the Mediterranean Sea, Italy, Mexico and the Pacific Ocean, Hispanola, an unknown land mass, and unknown mountains.
CASI
International Space Station; Endeavour (Orbiter); Spacecraft Docking; Unity Connecting Module; Spacecraft Docking Modules; Payload Transfer

20020084987 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews: Melroy
Aug. 15, 2002; In English; 45 min., 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137512; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Pamela A. Melroy USAF Pilot, is seen during a prelaunch interview. She gives a brief overview of the STS-112 mission which is to install the S1 truss on the International Space Station. She also gives some specific details about the structural design of the S1 truss. Pamela Melroy is also the Internal EVA (IV) coordinator for this mission. She talks about her responsibilities as the IV which are to direct the spacewalkers back into the Airlock after the S1 is installed. A detailed description about the goals of EVA (2) and EVA (3) are also given by Melroy.
CASI
Extravehicular Activity; International Space Station; Space Transportation System; Integrated Truss Structure S1

20020085107 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 11 Highlights
Oct. 17, 2002; In English; 23 min., 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137651; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The eleventh day of the STS-112 begins with a live shot from the flight deck of the Space Shuttle Atlantis. The flight crew consists of: Commander Jeff Ashby, Pilot Pamela Melroy, Mission Specialists: Dave Wolfe, Fyodor Yurchikhin, Sandy Mangus and Piers Sellers. Dave Wolfe and Jeff Ashby are shown cleaning the flight deck. Pam Melroy, Dave Wolfe, Sandy Mangus, and Jeff Ashby, answer questions from the internet about microgravity, spacesuits,

and orbital docking. The six astronauts then enter into the flight deck to answer questions from the media.
CASI
Space Transportation System; International Space Station; Space Shuttles; Atlantis (Orbiter); Manned Space Flight

20020085128 NASA Johnson Space Center, Houston, TX USA
Expedition 6 Crew Interviews: Ken Bowersox CDR
Oct. 09, 2002; In English; 29 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137691; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 6 Commander Ken Bowersox is seen during a prelaunch interview. He gives details on the mission's goals and significance, his role in the mission, what his responsibilities will be as commander, what the crew exchange will be like (transferring the Expedition 6 crew in place of the Expedition 5 crew on the International Space Station (ISS)) and what day-to-day life on an extended stay mission is like. Bowersox also discusses in some detail the planned extravehicular activities (EVAs), the anticipated use of the robot arms in installing the P1 truss and the on-going science experiments which will be conducted by the Expedition 6 crew. He touches on challenges posed by a late change in the crew roster. Bowersox ends with his thoughts on the value on the ISS in fostering international cooperation.
CASI
Prelaunch Summaries; Extravehicular Activity; International Space Station; Astronauts; Spaceborne Experiments; Crew Procedures (Inflight); Robot Arms; Spacecrew Transfer

20020085130 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 9 Highlights
Oct. 15, 2002; In English; 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137657; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The ninth day of the STS-112 mission begins with Pilot Pamela Melroy and Commander Jeff Ashby inside the Quest Airlock Module in the International Space Station. NASA ISS Science Officer Peggy Whitson is removing one of the Extravehicular Mobility Space Suits to reach a malfunctioning humidity separator. Also, a live shot of a treadmill being used that crewmembers use to keep fit in space is shown. Internet questions are then being answered by the crewmembers.
CASI
Space Transportation System; Airlock Modules; Space Missions; International Space Station; Extravehicular Mobility Units

20020085178 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 8 Highlights
Apr. 15, 2002; In English; 38 min., 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137518; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On Flight Day 8 of the STS-110 mission, the combined members of the Atlantis STS-110 crew and the International Space Station (ISS) Expedition 4 crew, Commanders Michael J. Bloomfield and Yury I. Onufrienko, respectively, answer questions posed to them by press members on the ground. Topics covered include: challenges of long term space habitation, adequacy of training for the on-orbit construction of the space station, details on the Mobile Transporter (MT) railcar system. Footage of the MT directly precedes and follows the extended question and answer portion of the video. The MT is seen from a variety of angles, as it slowly moves from Workstation 4 to Workstation 5 in order to test its ability to grapple to a fixed point along the track. The MT will eventually be used as a base for the robot arm in order to perform maintenance and assembly tasks on the ISS.
CASI
International Space Station; Space Station Mobile Servicing System; Spacecrews; Postflight Analysis

20020085298 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: Kalpana Chawla MS2
Jun. 10, 2002; In English; 1 hr., 8 min., 30 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

STS-107 Mission Specialist 2 Kalpana Chawla is seen during this preflight interview where she gives a quick overview of the mission before answering questions about her inspiration to become an astronaut and her career path. Chawla outlines her role in the mission in general, and specifically in conducting the on-board science experiments. She discusses the following experiments in detail: MEIDEX (Mediterranean Israel Dust Experiment), CM2 (Combustion Module 2), MIST (Water Mist Fire Suppression), SOFBALL (Structures of Flame Balls at Low Lewis-Number), LSP (Laminar Soot Processes), MGM (Mechanics of Granular Materials) and BDS (Biotechnology Demonstration System). She also discusses the potential benefits of space research, the dual-work shift of the mission and the rewards of international cooperation.
CASI
Astronauts; Columbia (Orbiter); Spaceborne Experiments; Prelaunch Summaries

20020085344 NASA Johnson Space Center, Houston, TX USA
Expedition 6 Crew Interviews: Nikolai Budarin FEI (Flight Engineer 1)
Oct. 11, 2002; In English; 20 min., 53 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137653; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Expedition 6 Flight Engineer Nikolai Budarin is seen during a prelaunch interview. He provides details on the mission's goals and significance, his role in the mission, what his responsibilities will be, what the crew activities will be like (docking of a Progress unpiloted supply vehicle, maintaining the space station, conducting science experiments and performing one spacewalk), the day-to-day life on an extended stay mission, and the experiments he will be conducting on board. Budarin also discusses how his previous experiences on mir space missions will help him and ends his thoughts on how valuable the International Space Station has proven.
CASI
Prelaunch Summaries; Crew Procedures (Inflight); Cosmonauts

20020085367 NASA Johnson Space Center, Houston, TX USA
Crew Interviews: Treschev
May 08, 2002; In English; 36 min., 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137531; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Sergei Treschev is a Cosmonaut of the Rocket Space Corporation Energia, (RSC), from Volynsky District, Lipetsk Region (Russia). He graduated from Moscow Energy Institute. After years of intense training with RSC Energia, he was selected as International Space Station (ISS) Increment 5 flight engineer. The Expedition-Five crew (two Russian cosmonauts and one American astronaut) will stay on the station for approximately 5 months. The Multipurpose Logistics Module, or MPLM, will carry experiment racks and three stowage and resupply racks to the station. The mission will also install a component of the Canadian Arm called the Mobile Base System (MBS) to the Mobile Transporter (MT) installed during STS-110. This completes the Canadian Mobile Servicing System, or MSS. The mechanical arm will now have the capability to "inchworm" from the U.S. Lab fixture to the MSS and travel along the Truss to work sites.
CASI
International Space Station; Transporter; Trusses; Space Transportation System; Cosmonauts; Robot Arms; Soviet Spacecraft; Launch Vehicles

20020085383 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: David Brown MS1
Jun. 18, 2002; In English; 49 min., 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140934; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Mission Specialist 1 David Brown is seen during this preflight interview where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career. Brown outlines his role in the mission in general, and specifically during the conducting of on-board science experiments. Brown discusses the following instruments

and experiments in detail: ARMS (Advanced Respiratory Monitoring System), MEIDEX (Mediterranean Israeli Dust Experiment), Combustion Module 2, and FREESTAR (Fast Reaction Enables Science Technology and Research). He also describes the new primary payload carrier, the SPACEHAB research double module which doubles the amount of space available for research. Brown shares his thoughts about the importance of international cooperation in mission planning and the need for scientific research in space.
CASI
Astronauts; Spaceborne Experiments; Spacecraft Modules; Crew Procedures (Inflight); Astronaut Training; International Space Station

20020085384 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: Rick D. Husband, Commander
Jun. 10, 2002; In English; 57 min., 14 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Commander Rick Husband is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. Husband outlines what his role in the mission will be, what training the crew received, what crew member responsibilities will be, particularly during launch and reentry, what day to day life will be like on an extended duration mission, and what science experiments are going to be conducted onboard. He discusses the following science experiments and instruments in detail: MEIDEX (Mediterranean Israeli Dust Experiment), SOLSE (Shuttle Ozone Limb Sounding Experiment, FREESTAR (Fast Reaction Enabling Science Technology and Research) and various student projects. Husband also touches on the importance of space research, the value of international cooperation, the reason for dual crew shifts on the mission and the role of crew members as research subjects.
CASI
Astronauts; Spaceborne Experiments; Astronaut Training; Crew Procedures (Inflight); Columbia (Orbiter)

20020085396 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: William McCool, Pilot
Jun. 12, 2002; In English; 31 min., 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140933; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Pilot William McCool is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his background. McCool outlines his role in the mission in general, and discusses the scientific experiments which comprise the primary payloads for the mission. He provides details on the following instruments and experiments: MEIDEX (Mediterranean Israeli Dust Experiment), BIOPACK (Bacterial Physiology and Virulence on Earth and in Microgravity) and SOLSE (Shuttle Ozone Limb Sounding Experiment). McCool talks about the new SPACEHAB research module which doubles the amount of space available for scientific research projects. He also mentions the training for the mission, the astronauts working in dual shifts on the shuttle, and the importance of international cooperation in planning the mission.
CASI
Astronauts; Columbia (Orbiter); Prelaunch Summaries; Spaceborne Experiments; Crew Procedures (Inflight); Microgravity

20020085517 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 5 Highlights
Oct. 11, 2002; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137659; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this fifth day of the STS-112 mission, the crewmembers Atlantis will begin transferring equipment and supplies to the orbiting laboratory. The crew reviews procedures for Saturday's spacewalk. Mission Specialists, Dave Wolf and Piers Sellers will prepare the tools and other equipment for use during Saturday's spacewalk. The spacewalkers reverse positions for most of the EVA, with Sellers riding the arm and Wolf free-floating while tethered to the station. They will attach umbilicals, install a second camera, install spool positioning devices to quickly disconnect fittings on ammonia lines and release radiator beam launch locks. The crewmembers will move a number of scientific experiments back and forth between the vehicles to return completed experiments to Earth and deploy new experiments at the station. One experiment transferred includes a set of liver cell tissue samples from an experiment studying the function of human liver cells in micro-gravity experiments were moved from the station onto the shuttle for return to Earth. Payload experiments such as Marshall Space Flight Center's protein crystals in micro-gravity experiments were moved to and from the station.
CASI
Extravehicular Activity; Space Transportation System; Spacecrews; Crew Procedures (Inflight); Crew Procedures (Preflight); Microgravity

20020085518 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 11 Highlights
Jun. 15, 2002; In English; 17 min., 10 sec. playing time, in color, with sound.
Report No.(s): NONP–NASA–VT–2002137578; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The eleventh day of the STS-111 flight shows live shots of the Space Shuttle Endeavor departing from the International Space Station. The International Space Station in orbit daylight across the Southern Pacific Ocean is also presented. A view of the forward port section of Endeavor's payload bay is also shown. Expedition four flight engineer Dan Bursch talks about farewell ceremonies to the Expedition Five Crew aboard the International Space Station.
CASI
Expeditions; International Space Station; Space Transportation System; Space Shuttles

20020085519 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Interviews – Wolf
Aug. 16, 2002; In English; 38 min., 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137522; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-112 Mission Specialist David Wolf is seen during this preflight interview, where he first answers questions on his career path and role models. Other questions cover mission goals, ISS (International Space Station) Expedition 5 spacecrew, crew training, the S1 Truss and its radiators, the MBS (Mobile Base Structure), his experience onboard Mir, and his EVAs (extravehicular activities) on the coming mission. The EVAs are the subject of several questions. Wolf discusses his crew members, and elsewhere discusses Pilot Pamela Melroy's role as an IV crew member during EVAs. In addition, Wolf answers questions on transfer operations, the SHIMMER experiment, and his thoughts on multinational crews and crew bonding.
CASI
International Space Station; Spacecrews; Extravehicular Activity; Integrated Truss Structure S1; Atlantis (Orbiter)

20020085524 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 12 Highlights
Jun. 16, 2002; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137576; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this twelfth flight day of the STS-111 flight, a live shot of the right hand wing of the Space Shuttle Endeavor is presented. Expedition Four Flight Engineer Dan Bursch, Flight Engineer Carl Walz and Commander Yury Onufrienko are shown aboard the Space Shuttle Endeavor. Dan Bursch also sends Father's Day wishes to everyone.
CASI
Expeditions; Endeavour (Orbiter); Space Transportation System; Space Shuttles

20020086352 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 5 Highlights
Jun. 09, 2002; In English; 26 min., 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139359; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On Flight Day 5 of STS-111, the crew of Endeavour (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist) and the Expedition 5 crew (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer) and Expedition 4 crew (Yury Onufrienko, Commander; Daniel Bursch, Flight Engineer; Carl Walz, Flight Engineer) are aboard the docked Endeavour and International Space Station (ISS). The ISS cameras show the station in orbit above the North African coast and the Mediterranean Sea, as Chang-Diaz and Perrin prepare for an EVA (extravehicular activity). The Canadarm 2 robotic arm

is shown in motion in a wide-angle shot. The Quest Airlock is shown as it opens to allow the astronauts to exit the station. As orbital sunrise approaches, the astronauts are shown already engaged in their EVA activities. Chang-Diaz is shown removing the PDGF (Power and Data Grapple Fixture) from Endeavour's payload bay as Perrin prepares its installation position in the ISS's P6 truss structure; The MPLM is also visible. Following the successful detachment of the PDGF, Chang-Diaz carries it to the installation site as he is transported there by the robotic arm. The astronauts are then shown installing the PDGF, with video provided by helmet-mounted cameras. Following this task, the astronauts are shown preparing the MBS (Mobile Base System) for grappling by the robotic arm. It will be mounted to the Mobile Transporter (MT), which will traverse a railroad-like system along the truss structures of the ISS, and support astronaut activities as well as provide an eventual mobile base for the robotic arm.
CASI
Extravehicular Activity; International Space Station; Space Station Mobile Servicing System; Orbital Assembly; Payload Transfer

20020086353 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 6 Highlights
Jun. 10, 2002; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139356; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The sixth day of STS-111 flight begins with a live shot of the Space Shuttle Endeavor. Dan Bursch Flight Engineer is shown inside the U.S. Lab Destiny. Astronaut Peggy Whitson and Flight Engineer Carl Walz installed the Mobile Remote Servicer Base System (MBS). The MBS latch is attached to the bar of the Mobile Transporter of the International Space Station. A transfer of supplies is shown inside the U.S. Lab Destiny. Mission Specialists Philippe Perrin and Commander Ken Cockrel talk to the media about EVA training.
CASI
International Space Station; Space Shuttles; Extravehicular Activity; Endeavour (Orbiter)

20020086354 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 1 Highlights
Apr. 08, 2002; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139355; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first day of the STS-110 mission begins with a live shot of the Space Shuttle Atlantis at the Kennedy Space Center. The primary objective of this flight is to rendezvous and dock with the International Space Station to attach the S (0) Truss and mobile transporter. The STS-110 crew consists of: Commander Michael J. Bloomfield, Pilot Stephen N. Frick, Mission Specialists Rex J. Walheim, Ellen Ochoa, Lee M.E. Morin, Jerry L. Ross, and Steven L. Smith. The crew is shown getting suited for their mission. Extravehicular Activity (EVA) will be performed by Jerry Ross, Lee Morin, Rex Walheim and Steven Smith. Live footage of the launch of the Space Shuttle Atlantis is also given.
CASI
International Space Station; Space Transportation System; Spacecraft Launching; Space Shuttles; Atlantis (Orbiter)

20020086355 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 1 Highlights
Jun. 05, 2002; In English; 16 min., 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139354; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On Flight Day 1 of STS-111, the crew of Endeavour (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist) and the Expedition 5 crew (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer) being transported to the International Space Station (ISS) are shown preparing for launch in the suit-up room of the crew quarters, and then shown heading to the shuttle. Following commencement of the countdown, the launch is then shown, with close-ups of the rocket nozzles as lift-off occurs. Endeavour is shown as it gains altitude, accelerates to 2400 mph, and drops its solid rocket boosters. The video ends with video of Endeavour's payload bay, having been opened after leaving Earth's atmosphere.
CASI
Endeavour (Orbiter); Liftoff (Launching); International Space Station; Spacecrew Transfer

20020086356 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 4 Highlights
Oct. 11, 2002; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137663; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the fourth day of STS-112, its crew (Jeffrey Ashby, Commander; Pamela Melroy, Pilot; David Wolf, Mission Specialist; Piers Sellers, Mission Specialist; Sandra Magnus, Mission Specialist; Fyodor Yurchikhin, Mission Specialist) onboard Atlantis and the Expedition 5 crew (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer) onboard the International Space Station (ISS) are seen preparing for the installation of the S1 truss structure. Inside the Destiny Laboratory Module, Korzun and other crewmembers are seen as they busily prepare for the work of the day. Sellers dons an oxygen mask and uses an exercise machine in order to purge the nitrogen from his bloodstream, in preparation for an extravehicular activity (EVA). Whitson uses the ISS's Canadarm 2 robotic arm to grapple the S1 truss and remove it from Atlantis' payload bay, with the assistance of Magnus. Using the robotic arm, Whitson slowly maneuvers the 15 ton truss structure into alignment with its attachment point on the starboard side of the S0 truss structure, where the carefully orchestrated mating procedures take place. There is video footage of the entire truss being rotated and positioned by the arm, and ammonia tank assembly on the structure is visible, with Earth in the background. Following the completion of the second stage capture, the robotic arm is ungrappled from truss. Sellers and Wolf are shown exiting the the Quest airlock hatch to begin their EVA. They are shown performing a variety of tasks on the now attached S1 truss structure, including work on the Crew Equipment Translation Cart (CETA), the S-band Antenna Assembly, and umbilical cables that provide power and remote operation capability to cameras. During their EVA, they are shown using a foot platform on the robotic arm. Significant portions of their activities are shown from the vantage of helmet mounted video cameras. The video closes with a final shot of the ISS and its new S1 truss.
CASI
Extravehicular Activity; International Space Station; Integrated Truss Structure S1; Orbital Assembly

20020086357 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 10 Highlights
Oct. 16, 2002; In English; 35 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137660; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On Flight Day 10 of the STS-112 mission, its crew (Jeffrey Ashby, Commander; Pamela Melroy, Pilot; David Wolf, Mission Specialist; Piers Sellers, Mission Specialist; Sandra Magnus, Mission Specialist; Fyodor Yurchikhin, Mission Specialist) on the Atlantis and the Expedition 5 crew on the International Space Station (ISS) (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer) are shown exchanging farewells in the ISS's Destiny Laboratory Module following the completion of a week-long period of docked operations. The Expedition 5 crew is nearing the end of five and a half continuous months aboard the space station. Following the closing of the hatches, the Atlantis Orbiter undocks from the station, and Melroy pilots the shuttle slowly away from the ISS, and engages in a radial fly-around of the station. During the fly-around cameras aboard Atlantis shows ISS from a number of angles. ISS cameras also show Atlantis. There are several shots of each craft with a variety of background settings including the Earth, its limb, and open space. The video concludes with a live interview of Ashby, Melroy and Yurchikhin, still aboard Atlantis, conducted by a reporter on the ground. Questions range from feelings on the conclusion of the mission to the experience of being in space. The primary goal of the mission was the installation of the Integrated Truss Structure S1 on the ISS.
CASI
Atlantis (Orbiter); International Space Station; Spacecrews

20020086358 NASA Johnson Space Center, Houston, TX USA
STS–112 Crew Training Clip
Sep. 03, 2002; In English; 47 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137513; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the crew of STS-112 (Jeffrey Ashby, Commander; Pamela Melroy, Pilot; David Wolf, Piers Sellers, Sandra Magnus, and Fyodor Yurchikhin, Mission Specialists) during several parts of their training. The video

is arranged into short segments. In 'Topside Activities at the NBL', Wolf and Sellers are fitted with EVA suits for pool training. 'Pre-Launch Bailout Training in CCT II' shows all six crew members exiting from the hatch on a model of a shuttle orbiter cockpit. 'EVA Training in the VR Lab' shows a crew member training with a virtual reality simulator, interspersed with footage of Magnus, and Wolf with Melroy, at monitors. There is a 'Crew Photo Session', and 'Pam Melroy and Sandy Magnus at the SES Dome' also features a virtual reality simulator. The final two segments of the video involve hands-on training. 'Post Landing Egress at the FFT' shows the crew suiting up into their flight suits, and being raised on a harness, to practice rapelling from the cockpit hatch. 'EVA Prep and Post at the ISS Airlock' shows the crew assembling an empty EVA suit onboard a model of a module. The crew tests oxygen masks, and Sellers is shown on an exercise bicycle with an oxygen mask, with his heart rate monitored (not shown).
CASI
Space Shuttle Orbiters; Spacecrews; Astronaut Training; Extravehicular Mobility Units; Extravehicular Activity; Training Simulators

20020086376 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 3 Highlights
Jun. 07, 2002; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139352; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On Flight Day 3 of STS-111, the crew of Endeavour (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist) and the Expedition 5 crew (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer), begin their final approach towards the International Space Station (ISS). From cameras aboard the ISS, live video of Endeavour is shown as it approaches the station. The Orbiter is maneuvered slowly to a position for docking, and cameras from multiple angles show this process. As it is maneuvered, there are clear views of its payload bay, which includes the Leonardo MultiPurpose Logistics Module (MPLM) and the Mobile Base System (MBS), both of which will be installed on the ISS during this mission. In the final stages of the docking procedure there is close-up footage of Endeavour meeting the ISS's Pressurized Mating Adapter 2 on the Destiny Laboratory Module. Inside the ISS, the Expedition 4 crew (Yury Onufrienko, Commander; Daniel Bursch, Flight Engineer; Carl Walz, Flight Engineer), which will be replaced by the Expedition 5 crew, prepares for final docking. Crew members are shown transferring equipment from the Endeavour to the ISS, prior to a replay of the mating of the two crafts. In the replay, the hatch is shown being opened and the two newly arrived crews are greeted with excitement by Expedition 4 crewmembers. The video closes with footage of the Quest airlock used for EVA (extravehicular activity) egress, and the Canadarm 2 robotic arm.
CASI
Hatches; International Space Station; Spacecraft Docking; Endeavour (Orbiter); Air Locks; Spacecrews

20020086383 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: Michael Anderson, Mission Specialist
Jun. 10, 2002; In English; 51 min., 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140927; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Mission Specialist 3 and Payload Commander Michael Anderson is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. He outlines his role in the mission in general, and specifically in conducting onboard science experiments. He discusses the following instruments and sets of experiments in detail: CM2 (Combustion Module 2), FREESTAR (Fast Reaction Enabling Science Technology and Research, MEIDEX (Mediterranean Israeli Dust Experiment) and MGM (Mechanics of Granular Materials). Anderson also mentions on-board activities and responsibilities during launch and reentry, mission training, and microgravity research. In addition, he touches on the dual work-shift nature of the mission, the use of crew members as research subjects including pre and postflight monitoring activities, the emphasis on crew safety during training and the value of international cooperation.
CASI
Prelaunch Summaries; Astronauts; Crew Procedures (Inflight); Spaceborne Experiments; Astronaut Training; Columbia (Orbiter)

20020086398 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 2 Highlights
Jun. 05, 2002; In English; 12 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139353; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On Flight Day 2 of STS-111, the crew of Endeavour (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist) and the Expedition 5 crew (Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer), having successfully entered orbit around the Earth, begin to maneuver towards the International Space Station (ISS), where the Expedition 5 crew will replace the Expedition 4 crew. Live video is shown of the Earth from several vantage points aboard the Shuttle. The center-line camera, which will allow Shuttle pilots to align the docking apparatus with that on the ISS, provides footage of the Earth. Chang-Diaz participates in an interview, in Spanish, conducted from the ground via radio communications, with Cockrell also appearing. Footage of the Earth includes: Daytime video of the Eastern USA with some cloud cover as Endeavour passes over the Florida panhandle, Georgia, and the Carolinas; Daytime video of Lake Michigan unobscured by cloud cover; Nighttime low-light camera video of Madrid, Spain.
CASI
International Space Station; Endeavour (Orbiter); Earth Observations (From Space); Spacecraft Maneuvers

20020086514 NASA Johnson Space Center, Houston, TX USA
STS–111 Crew Interviews: Ken Cockrell, Commander
Apr. 30, 2002; In English; 52 min., 50 sec. playing time, in color, woth sound
Report No.(s): NONP–NASA–VT–2002139467; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-111 Mission Commander Ken Cockrell is seen during this preflight interview, answering questions about his inspiration in becoming an astronaut and provides an overview of the mission. He discusses the following topics: the docking of the Endeavour Orbiter to the International Space Station (ISS), the delivery of the Mobile Base System (MBS) to the ISS, the crew transfer activities (the Expedition 5 crew is replacing the Expedition 4 crew on the ISS), the planned extravehicular activities (EVAs), and the installation of the MBS onto the ISS. Cockrell provides a detailed description of the MBS and its significance for the ISS. He also describes prelaunch activities, mission training and international cooperation during the mission.
CASI
Astronauts; Endeavour (Orbiter); Astronaut Training; Prelaunch Summaries; Crew Procedures (Inflight); Orbital Assembly; Spacecrew Transfer; Spacecraft Docking; Extravehicular Activity

20020086515 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: Laurel Clark, Mission Specialist
Jun. 10, 2002; In English; 56 min., 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139459; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Mission Specialist 4 Laurel Clark is seen during this preflight interview, where she gives a quick overview of the mission before answering questions about her inspiration to become an astronaut and her career path. Clark outlines her role in the mission in general, and specifically in conducting onboard science experiments. She discusses the following suite of experiments and instruments in detail: ARMS (Advanced Respiratory Monitoring System) and the European Space Agency's Biopack. Clark also mentions on-board activities and responsibilities during launch and reentry, mission training, and microgravity research. In addition, she touches on the use of crew members as research subjects including pre and postflight monitoring activities, the emphasis on crew safety and the value of international cooperation.
CASI
Prelaunch Summaries; Astronauts; Crew Procedures (Inflight); Spaceborne Experiments; Astronaut Training; Columbia (Orbiter)

20020086516 NASA Johnson Space Center, Houston, TX USA
STS–111 Crew Training Clip
May 17, 2002; In English; 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137690; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-111 Crew is in training for space flight. The crew consists of

Commander Ken Cockrell, Pilot Paul Lockhart, Mission Specialists Franklin Chang-Diaz and Philippe Perrin. The crew training begins with Post Insertion Operations with the Full Fuselage Trainer (FFT). Franklin Chang-Diaz, Philippe Perrin and Paul Lockhart are shown in training for airlock and Neutral Buoyancy Lab (NBL) activities. Bailout in Crew Compartment Training (CCT) with Expedition Five is also shown. The crew also gets experience with photography, television, and habitation equipment.
CASI
Space Transportation System; Spacecrews; Spacecraft Equipment; Space Flight Training

20020086517 NASA Johnson Space Center, Houston, TX USA
STS–111 Expedition Five Crew Training Clip
May 17, 2002; In English; 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137692; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-111 Expedition Five Crew begins with training on payload operations. Flight Engineer Peggy Whitson and Mission Specialist Sandy Magnus are shown in Shuttle Remote Manipulator System (SRMS) procedures. Flight Engineer Sergei Treschev gets suited for Neutral Neutral Buoyancy Lab (NBL) training. Virtual Reality lab training is shown with Peggy Whitson. Habitation Equipment and procedures are also presented.
CASI
Education; Space Transportation System; Payloads; Space Flight Training

20020086590 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 8 Highlights
Jun. 12, 2002; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137694; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On Flight Day 8 of STS-111 (Space Shuttle Endeavour crew includes: Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist; International Space Station (ISS) Expedition 5 crew includes Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer; ISS Expedition 4 crew includes: Yury Onufrienko, Commander; Daniel Bursch, Flight Engineer; Carl Walz, Flight Engineer), the Leonardo Multi Purpose Logistics Module (MPLM) is shown from the outside of the ISS. The MPLM, used to transport goods to the station for the Expedition 5 crew, and to return goods used by the Expedition 4 crew, is being loaded and unloaded by crewmembers. Live video from within the Destiny Laboratory Module shows Whitson and Chang-Diaz. They have just completed the second of three reboosts planned for this mission, in each of which the station will gain an additional statutory mile in altitude. Following this there is an interview conducted by ground-based reporters with some members from each of the three crews, answering various questions on their respective missions including sleeping in space and conducting experiments. Video of Earth and space tools precedes a second interview much like the first, but with the crews in their entirety. Topics discussed include the feelings of Bursch and Walz on their breaking the US record for continual days spent in space. The video ends with footage of the Southern California coastline.
CASI
International Space Station; Spacecrews; Spacecrew Transfer; Crew Procedures (Inflight); Earth Observations (From Space); Loading Operations

20020086899 NASA Johnson Space Center, Houston, TX USA
STS–111 Flight Day 7 Highlights
Jun. 11, 2002; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137693; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On Flight Day 7 of STS-111 (Space Shuttle Endeavour crew includes: Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist; Philippe Perrin, Mission Specialist; International Space Station (ISS) Expedition 5 crew includes Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer; ISS Expedition 4 crew includes: Yury Onufrienko, Commander; Daniel Bursch, Flight Engineer; Carl Walz, Flight Engineer), this video opens with answers to questions asked by the public via e-mail about the altitude of the space station, the length of its orbit, how astronauts differentiate between up and down in the microgravity environment, and whether they hear wind noise during the shuttle's reentry. In video footage shot from inside the Quest airlock, Perrin is shown exiting the station to perform an extravehicular activity (EVA) with Chang-Diaz. Chang-Diaz is shown, in helmet mounted camera footage, attaching cable protection booties to a fish-stringer device with multiple hooks, and Perrin is seen loosening bolts that hold the replacement unit accomodation in launch position atop the Mobile Base System (MBS). Perrin then mounts a camera atop the mast of the MBS. During this EVA, the astronauts installed the MBS on the Mobile Transporter (MT) to support the Canadarm 2 robotic arm. A camera in the Endeavour's payload bay provides footage of the Pacific Ocean, the Baja Peninsula, and Midwestern United States. Plumes from wildfires in Nevada, Idaho, Yellowstone National Park, Wyoming, and Montana are visible. The station continues over the Great Lakes and the Eastern Provinces of Canada.
CASI
Astronauts; International Space Station; Extravehicular Activity; Orbital Assembly

20020086900 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 2 Highlights
Apr. 09, 2002; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139351; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The second flight day of the STS-110 mission begins with Pilot Stephen Frick, and Mission Specialists Ellen Ochoa and Jerry Ross shown in the flight deck of the Space Shuttle Atlantis. Ellen Ochoa answers questions about the goals of the mission which are to install the S(0) truss segment on the International Space Station. Television cameras are attached to the robotic arm to take pictures of the truss in orbit. Commander Mike Bloomfield and Stephen Frick talks about the physical condition of the robotic arm.
CASI
International Space Station; Robot Arms; Space Transportation System; Spacecraft Maintenance

20020086901 NASA Johnson Space Center, Houston, TX USA
STS–111 Crew Interviews: Paul Lockhart, Pilot
Apr. 30, 2002; In English; 49 min., 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139461; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-111 Pilot Paul Lockhart is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. He discusses the following mission goals: the crew transfer activities (the Expedition 5 crew is replacing the Expedition 4 crew on the International Space Station (ISS)), the delivery of the payloads which includes the Mobile Remote Servicer Base System (MBS), and the planned extravehicular activities (EVAs) which include attaching the MBS to the ISS and repairing the station's robot arm. He describes in-flight procedures for launch, reentry and docking with the ISS. He ends with his thoughts on the role of international cooperation in building and maintaining ISS.
CASI
International Space Station; Astronauts; Extravehicular Activity; Payloads; Prelaunch Summaries; Spacecrew Transfer; Endeavour (Orbiter)

20020086918 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 4 Highlights
Apr. 11, 2002; In English; 38 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137580; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this fourth day of the STS-110 mission, the crewmembers of Atlantis (Michael Bloomfield, Commander; Stephen Frick, Pilot; and Mission Specialists Ellen Ochoa, Jerry Ross, Rex Walheim, Steven Smith and Lee Morin) are seen briefly performing various crew procedures. The extravehicular activity (EVA) performed by Smith and Walheim to install the S0 truss onto the International Space Station (ISS) is shown in great detail. Shots of the robot arm lifting the S0

truss out of the Atlantis payload bay are also seen. A view of Hawaii is briefly shown.
CASI
Astronauts; Extravehicular Activity; Trusses; Orbital Assembly; International Space Station; Space Station Structures

20020086952 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Interviews: Ilan Ramon, Mission Specialist
Jun. 10, 2002; In English; 51 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140924; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

STS-107 Mission Specialist Ilan Ramon is seen during this preflight interview, where he gives a quick overview of the mission before answering questions about his inspiration to become an astronaut and his career path. He outlines his role in the mission in general, and specifically in conducting on-board science experiments. He discusses the following instruments and sets of experiments in detail: CM2 (Combustion Module 2), FREESTAR (Fast Reaction Enabling Science Technology and Research), MEIDEX (Mediterranean Israeli Dust Experiment) and MGM (Mechanics of Granular Materials). Ramon also mentions on-board activities during launch and reentry, mission training and microgravity research. In addition, he touches on the dual work-shift nature of the mission, the use of crew members as research subjects including pre and postflight monitoring activities, the emphasis on crew safety during training and the value of international cooperation.
CASI
Prelaunch Summaries; Astronauts; Crew Procedures (Inflight); Spaceborne Experiments; Columbia (Orbiter); Astronaut Training; Israeli Space Program

20020086967 NASA Johnson Space Center, Houston, TX USA
STS–110 Post Flight Presentation
May 21, 2002; In English; 18 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140931; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of STS-110 (Michael Bloomfield, Commander; Stephen Frick, Pilot; Mission Specialists Ellen Ochoa, Jerry Ross, Rex Walheim, Steve Smith and Lee Morin) narrate this video as footage from the mission is seen, starting with crew suit up, and launch of Atlantis. Various on-orbit activities are shown, including the opening of the payload bay doors, the rendezvous and docking of Atlantis with the International Space Station (ISS). Crew activities shown include loading operations, extravehicular activities (EVAs), robot arm operation and crew living conditions. Specific EVAs footage includes the unloading of the S0 truss from the Atlantis payload bay and installation onto the ISS. The crew is also shown preparing the Mobile Transporter for future use. The video ends with Atlantis undocking from the ISS and landing at Kennedy Space Center.
CASI
Astronauts; Extravehicular Activity; Spacecraft Docking; Orbital Assembly; Postflight Analysis; Space Station Mobile Servicing System; Space Station Structures

20020086968 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Training Clip
Jun. 26, 2002; In English; 42 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140930; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-107 is a Multidiscipline Microgravity and Earth Science Research Mission to conduct international scientific investigations in orbit. The crew consists of Payload Specialist Ilan Ramon, Commander Rick Husband, Pilot William McCool, and Mission Specialists David Brown, Laurel Clark, Michael Anderson, and Kalpana Chawla. The crewmembers are shown getting suited in the Pre-Launch Ingress and Egress training area. The other areas of training include Payload Experiment in Fixed Base/Spacehab, Mist Experiment Combustion Module 2, Phab 4 Experiment in CCT Mid-deck and Payload Experiment Demo-Protein Crystal Growth.
CASI
Space Transportation System; Microgravity; Spaceborne Experiments; Space Shuttle Payloads; Earth Sciences

20020086969 NASA Johnson Space Center, Houston, TX USA
STS–109 Post Flight Presentation
Apr. 02, 2002; In English; 17 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140923; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-109 Post Flight presentation begins with Mission Specialists Nancy J. Currie, Michael J. Massimino, James H. Newman, and Richard M. Linnehan shown getting suited on launch day. Actual footage of the liftoff of the Space Shuttle Columbia is shown. Five spacewalks are performed to service the Hubble Space Telescope. Richard Linnehan and John Grunsfield are replacing solar arrays, connectors and power control units on the Hubble Space Telescope. Mission Specialist Nancy Currie will use Space Shuttle Columbia's robotic arm to grab the telescope, move it away from the orbiter and release it. A look at the coast of South America is also presented.
CASI
Extravehicular Activity; Hubble Space Telescope; Space Transportation System; Space Shuttles; Spacecraft Launching

20020086970 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 6 Highlights
Oct. 12, 2002; In English; 31 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139487; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On the sixth flight day of STS-112 (Atlantis crewmembers include Dave Wolf, Mission Specialists; Sandy Magnus, Mission Specialists; Pam Melroy, Pilot; Jeff Ashby, Commander; Piers Sellers, Mission Specialists; Fyodor Yurchikhin, Mission Specialists), Wolf and Sellers are seen preparing for an EVA (extravehicular activity) during which they will service the ISS (International Space Station) to which Atlantis is docked. This will be the 45th EVA in support of ISS assembly and maintenance and the 20th conducted from the ISS. While the astronauts prepare, video footage is shown of the Sahara desert, over which the ISS is passing in a track that will take it over North Africa and the Mediterranean Sea. During the EVA, the External Television Camera Group will be brought out of the station and attached to the station. As the astronauts work, their helmet mounted cameras provide excellent footage of the ISS with the Shuttle docked at the Destiny Laboratory Module. Multiple shots of the station show several modules including Destiny, Quest, Unity and Zarya, as well as Canadarm 2 and Atlantis. The video closes with a wide angle shot of the ISS.
CASI
Extravehicular Activity; International Space Station; Space Station Mobile Servicing System; Television Cameras; Orbital Assembly

20020087568 NASA Johnson Space Center, Houston, TX USA
STS–111 Post Flight Presentation
Jul. 12, 2002; In English; 17 min., 17 sec. playing time, in color, with narration
Report No.(s): NONP–NASA–VT–2002139475; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crews of STS-111 (Endeavour's crew: Ken Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Mission Specialist (MS); Philippe Perrin, MS; International Space Station's (ISS) Expedition 4 crew: Yury Onufrienko, Commander; Daniel Bursch, Flight Engineer; Carl Walz, Flight Engineer; ISS Expedition 5 crew: Valery Korzun, Commander; Peggy Whitson, Flight Engineer; Sergei Treschev, Flight Engineer) narrate this video of highlights from the mission. It includes footage from each major portion of the mission: launch preparation, launch, entering orbit, opening payload bay doors, rendezvous of Endeavour with ISS, docking of the crafts and the meeting between Endeavour and Expedition 5 crews and the Expedition 4 crew, which Expedition 5 relieved. Docked operations include: crew transfer procedures, transfer of goods, EVA (extravehicular activity) prep, EVA performed by Chang-Diaz and Perrin which included installing a grapple fixture, mounting the Mobile Base System (MBS) to the Mobile Transporter (MT), and changing a joint on the station's Canadarm 2 robotic arm. The video ends with re-entry and landing of the shuttle.
CASI
Space Transportation System Flights; Spacecraft Docking; Postflight Analysis; Extravehicular Activity; Spacecrew Transfer

20020087582 NASA Johnson Space Center, Houston, TX USA
STS–109 Mission Highlights Resource Tape, Part 4 of 4, Flight Days 8 - 12
May 31, 2002; In English; 1 hr., 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137577; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video, Part 4 of 4, shows footage of crew activities from flight days 8 through 12 of STS-109. The crew included: Scott Altman, Commander; Duane Carey, Pilot; John Grunsfeld, Payload Commander; Nancy Currie, Richard Linnehan, James Newman, Michael Massimino, Mission Speicalists. The activities from other flights days can be seen on 'STS-109 Mission Highlights Resource Tape' Part 1 of 4 (internal ID 2002139471), 'STS-109 Mission Highlights Resource Tape' Part 2 of 4 (internal ID 2002137664), and 'STS-109 Mission Highlights Resource Tape' Part 3 of 4 (internal ID 2002139476). The primary activity on flight day 8 was an EVA (extravehicular activity) by Grunsfeld and Linnehan to install a cryocooler and radiator for the NICMOS (Near Infrared Camera and Multi-Object Spectrometer) on the HST (Hubble Space Telescope). Before returning to Columbia's airlock, the astronauts, with a cloudy background, hold onto the orbiter and offer their thoughts on the significance of their mission, the HST, and spaceflight. Footage from flight day 9 includes the grappling, unbearthing, and deployment of the HST from Columbia, and the crew coordinating and videotaping Columbia's departure. Flight day 10 was a relatively inactive day, and flight day 11 includes a checkout of Columbia's aerodynamic surfaces. Columbia landed on flight day 12, which is covered by footage of the crew members speaking during reentry, and their night landing, primarily shown through the orbiter's head-up display. The video includes numerous views of the HST, as well as views of the the Galapagos Islands, Madagascar, and Southern Africa with parts of the Atlantic, Indian, and Pacific Oceans, and part of the coast of Chile. The pistol grip space tool is shown in use, and the crew answers two messages from the public, including a message to Massimino from the Fire Department of New York.
CASI
Columbia (Orbiter); Spacecrews; Hubble Space Telescope; Orbital Servicing; Spacecraft Instruments; Extravehicular Activity; Spacecraft Docking; Horizontal Spacecraft Landing

20020087583 NASA Johnson Space Center, Houston, TX USA
STS–109 Mission Highlights Resource Tape, Part 2 of 4, Flight Days 4 & 5
May 30, 2002; In English; 1 hr., 24 min., 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002137664; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video, Part 2 of 4, shows the activities of the STS-109 crew (Scott Altman, Commander; Duane Carey, Pilot; John Grunsfeld, Payload Commander; Nancy Currie, James Newman, Richard Linnehan, Michael Massimino, Mission Specialists) during flight days 4 and 5. The activities from other flights days can be seen on 'STS-109 Mission Highlights Resource Tape' Part 1 of 4 (internal ID 2002139471), 'STS-109 Mission Highlights Resource Tape' Part 3 of 4 (internal ID 2002139476), and 'STS-109 Mission Highlights Resource Tape' Part 4 of 4 (internal ID 2002137577). The primary activities during these days were EVAs (extravehicular activities) to replace two solar arrays on the HST (Hubble Space Telescope). Footage from flight day 4 records an EVA by Grunsfeld and Linnehan, including their exit from Columbia's payload bay airlock, their stowing of the old HST starboard rigid array on the rigid array carrier in Columbia's payload bay, their attachment of the new array on HST, the installation of a new starboard diode box, and the unfolding of the new array. The pistol grip space tool used to fasten the old array in its new location is shown in use. The video also includes several shots of the HST with Earth in the background. On flight day 5 Newman and Massimino conduct an EVA to change the port side array and diode box on HST. This EVA is very similar to the one on flight day 4, and is covered similarly in the video. A hand operated ratchet is shown in use. In addition to a repeat of the previous tasks, the astronauts change HST's reaction wheel assembly, and because they are ahead of schedule, install installation and lubricate an instrument door on the telescope. The Earth views include a view of Egypt and Israel, with the Nile River, Red Sea, and Mediterranean Sea.
CASI
Spacecrews; Columbia (Orbiter); Hubble Space Telescope; Extravehicular Activity; Orbital Servicing; Solar Arrays; Payload Transfer

20020087584 NASA Johnson Space Center, Houston, TX USA
STS–109 Mission Highlights Resource Tape, Part 1 of 4, Flight Days 1 - 3
May 30, 2002; In English; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139471; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video, Part 1 of 4, shows the activities of the STS-109 crew (Scott Altman, Commander; Duane Carey, Pilot; John Grunsfeld, Payload Commander; Nancy Currie, James Newman, Richard Linnehan, Michael Massimino, Mission Specialists) during flight days 1 through 3. The activities from other flight days can be seen on 'STS 109 Mission Highlights Resource Tape' Part 2 of 4 (internal ID 2002137664), 'STS 109 Mission Highlights Resource Tape' Part 3 of 4 (internal ID 2002139471), and 'STS-109 Mission Highlights Resource Tape' Part 4 of 4 (internal ID 2002137577). The main activity recorded during flight day 1 is the liftoff of Columbia. Attention is given to suit-up, boarding, and pre-flight procedures. The pre-launch crew meal has no sound. The crew members often wave to the camera before liftoff. The jettisoning of the solid rocket boosters is shown, and the External Tank is seen as it falls to Earth, moving over African dunes in the background. There are liftoff replays, including one from inside the cockpit. The opening of the payload bay doors is seen from the rear of the shuttle's cockpit. The footage from flight day 2 shows the Flight Support System for bearthing the HST (Hubble Space Telescope). Crew preparations for the bearthing are shown. Flight day 3 shows the tracking of and approach to the HST by Columbia, including orbital maneuvers, the capture of the HST, and its lowering onto the Flight Support System. Many views of the HST are shown, including one which reveals an ocean and cloud background as the HST retracts a solar array.
CASI
Columbia (Orbiter); Hubble Space Telescope; Spacecrews; Liftoff (Launching); Orbital Rendezvous; Preflight Operations; Spacecraft Docking

20020087585 NASA Johnson Space Center, Houston, TX USA
STS–109 Mission Highlights Resource Tape, Part 3 of 4, Flight Days 6 & 7
May 30, 2002; In English; 58 min., 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139476; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video, Part 3 of 4, shows the activities of the STS-109 crew (Scott Altman, Commander; Duane Carey, Pilot; John Grunsfeld, Payload Commander; Nancy Currie, James Newman, Richard Linnehan, Michael Massimino, Mission Specialists) during flight days 6 and 7. The activities from other flight days can be seen on 'STS-109 Mission Highlights Resource Tape' Part 1 of 4 (internal ID 2002139471), 'STS-109 Mission Highlights Resource Tape' Part 2 of 4 (internal ID 2002137664), and 'STS-109 Mission Highlights Resource Tape' Part 4 of 4 (internal ID 2002137577). Flight day 6 features a very complicated EVA (extravehicular activity) to service the HST (Hubble Space Telescope). Astronauts Grunsfeld and Linnehan replace the HST's power control unit, disconnecting and reconnecting 36 tiny connectors. The procedure includes the HST's first ever power down. The cleanup of spilled water from the coollant system in Grunsfeld's suit is shown. The pistol grip tool, and two other space tools are also shown. On flight day 7, Newman and Massimino conduct an EVA. They replace the HST's FOC (Faint Object Camera) with the ACS (Advanced Camera for Surveys). The video ends with crew members playing in the shuttle's cabin with a model of the HST.
CASI
Columbia (Orbiter); Spacecrews; Hubble Space Telescope; Spacecraft Instruments; Payload Transfer; Orbital Servicing; Extravehicular Activity

20020087626 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 8 Highlights
Oct. 14, 2002; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002146098; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On this eighth day of the STS-112 mission, the crew members of Atlantis (Commander Jeff Ashby; Pilot Pam Melroy; Mission Specialists Sandy Magnus, Piers Sellers, Dave Wolf, and Fyodor Yurchikhin) are seen preparing for the mission's third extravehicular activity (EVA). Magnus is shown reviewing instructions for operation of the International Space Station's (ISS) robot arm. Wolf and Sellers are seen successfully attaching cable connections to the S1 truss during the EVA. Scenes shown include: the ISS's robot arm, the Crew Equipment

Translation Aid (CETA) cart and the deployment of the central radiator panel of the S1 truss.
CASI
Astronauts; Integrated Truss Structure S1; Extravehicular Activity; Space Station Mobile Servicing System; Orbital Assembly; International Space Station

20020087627 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 7 Highlights
Oct. 13, 2002; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139486; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

On this seventh day of STS-112 mission members of the crew (Commander Jeff Ashby; Pilot Pam Melroy; Mission Specialist Sandy Magnus, Piers Sellers, Dave Wolf, and Fyodor Yurchikhin) along with the Expedition Five crew (Commander Valery Korzun; Flight Engineer Peggy Whitson, and Sergei Treschev) are seen answering questions during the mission's press interview and photo opportunity. They answered various questions regarding the mission's objectives, the onboard science experiments, the extravehicular activities (EVAs) and the effects of living in space. Shots of the test deployment of the S1 truss radiator and Canadarm rotor joint are also shown.
CASI
Astronauts; Extravehicular Activity; Integrated Truss Structure S1; Orbital Assembly; Space Station Mobile Servicing System; International Space Station

20020087628 NASA Johnson Space Center, Houston, TX USA
International Space Station Expedition 6 Crew Training Clip
2002; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002143585; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crewmembers of Expedition Six consists of Commander Ken Bowersox, and Flight Engineers Donald Pettit, and Nikolai Budarin. The main goal for expedition six is to perform scientific research and international cooperation. The various areas of training shown include hands on review of The International Space Station Mockups, Neutral Buoyancy Laboratory Extravehicular Activity (EVA) training, and International Space Station Training. A photo session of the astronauts is also presented.
CASI
International Space Station; Space Flight Training; Expeditions; Extravehicular Activity

20020087629 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 2 Highlights
Oct. 08, 2002; In English; 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139460; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

On the second flight day of STS-112 (Commander Jeff Ashby, Pilot Pam Melroy and Mission Specialists Sandy Magnus, Piers Sellers, David Wolf and Fyodor Yurchikhin), video footage is shown of the Space Shuttle Atlantis's payload bay, which contains the International Space Station's (ISS) S1 (S-One) truss section, which will be installed on the ISS by Sellers and Wolf during EVAs (extravehicular activities) following Atlantis's docking with the station. Also shown, via a camera on the shuttle's robotic arm, are the three radiators that reside on the truss structure and will provide cooling capability for the entire station. During this flight day, Atlantis passes over Southern California, Nevada, Wyoming, South Dakota, and Minnesota in a track that will eventually bring it over Newfoundland and Labrador.
CASI
Integrated Truss Structure S1; Robot Arms; Space Shuttle Payloads; Atlantis (Orbiter)

20020087649 NASA Johnson Space Center, Houston, TX USA
STS–113 Crew Training Clip
Jan. 01, 2002; In English; 34 min., 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002143591; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-113 crew consists of Commander Jim Weatherbee, Pilot Paul Lockhart, and Mission Specialists Michael Lopez-Alegria and John Herrington. The goal of the STS-113 mission is to deliver the Expedition Six crew to the International Space Station and return the Expedition Five crew to Earth. Also, the P1 Truss will be installed on the International Space Station. The STS-113 crew is shown getting suited for Pre-Launch Ingress and Egress. The Neutral Buoyancy Lab Extravehicular Activity training (NBL) (EVA), CETA Bolt Familiarization, and Photography TV instruction are also presented.
CASI
International Space Station; Space Transportation System; Trusses; Space Flight Training

20020087659 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 1 Highlights
Oct. 07, 2002; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139472; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On the first day of STS-112 the crew (Commander Jeff Ashby, Pilot Pam Melroy and Mission Specialists Sandy Magnus, Piers Sellers, David Wolf and Fyodor Yurchikhin) are shown preparing for launch at Kennedy Space Center, being transported to the Space Shuttle Atlantis at its launch pad, and being seated in the Orbiter. During the launch, the External Tank (ET) camera, mounted to the top of Atlantis's ET and aimed downward) will provide never before seen footage of the shuttle during lift-off. Following the final countdown and liftoff, the ET camera provides footage as Atlantis quickly leaves the Earth behind, at speeds over 2,800 miles per hour. Following orbital insertion, the shuttle's payload bay doors are shown opening in footage provided by a payload bay camera. Sellers and Magnus narrate their thoughts during a replay of the initial launch sequence, shortly after entering orbit. Following the tape, they are shown in the crewcabin with the rest of the crew, and they each share brief thoughts.
CASI
Endeavour (Orbiter); Spacecraft Launching; Postlaunch Reports; Spacecrews

20020087660 NASA Johnson Space Center, Houston, TX USA
STS–112 Flight Day 3 Highlights
Oct. 09, 2002; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139458; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

During the third flight day of STS-112 (Commander Jeff Ashby, Pilot Pam Melroy and Mission Specialists Sandy Magnus, Piers Sellers, David Wolf and Fyodor Yurchikhin), the Space Shuttle Atlantis begins its final approach to the International Space Station (ISS) with which it will dock. The Chinese mainland is seen, at night, at a height of 242 statute miles. In one section of video from a camera onboard the ISS, Atlantis can be seen to be almost directly below the station, at a distance of several hundred feet. The orbiter's docking system is shown, as it is slowly guided by Ashby towards the forward docking port on the ISS's Destiny Laboratory Module and its forward docking port. Above the docking port, the S0 truss structure can be seen, to which the S1 truss structure in Atlantis' payload bay will be attached during this mission. Also seen are the Unity airlock and other modules. Following the completion of docking, in which an excellent shot of the docking system in hard dock is visible, the hatches between the two crafts are opened and the members of Atlantis are greeted by the very excited members of Expedition 5, who have been aboard the ISS for several months.
CASI
International Space Station; Spacecraft Docking; Atlantis (Orbiter); Orbital Rendezvous

20020087946 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 11 Highlights
Apr. 18, 2002; In English; 20 min., 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139463; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-110 flight day eleven begins with a live television view from the cockpit of the Space Shuttle Atlantis. The crewmembers consist of Commander Michael Bloomfield, Pilot Stephen N. Frick, Mission Specialists Rex J. Walhheim, Ellen Ochoa, Lee M.E. Morin, Jerry L. Ross, and Steven L. Smith. The crewmembers answer questions about the Canadarm 2 and the mobile servicing system.
CASI
Space Shuttles; Atlantis (Orbiter); Space Flight; Canadian Space Program; Space Transportation System

20020087947 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 3 Highlights
Apr. 10, 2002; In English; 26 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140922; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-110 Flight Day 3 begins with a view from the flight deck of The Space Shuttle Atlantis. Commander Mike Bloomfield performs engine firing from Atlantis to meet with the International Space Station. The hatch between Space Shuttle Atlantis and the International Space Station opens and Expedition Four Commander Yury Onufrienko greets STS-110 Commander Michael Bloomfield and Mission Specialist Ellen Ochoa as they enter the station. Also, much live animation of the Space Shuttle Atlantis is presented, as seen from a camera aboard the I.S.S.
CASI
International Space Station; Space Transportation System; Space Shuttles; Atlantis (Orbiter); Manned Space Flight

20020088705 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 9 Highlights
Apr. 16, 2002; In English; 29 min., 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140925; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-110 ninth flight day begins with a live television view of the International Space Station's Quest Airlock. Astronauts Jerry Ross and Lee Morin are preparing for their forth spacewalk while Space Shuttle Atlantis is docked with the International Space Station. Jerry Ross and Lee Morin are breathing Oxygen inside of the Quest Airlock. Live footage of Jerry Ross at the tip of the Robotic Arm is shown. Jerry Ross and Lee Morin are entering the airlock module after the work on the S(0) Truss segment is finished.
CASI
Airlock Modules; Extravehicular Activity; Space Transportation System; Trusses

20020088706 NASA Johnson Space Center, Houston, TX USA
STS–110 Flight Day 10 Highlights
Apr. 17, 2002; In English; 28 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002140932; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-110 tenth flight day begins with a live view of the flight deck of The Space Shuttle Atlantis. Commander Michael Bloomfield, Pilot Stephen Frick, Mission Specialists Lee Morin, Jerry L. Ross, Steven Smith, Ellen Ochoa, and Rex Walheim are joined by Cosmonaut Yury Onufrienko and Flight Engineers Dan Bursch and Carl Walz. Commander Michael Bloomfield thanks everyone who participated in the STS-110 mission and who made it a success. Commander Bloomfield bids farewell to the Expedition four crew before undocking of the Space Shuttle Atlantis from the International Space Station. A live shot of Atlantis and the newly installed S0 truss is shown.
CASI
International Space Station; Trusses; Spacecraft Docking; Atlantis (Orbiter); Manned Space Flight

20020089420 NASA Johnson Space Center, Houston, TX USA
STS–111 Mission Highlights Resource Tape, Part 1 of 4, Flight Days 1 - 4
Aug. 02, 2002; In English; 1 hr., 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139357; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video, Part 1 of 4, shows the activities of the STS-111 crew (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Phillipe Perrin, Mission Specialists) during flight days 1 through 4. Also shown are the incoming Expedition 5 (Valeri Korzun, Commander; Peggy Whitson, NASA ISS Science Officer; Sergei Treschev, Flight Engineer) and outgoing Expedition 4 (Yuri Onufriyenko, Commander; Carl Walz, Daniel Bursch, Flight Engineers) crews of the ISS (International Space Station). The activities from other flight days can be seen on 'STS-111 Mission Highlights Resource Tape' Part 2 of 4 (internal ID 2002139469), 'STS-111 Mission Highlights Resource Tape' Part 3 of 4 (internal ID 2002139468), and 'STS-111 Mission Highlights Resource Tape' Part 4 of 4 (internal ID 2002139474). The primary activity of flight day 1 is the launch of Space Shuttle Endeavour. The crew is seen before the launch at a meal and suit-up, and some pre-flight procedures are shown. Perrin holds a sign with a personalized message. The astronauts communicate with Mission Control extensively after launch, and an inside view of the shuttle cabin is shown. The replays of the launch include close-ups of the nozzles at liftoff, and the fall of the solid rocket boosters and the external fuel tank. Flight day 2 shows footage of mainland Asia at night, and daytime views of the eastern United States and Lake Michigan. Flight day three shows the Endeavour orbiter approaching and docking with the ISS. After the night docking, the crews exchange greetings, and a view of the Nile river and Egypt at night is shown. On flight day 4, the MPLM (Multi-Purpose Logistics Module) Leonardo was temporarily transferred from Endeavour's payload bay to the ISS.
CASI
Endeavour (Orbiter); International Space Station; Spacecrews; Launching; Spacecraft Docking; Payload Transfer; Spacecraft Docking Modules

20020089421 NASA Johnson Space Center, Houston, TX USA
STS–111 Mission Highlights Resource Tape, Part 3 of 4, Flight Days 8 - 10
Aug. 07, 2002; In English; 1 hr., 19 min., 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139468; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

An overview of the STS-111 Endeavour mission is given through footage of each flight day. Scenes from flight days 8 through 10 show activities such as extravehicular activity (EVA) preparation, EVA activity to replace the wrist roll joint on the International Space Station's (ISS) robotic arm, logistics transfer operation, space suit check-out and loading of the Leonardo Multi-Purpose Logistics Module onto the Endeavour's cargo bay. Individual shots of Africa, Italy, Hispaniola, Mexico and the Strait of Gilbraltar are shown. For mission footage from flight days 1 to 7 and 11-14, see also, 'STS-111 Mission Highlights Resource Tape, Part 1', 'STS-111 Mission Highlights Resource Tape, Part 2' and 'STS-111 Mission Highlights Resource Tape, Part 4'.
CASI
Spacecrew Transfer; Loading Operations; Extravehicular Activity; Astronauts; Robot Arms; Orbital Assembly; Payload Transfer; Endeavour (Orbiter); International Space Station

20020089422 NASA Johnson Space Center, Houston, TX USA
STS–111 Mission Highlights Resource Tape, Part 2 of 4, Flight Days 5 - 7
Aug. 07, 2002; In English; 1 hr., 24 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139469; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video, Part 2 of 4, shows the activities of the STS-111 crew (Kenneth Cockrell, Commander; Paul Lockhart, Pilot; Franklin Chang-Diaz, Phillipe Perrin, Mission Specialists) during flight days 5 through 7. Also shown are the incoming Expedition 5 (Valeri Korzun, Commander; Peggy Whitson, NASA ISS Science Officer; Sergei Treschev, Flight Engineer) and outgoing Expedition 4 (Yuri Onufriyenko, Commander; Carl Walz, Daniel Bursch, Flight Engineers) crews of the ISS (International Space Station). The activities from other flight days can be seen on 'STS-111 Mission Highlights Resource Tape' Part 1 of 4 (internal ID 2002139357), 'STS-111 Mission Highlights Resource Tape' Part 3 of 4 (internal ID 2002139468), and 'STS-111 Mission Highlights Resource Tape' Part 4 of 4 (internal ID 2002139474). On flight day 5, the transfer and installation of a Power and Data Grapple Fixture onto the P6 Truss during an EVA (extravehicular activity) is shown. The relocation of micrometeorite debris shields is also shown. Canadarm 2 is used to move the Mobile Base System near the Mobile Transporter on the ISS Destiny Module. The capture of the Mobile Base System takes place on flight day 6, along with a crew transfer ceremony on board the ISS. The video includes a view of the South Pacific just before dawn, and the Endeavour crew answers questions from the public.
Author
Endeavour (Orbiter); International Space Station; Spacecrews; Extravehicular Activity; Orbital Assembly; Payload Transfer

20020089423 NASA Johnson Space Center, Houston, TX USA
STS–111 Mission Highlights Resource Tape, Part 4 of 4, Flight Days 11-14
Aug. 08, 2002; In English; 49 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002139474; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-111 Endeavour mission is given through footage of each flight day. Scenes from flight days 11 through 14 show activities such as preparations for hatch closure and undocking of Endeavour from the International Space Station (ISS), the actual undocking operation, prelanding

spacesuit and equipment checks and the landing at Edwards Air Force base. Numerous shots of the ISS and Endeavour are shown. For footage from flight days 1-10, see 'STS-111 Mission Highlights Resource Tape, Part 1', 'STS-111 Mission Highlights Resource Tape, Part 2', and 'STS-111 Mission Highlights Resource Tape, Part 3'.
CASI
Endeavour (Orbiter); Spacecraft Landing; Crew Procedures (Inflight); Astronauts; Space Suits; Spacecraft Reentry; Spacecraft Docking

20020090767 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 1 Highlights
Nov. 24, 2002; In English; 25 min. playing time, in color with sound
Report No.(s): NONP–NASA–VT–2002149518; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The first flight day of the STS-113 begins with a live shot of the Space Shuttle Endeavor at the Kennedy Space Center. The STS-113 crew consists of Commander Jim Wetherbee, Pilot Paul Lockhart, and Mission Specialists Michael Lopez-Alegria, and John Herrington. The STS-113 crewmembers are accompanied Expedition 6 astronauts Kenneth Bowersox, Donald Pettit and Nikolai Budarin. The purpose of this flight is to carry the P1 truss segment to the International Space Station along with the Expedition 6 flight crew. The crewmembers are shown getting suited for the space flight. Countdown and lift off of the Space Shuttle Endeavor is also shown.
CASI
Expeditions; International Space Station; Space Transportation System; Spacecraft Launching; Endeavour (Orbiter)

20020090769 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 3 Highlights
Nov. 26, 2002; In English; 32 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002149519; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the activities of the STS-113 crew (Jim Wetherbee, Commander; Paul Lockhart, Pilot; Michael Lopez-Alegria, John Herrington, Mission Specialists) during flight day 3. The major tasks of flight day 3 were rendezvous and docking with the ISS (International Space Station), the transfer of the Expedition 6 crew (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin, Flight Engineers) to the ISS, and preparations for an EVA (extravehicular activity) scheduled for the following day. The approach of Space Shuttle Endeavour to the ISS is shown in detail, including the firing of the Left Orbital Maneuvering System, and the aiming maneuvers the orbiter makes to dock with the ISS. There are centerline views of the ISS before and during the final docking maneuver. The new ISS crew is received by the Expedition 5 crew (Valeri Korzun, Commander; Peggy Whitsun, Sergei Treschev; Flight Engineers), and the transfer of EVA suits is shown. Earth views include a pan along a reddish Earth limb, and the Pacific Ocean with Endeavour's Canadarm robotic arm in the foreground.
CASI
Endeavour (Orbiter); International Space Station; Orbital Maneuvers; Orbital Rendezvous; Spacecraft Docking; Spacecrews; Spacecrew Transfer

20020090794 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 5 Highlights
Nov. 28, 2002; In English; 37 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153312; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the activities of the STS-113 crew (Jim Wetherbee, Commander; Paul Lockhart, Pilot; Michael Lopez-Alegria, John Herrington, Mission Specialists) during flight day 5. The crew is seen together with the Expedition 5 (Valeri Korzun, Commander; Peggy Whitsun, ISS Science Officer/Flight Engineer; Sergei Treschev, Flight Engineer) and Expedition 6 (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin, Flight Engineers) crews of the ISS (International Space Station) preparing for an EVA (extravehicular activity) the following day, and performing tasks on board the ISS. The changing of valves on the ISS carbon dioxide removal assembly is shown. The STS-113 crew is seen together answering numerous questions from the general public, with Lopez-Alegria answering all but one. There is also a clip of Jay Leno congratulating Wetherbee on his fiftieth birthday. Inside views of the Endeavour orbiter and the ISS modules are shown, as well as a view of the coast of Chile.
CASI
Endeavour (Orbiter); International Space Station; Spacecrews; Space Maintenance

20020090795 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 6 Highlights
Nov. 29, 2002; In English; 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153311; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the activities of the STS-113 crew (Jim Wetherbee, Commander; Paul Lockhart, Pilot; Michael Lopez-Alegria, John Herrington, Mission Specialists) during flight day 6. Also shown are the Expedition 5 (Valeri Korzun, Commander; Peggy Whitsun, ISS Science Officer/Flight Engineer; Sergei Treschev, Flight Engineer) and Expedition 6 (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin, Flight Engineers) crews of the ISS (International Space Station). The primary activity of flight day 6 is the outfitting of the P1 (Port 1) Truss Structure. The suiting up and departure of Lopez-Alegria and Herrington through the ISS Quest airlock is shown. The departure is shown through sequential still video. The ISS CETA handrail cart is shown in use, as is a pistol-grip space tool. At the end of the EVA, the astronauts are shown cleaning up outside the ISS. The video also contains a Thanksgiving message about the importance of technological advances in spaceflight, and footage of the Moon disappearing behind the Earth's limb.
CASI
International Space Station; Endeavour (Orbiter); Spacecrews; Extravehicular Activity; Orbital Assembly

20020090816 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 4 Highlights
Nov. 27, 2002; In English; 36 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002149871; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The fourth day of the STS-113 space mission begins with NASA ISS Science Officers Peggy Whitson and Don Pettit inside of the Destiny Laboratory Module. The first spacewalk of the STS-113 is presented. The purpose of this spacewalk is to make connections of the P1 and the S0 truss segments. An actual view of Robot Arm operator Peggy Whitson grasping the P1 is shown. The actual connection of the S0 with the P1 truss is presented.
CASI
Extravehicular Activity; Space Missions; Destiny Laboratory Module; International Space Station

20020090848 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 2 Highlights
Nov. 25, 2002; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002149520; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The second flight day of the STS-113 mission begins with a shot inside of the Destiny Laboratory Module. NASA ISS Science Officer Peggy Whitson is seen inside of the Destiny Laboratory where scientific research is performed. Mission Specialists John Herrington and Michael Lopez-Alegria are seen at the Mid-deck of the Space Shuttle Endeavor. Commander Jim Wetherbee and Ken Bowersox are also shown. Pilot Paul Lockhart is the EVA coordinator for this mission. Ken Bowersox, Don Pettit and Nikolai Budarin of the Space Station Expedition Six crew answer questions about the launch.
CASI
Expeditions; Space Transportation System; Destiny Laboratory Module; Endeavour (Orbiter); Spacecraft Launching

20020091593 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 7 Highlights
Nov. 30, 2002; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153315; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-113 seventh flight day begins with a view of the Russian Segment of the International Space Station from a camera at the end of the S1 truss. Live footage of Michael Lopez-Alegria and John Herrington are shown aboard the International Space Station. A change of command ceremony is presented to

welcome the Expedition Six Crew and to say farewell to the Expedition Five crew. Commander Valery Korzun, Flight Engineer Sergei Treschev, NASA ISS Science Officer Peggy Whitson, Expedition Six Commander Ken Bowersox, Flight Engineer Nikolai Budarin, NASA ISS Science Officer Don Pettit, Commander Jim Wetherbee, Pilot Paul Lockhart and Mission Specialists Michael Lopez-Alegria and John Herrington are all are shown during the ceremony.
CASI
International Space Station; Space Transportation System; Space Flight; Expeditions

20020091606 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 8 Highlights
Dec. 01, 2002; In English; 19 min., 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153314; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-113 eigth flight day begins with Michael Lopez Alegria exiting the Quest Airlock to begin working on the P1 truss structure. Michael Lopez alegria is installing spool positioning devices (SPD) on the P1 truss structure. John Herrington is also seen working outside of the International Space Station. A good view of the deployed UHF radio antenna is shown.
CASI
Extravehicular Activity; International Space Station; Space Transportation System; Space Missions

20030001014 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 11 Highlights Replay
Dec. 04, 2002; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153514; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-113 eleventh flight day begins with Flight Engineer John Herrington and ISS Science Officer Peggy Whitson answering questions from the media. Earth Views from the Space Shuttle Endeavor payload bay, as the Space Shuttle Endeavor Expedition Five Crew travel over the Baja Peninsula are also presented.
CASI
Space Transportation System; Endeavour (Orbiter); International Space Station; Space Shuttle Orbiters

20030001038 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 10 Highlights Replay
Dec. 03, 2002; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153319; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The activities of the STS-113 (Jim Wetherbee, Commander; Paul Lockhart, Pilot; Michael Lopez-Alegria, John Herrington, Mission Specialists) crew during flight day 10 are shown. Also seen are the outgoing Expedition 5 (Valeri Korzun, Commander; Peggy Whitsun, ISS Science Officer/Flight Engineer; Sergei Treschev, Flight Engineer) and incoming Expedition 6 (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin, Flight Engineers) crews of the International Space Station (ISS). A panoramic view of the undocking of the Space Shuttle Endeavor from the International Space Station is also presented.
CASI
Expeditions; International Space Station; Space Transportation System; Spacecraft Docking

20030002833 NASA Johnson Space Center, Houston, TX USA
STS–112 Post Flight Presentation
Nov. 26, 2002; In English; 18 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002160012; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-112 post flight presentation begins with a shot of the moonrise over the Earth's Limb. A photograph of the STS-112 crew is shown. The crew consists of Mission Specialists Sandy Magnus, David Wolf, Piers Sellers and Fodor Yurchikhin, Pilot Pam Melroy and Commander Jeff Ashby. The crew departs from the Operations and Control Building to the launch pad at Kennedy Space Center in Florida. Sandy Magnus is shown preparing to board the Space Shuttle Atlantis. The actual STS-112 launch with flight deck activity during rendezvous with the International Space Station is also presented.
CASI
Space Transportation System; Atlantis (Orbiter); Extravehicular Activity; International Space Station; Flyby Missions

20030004016 NASA Johnson Space Center, Houston, TX USA
STS–113 Flight Day 9 Highlights
Dec. 01, 2002; In English; 18 min., 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2002153313; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-113 (Jim Wetherbee, Commander; Paul Lockhart, Pilot; Michael Lopez-Alegria, John Herrington, Mission Specialists) crew during flight day 9. Also seen are the outgoing Expedition 5 (Valeri Korzun, Commander; Peggy Whitsun, ISS Science Officer/Flight Engineer; Sergei Treschev, Flight Engineer) and incoming Expedition 6 (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin, Flight Engineers) crews of the ISS (International Space Station). Flight day 9 is a relatively inactive day, with some off-time scheduled for crew bonding and enjoying views. Seven of the joint crew members, including Lopez-Alegria, Wetherbee, Herrington, and Whitsun, pose together and answer questions. Footage shows ISS Science Officers Whitsun and Pettit troubleshooting equipment. The video also contains a clear view of southern South America, a cloudy view of the South Pacific, and external footage of the ISS including the Canadarm robotic arm. The payload bay of the shuttle Endeavour is also shown.
CASI
Endeavour (Orbiter); International Space Station; Spacecrews; Spacecrew Transfer

20030007778 NASA Johnson Space Center, Houston, TX USA
Flight Day 2 Highlights
Jan. 17, 2003; In English; 22 min., 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003007322; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-107 second flight day begins with a shot of the Spacehab Research Double Module. Live presentations of experiments underway inside of the Spacehab Module are presented. Six experiments are shown. As part of the Space Technology and Research Student Payload, students from Australia, China, Israel, Japan, New York, and Liechtenstein are studying the effect that microgravity has on ants, spiders, silkworms, fish, bees, granular materials, and crystals. Mission Specialist Kalpana Chawla is seen working with the zeolite crystal growth experiment.
CASI
Space Transportation System; Spacecraft Modules; Microgravity; Spaceborne Experiments

20030007905 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 3 Highlights
Jan. 18, 2003; In English; 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003007321; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-107 third flight day begins with a presentation of some of the experiments inside the SPACEHAB Research Double Module aboard the Space Shuttle Columbia. STS-107 Mission Specialist Laurel Clark is shown working with the Bioreactor Experiment. The purpose of this experiment is to grow larger cells in space. She is shown performing an analysis of the concentrate of the media used to feed these cells. Mike Anderson is shown performing measurements on breathing. Payload Specialist IIan Ramon, Mission Specialist Kalpana Chawla, Commander Rick Husband, and Mission Specialist Laurel Clark talk with the media about the progress of these scientific experiments in space.
CASI
Space Shuttles; Space Transportation System; Spacecraft Modules; Spaceborne Experiments; Columbia (Orbiter)

20030010289 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 8 Highlights
Jan. 23, 2003; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009293; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists, Ilan Ramon, Payload Specialist) during flight day 8 of the Columbia orbiter's final flight. The primary activities of flight day 8 are spaceborne experiments. Some background information is given on the SOFBALL (Structure of Flame Balls at Low Lewis-Number) microgravity experiment as footage of the flame balls is shown. The video also shows the MEIDEX (Mediterranean Israeli Dust Experiment) calibrating on the Moon. The six STARS (Space Technology and Research Students) international student experiments are profiled, including experiments on carpenter bees (Liechtenstein), spiders (Australia), silkworms (China), ants (USA), crystal growth (Israel), and fish embryos (Japan). A commercial experiment on roses is also profiled. Astronaut Clark gives a tour of the SpaceHab RDM (Research Double Module), in the space shuttle's payload bay. Astronauts McCool and Ramon take turns on an exercise machine. The video includes a partly cloudy view of the Pacific Ocean.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Spacecraft Modules

20030010292 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 7 Highlights
Jan. 22, 2003; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009373; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist) during flight day 7 of the Columbia orbiter's final flight. The primary activities of flight day 7 are setting up and conducting spaceborne experiments in the SpaceHab RDM (Research Double Module) in the orbiter's payload bay. Silkworms and ants from the STARS (Space Technology and Research Students) international student experiments are shown. Footage of the Mediterranean Sea taken by the MEIDEX (Mediterranean Israeli Dust Experiment) is also shown. Canisters containing experiments attached to the SpaceHab RDM are shown in the space shuttle's payload bay. Other views include the Earth's surface, and the Earth's atmosphere, visible along its limb.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Spacecraft Modules

20030010296 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 9 Highlights
Jan. 24, 2003; In English; 18 min., 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003010428; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist) during flight day 9 of the Columbia orbiter's final flight. The primary activities of flight day 9 are spaceborne experiments. The video shows a commercial experiment on roses, a partial view of Africa from Libya to the Horn of Africa through the MEIDEX (Mediterranean Israeli Dust Experiment), and the FAST (Facility for Absorption and Surface Tension) experiment. The STARS (Space Technology and Research Students) international student experiments are shown. The preliminary results of these experiments on the effects of microgravity on silkworms, spiders, crystal growth, fish embryos, carpenter bees, and ants are discussed. The video includes a view of southern Spain and the Mediterranean Sea.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Microgravity Applications; Students

20030010370 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 5 Highlights
Jan. 20, 2003; In English; 12 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003007324; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The fifth day of the STS-107 space mission begins with a presentation of The Six Space Technology and Research Students (STARS) program experiments aboard the Space Shuttle Columbia. Students from Australia, China, Israel, Japan, Lichtenstein and The USA send scientific experiments into space. The video includes the progress of experiments with various insects including silkworms, carpenter bees, ants, fish, and spiders.
CASI
Space Missions; Space Transportation System; Columbia (Orbiter); Spaceborne Experiments; Microgravity

20030010441 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 4 Highlights
Jan. 19, 2003; In English; 23 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003007323; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This fourth flight day of the STS-107 mission begins with a view of the moon from a camera inside of the payload bay of the Space Shuttle Columbia. Presentations of the scientific experiments inside the Spacehab double module are presented. Mission Specialist Michael Anderson is shown working on the combustion module 2, Mission Specialist Kalpana Chawla is shown performing a soot test, Payload Specialist Ilan Ramon is working on the Mediterranean Israeli Dust Experiment (MEIDEX), and Commander Rick Husband is shown studying the mechanics of granular materials. A panoramic view of the pass over Saudi Arabia and the Persian Gulf are shown.
CASI
Space Transportation System; Columbia (Orbiter); Spacecraft Modules; Space Shuttle Missions

20030011461 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 12 Highlights
Jan. 27, 2003; In English; 30 min., 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003010522; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist) during flight day 12 of the Columbia orbiter's final mission. The primary activities are spaceborne experiments in the SpaceHab RDM (Research Double Module). Experiments shown in the video include SOFBALL (Structure of Flame Balls at Low Lewis-Number), an experiment to grow cancer cells in microgravity, and the STARS (Space Technology and Research Students) experiments, including bees, ants, chemical gardens, fish, and spiders. Crew Members are shown working on MIST (Water Mist Fire Suppression), a commercial experiment. Red Team crew members (Husband, Chawla, Clark, Ramon) are shown conversing through a handset with the Expedition 6 crew (Kenneth Bowersox, Commander; Donald Pettit, Nikolai Budarin; Flight Engineers) of the ISS (International Space Station).
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Spacecraft Modules

20030011462 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 10 Highlights
Jan. 25, 2003; In English; 26 min., 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003010501; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist) during flight day 10 of the Columbia orbiter's final mission. Flight day 10 includes an interview by Mission Control of astronauts Brown, McCool, and Anderson, who answer questions on the mission's spaceborne experiments, as well as biographical and other questions. Much of the video is shot and narrated by Payload Specialist Ramon, who shows the crew members at work on experiments in the SpaceHab RDM (Research Double Module), and performing other tasks. Experiments featured in the video include SOFBALL (Structure of Flame Balls at Low Lewis-Number), the STARS (Space Technology and Research Students) experiments, and experiments on cancer and osteoporosis.

Crew activities shown include making a video of Earth, and preparing for sleep. Earth views shown in the video include the Gulf of Aden, Ghana, Lake Chad, and the coast of North Carolina.
CASI
Columbia (Orbiter); Spacecrews; Intravehicular Activity; Spaceborne Experiments; Spacecraft Modules

20030011463 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 11 Highlights
Jan. 26, 2003; In English; 21 min., 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003010430; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew (Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist) during flight day 11 of the Columbia orbiter's final mission. In the video, crew members from the Blue Team (McCool, Brown, Anderson) and the Red Team (Husband, Chawla, Clark, Ramon) are shown at work on experiments in the SpaceHab RDM (Research Double Module), and performing other tasks. Much of the video is shot and narrated by Commander Husband. Mission Specialist Brown is shown operating the MEIDEX (Mediterranean Israeli Dust Experiment). Crew activities shown include making breakfast, entering sleep stations, and programming shuttle maneuvers necessary for the spaceborne experiments onboard. Earth views shown in the video include one of Egypt, Israel and Jerusalem.
CASI
Columbia (Orbiter); Spacecrews; Spacecraft Modules; Spaceborne Experiments; Intravehicular Activity

20030012582 NASA Johnson Space Center, Houston, TX USA
STS–114 Crew Interview: Stephen Robinson
Jan. 22, 2003; In English; 39 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013992; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Stephen Robinson, Mission Specialist 2 (MS2), of the STS-114 space mission is seen during a prelaunch interview. He discusses his duties as flight engineer, Extravehicular Activity 2 (EVA 2) spacewalker, and medical officer. Robinson answers questions about his interests in spaceflight and the specific goals of the mission. He identifies this mission as the International Space Station Resupply Mission because supplies and experiments are brought to the International Space Station and Expedition 6 crew of Commander Kenneth Bowersox, and Flight Engineers Donald Pettit and Nikolai Budarin are returning to Earth. Lastly, he talks about the docking of the Space Shuttle Atlantis with the International Space Station. He looks forward to this experience in space.
CASI
International Space Station; Space Transportation System; Spacecraft Maintenance; Atlantis (Orbiter)

20030012583 NASA Johnson Space Center, Houston, TX USA
STS–114 Crew Interview: Soichi Noguchi
Jan. 22, 2003; In English; 32 min., 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013988; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Soichi Noguchi, Mission Specialist 1 (MS1) representing Japan's National Space Development Agency (NASDA) is seen during a prelaunch interview. He discusses the main goals of this flight which are to take expedition 7 to the International Space Station and bring back expedition 6 to the Earth. He is also responsible for all Extravehicular (EVA) work on this mission. Expedition seven includes: Mission Specialist and Commander Yuri Malenchenko; NASA ISS Science Officer Edward Lu; and Flight Engineer Alexander Kaleri. Expedition Six includes: Commander Kenneth Bowersox; NASA ISS Science Officer Donald Petit; and Flight Engineer Nikolai Budarin. Noguchi explains the Utilization and Logistics Flight 1 (ULF1) Mission which entails the exchange of crewmembers, various supplies and experiments and the replacement of a control component on the International Space Station. This is also will be Soichi Noguchi's first spacewalk.
CASI
Extravehicular Activity; International Space Station; Space Transportation System; NASA Space Programs

20030012592 NASA Johnson Space Center, Houston, TX USA
STS–114 Crew Interview: James M. Kelly, PLT
Jan. 21, 2003; In English; 40 min., 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013989; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Pilot James M. Kelly, Lieutenant Colonel USAF, is shown during a prelaunch interview. He expresses the major goals of the mission which are to replace the Expedition Six crew of the International Space Station (ISS), install the Raffello Multi-Purpose Logistics Module, deliver the External Stowage Platform to the ISS, and replace the Control Moment Gyroscope (CMG). The major task that he has is to be the backup pilot for Commander Eileen Collins. He talks about the three new research racks brought up to the International Space Station inside the U.S. Destiny Laboratory along with the Window Observational Research Facility (WORF), Human Research Facility 2 (HRF-2), and a Minus Eighty Degree Laboratory Freezer (MELF-1). Kelly also explains how he uses the ISS' Robotic arm to lift the MPLM out of Atlantis' payload bay and attach it to the Unity node to unload hardware, supplies and maintenance items. This will be his second trip to the International Space Station.
CASI
Space Transportation System; Atlantis (Orbiter); Logistics; Destiny Laboratory Module; Research Facilities

20030012878 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 6 Highlights
Jan. 21, 2003; In English; 22 min., 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009263; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew on flight day 6 of the Columbia orbiter's final mission. The crew members include: Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark; Mission Specialists; Ilan Ramon, Payload Specialist. The primary activities of flight day 6 are spaceborne experiments, and a conversation between Israeli Prime Minister Ariel Sharon, accompanied by the Israeli Minister of Education, and Israeli astronaut Ilan Ramon. Both the Israelis and their interpreter are audible on the tape. The video also features a bioreactor used to grow cancer cells in microgravity, and footage taken by the Mediterranean Israeli Dust Experiment (MEIDEX) of sprites, lightning in the lower ionosphere. Mission Specialist Anderson is shown working on the Laminar Soot Processes (LSP-2) experiment. Pilot McCool answers two questions from the public, and a view of Panama is shown.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Israeli Space Program

20030012879 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 13 Highlights
Jan. 28, 2003; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003010584; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew on flight day 13 of the Columbia orbiter's final mission. The crew members include: Rick Husband, Commander; William McCool, Pilot; Kalpana Chawla, David Brown, Michael Anderson, Laurel Clark, Mission Specialists; Ilan Ramon, Payload Specialist. The primary activities of flight day 13 are spaceborne experiments, including troubleshooting undertaken by Mission Specialist Chawla on the Water Mist Fire Suppression (MIST) experiment. Chawla performs troubleshooting tasks relayed to her by Mission Control. She shows Mission Control the location of air and water in a transparent hose that is part of the atomizer on the exterior of the combustion module. She also changes the atomizer head. All six Space Technology and Research Students (STARS) experiments are profiled in the video. These experiments are on ants, crystal growth in a chemical garden, fish embryos, carpenter bees, spiders, and silkworms. The video also includes a view of the southeast Texas coast near Houston, and a view of Portugal, Spain, Gibraltar, Morocco, and the Sahara Desert. The video ends with an explanation of roses at Mission Control which commemorate astronauts who have died on missions.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Space Maintenance; Fire Extinguishers

20030012923 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 14 Highlights
Jan. 29, 2003; In English; 40 min., 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013991; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows the activities of the STS-107 crew on flight day 14 of the Columbia orbiter's final mission. The crew includes Commander Rick Husband, Pilot William McCool, Mission Specialists Kalpana Chawla, David Brown, Michael Anderson, and Laurel Clark, and Payload Specialist Ilan Ramon. Most of the video shows a press conference on board Columbia featuring all seven astronauts. Reporters ask the crew members questions, who reply via a handset. Most of the questions cover life in space and the mission's spaceborne experiments. Each astronaut answers multiple questions, and in response to one of the questions, each of the seven describes an 'O Wow!' moment. The remainder of the video consists of a tour of the orbiter, including the flight deck, mid-deck, and the SpaceHab Research Double Module (RDM) in the payload bay. Mission Specialist Chawla demonstrates eating at the shuttle's galley, and Commander Husband shows his toiletries. In the RDM, Mission Specialist Clark exercises on a machine for an experiment on respiration.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Manned Space Flight

20030014481 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 15 Highlights
Jan. 30, 2003; In English; 27 min., 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013986; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew on flight day 15 of the Columbia orbiter's final mission. The crew includes Commander Rick Husband, Pilot William McCool, Mission Specialists Michael Anderson, David Brown, Laurel Clark, and Kalpana Chawla, and Payload Specialist Ilan Ramon. The primary activities of flight day 15 are crew interviews, and operating the Water Mist Fire Suppression (MIST) experiment. Early in the video, astronauts McCool and Ramon respond together to a question. Much of the video is taken up by an interview of astronauts Brown, Anderson, and McCool. Two parts of the video show the MIST experiment in operation, operated the first time by astronaut Brown. Another part of the video is narrated by Mission Specialist Clark, who identifies views of Mount Vesuvius, and an atoll in the south Pacific. In this part, Payload Specialist Ramon is seen on an exercise machine, Commander Husband shows body fluid samples from the crew taken during the mission, and Clark demonstrates how the crew eats meals. The video ends with footage from earlier in the mission which shows a deployed radiator in the shuttle's payload bay that reflects an image of the Earth.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Fire Extinguishers

20030014487 NASA Johnson Space Center, Houston, TX USA
STS–107 Flight Day 1 Highlights
Jan. 16, 2003; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009262; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows the activities of the STS-107 crew on flight day 1 of the Columbia orbiter's final mission. The crew includes Commander Rick Husband, Pilot William McCool, Mission Specialists Michael Anderson, David Brown, Laurel Clark, and Kalpana Chawla, and Payload Specialist Ilan Ramon. The video begins with a view of the space shuttle on its launch pad, while an announcer gives an overview of the mission, including its spaceborne experiments. The announcer then introduces the crew members, listing their previous experience. They are seen seated at a banquet table, and during suit up. The seating of the crew in the orbiter is shown, as are other prelaunch procedures. Dialog from during the launch is audible on the tape, and the video includes views of the ascent from different angles, as well as booster separation. The video ends with a view of Columbia in orbit, showing the Research Double Module (RDM) on the inside of its payload bay.
CASI
Columbia (Orbiter); Spacecrews; Spaceborne Experiments; Liftoff (Launching)

20030016693 NASA Johnson Space Center, Houston, TX USA
STS–107 Crew Choice Television Highlights
Jan. 31, 2003; In English; 20 min., 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003016044; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-107 flight day highlights begin with a shot inside the flight deck of the Space Shuttle Columbia where Commander Rick Husband, Pilot William McCool, and Mission Specialists David Brown and Kalpana Chawla are seated. The actual liftoff of the Space Shuttle Columbia is shown with Mission Specialists Michael Anderson and Laurel Clark, and Payload Specialist Ilan Ramon seated on the middeck of the spacecraft. Mission Specialist David Brown exits his seat to take pictures of the external tank while Michael Anderson also prepares to take photographs. A beautiful shot of the orbiter flying over Egypt is presented. A view of the Spacehab Research Double Module is shown where crystals are growing in microgravity. Laurel Clark is also shown working on the Bioreactor experiment. Michael Anderson is shown performing various breathing experiments in space. This video shows the last flight of STS-107 during ascent as the crew is seated in the flight deck and middeck of the Space Shuttle Columbia.
CASI
Space Transportation System; Columbia (Orbiter); Spacecraft Modules; Microgravity; Ascent

20030016694 NASA Johnson Space Center, Houston, TX USA
STS–114 Crew Interviews Eileen Collins, CDR
Jan. 21, 2003; In English; 38 min., 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003013985; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Commander Eileen Collins of the STS-114 space mission is seen during a pre-launch interview. She answers questions about the primary goals of the mission which are to exchange the expedition six and expedition seven crews. Also, she says that a large amount of logistics will be taken up to the International Space Station. The primary payload on this mission include: 1) The Utilization and Logistics Flight-1 (ULF-1); 2) Raffaello Multi-Purpose Logistics Module (MPLM); and 3) External Stowage Platform (ESP-2) which are all explained in detail by the Commander. The Window Observational Research Facility (WORF) rack, Human Research Facility (HRF) rack, Minus Eighty Degree Laboratory Freezer (MELF) and EXPRESS rack are the Space Station equipment to be installed on the International Space Station (I.S.S.). Collins is the Intravehicular Activity (IVA) specialist for this mission who oversees the three Extravehicular Activity (EVA)'s performed by Mission Specialists Soichi Noguchi and Stephen Robinson. The three EVA's include an external camera installation, positioning devices for an ammonia system and the installation of Floating Potential Measuring Unit (FPMU). Commander Collins expresses that she wants to have a successful mission, and also wants to see the Earth from space.
CASI
Space Transportation System; Atlantis (Orbiter); Spacecrews; Space Missions; Space Station Modules; International Space Station

20030018443 NASA Johnson Space Center, Houston, TX USA
STS–112 Mission Highlights Resource Tape, Part 1 of 3
Jan. 22, 2003; In English; 59 min., 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009344; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video, Part 1 of 3, shows the activities of the STS-112 crew on flight days 1 - 3. The crew included Commander Jeff Ashby, Pilot Pam Melroy, and Mission Specialists Sandy Magnus, David Wolf, Piers Sellers, and Fyodor Yurchikhin. Flight day 1 begins with an introduction of the astronauts, seen during their pre-flight banquet, and suit-up. The ingress of some of the crew into the Space Shuttle Atlantis is shown. The launch footage includes the view from a camera mounted on the shuttle's external fuel tank, as well as replays. The separation of the shuttle's booster rockets is also shown. On flight day 2 a view of the payload bay and orbiter docking mechanism on Atlantis is shown from a camera on the shuttle's robotic arm. The footage of flight day 3 includes the docking of Atlantis and the International Space Station (ISS), and the exchange

of greetings between the two spacecrews. Views of Earth include a pass over the western USA on flight day 2, and a night view of China on flight day 3.
Author
Atlantis (Orbiter); Spacecrews; Liftoff (Launching); International Space Station; Spacecraft Docking

20030018444 NASA Johnson Space Center, Houston, TX USA
STS–113 Post Flight Presentation
Jan. 23, 2002; In English; 22 min., 24 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003018356; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-113 post-flight presentation begins with a view of Mission Specialists Michael E. Lopez-Alegria and John B. Herrington getting suited for the space mission. The STS-113 crew consists of: Commander James D. Wetherbee, Pilot Paul Lockhart, Mission Specialists Michael Lopez-Alegria and John Herrington. Cosmonauts Valery Korzun, and Sergei Treschev, and astronaut Peggy Whitson who are all members of the expedition five crew, and Commander Kenneth Bowersox, Flight Engineers Nikolai Budarin and Donald Pettit, members of Expedition Six. The main goal of this mission is to take Expedition Six up to the International Space Station and Return Expedition Five to the Earth. The second objective is to install the P(1) Truss segment. Three hours prior to launch, the crew of Expedition Six along with James Wetherbee, Paul Lockhart, Michael Lopez-Alegria and John Herrington are shown walking to an astrovan, which takes them to the launch pad. The actual liftoff is presented. Three Extravehicular Activities (EVA)'s are performed on this mission. Michael Lopez-Alegria and John Herrington are shown performing EVA 1 and EVA 2 which include making connections between the P1 and S(0) Truss segments, and installing fluid jumpers. A panoramic view of the ISS with the Earth in the background is shown. The grand ceremony of the crew exchange is presented. The astronauts performing everyday duties such as brushing teeth, washing hair, sleeping, and eating pistachio nuts are shown. The actual landing of the Space Shuttle is presented.
CASI
Space Transportation System; Space Missions; Space Shuttles; Extravehicular Activity; Spacecraft Maintenance

20030018890 NASA Johnson Space Center, Houston, TX USA
STS–112 Mission Highlights Resource Tape Part 2 of 3
Jan. 22, 2003; In English; 59 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009292; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the STS-112 Mission is presented. The fourth flight day begins with a view inside of the Destiny Laboratory of the International Space Station where Expedition Five Commander Valery Korzun is shown. The robotics workstation where Mission Specialist Sandra Mangus and Flight Engineer Peggy Whitson operate Canadarm 2 to lift the S(1) Truss segment out of the payload bay of the Space Shuttle Atlantis and maneuver it for installation onto the S(1) Truss is presented. Mission Specialist Piers Sellers is shown preparing for his six and one half hour spacewalk by performing breathing exercises. Animation of the installation of the S(1) Truss, and also the unbirthing of the S(1) truss is also presented. Mission Specialists David Wolf and Piers Sellers are shown getting suited for their spacewalks. During the spacewalk, David Wolf is removing the antenna assembly from its launched position and Piers Sellers is releasing launch restraints from the Radiator Beam Assembly. A beautiful view of the coast of Texas is captured during this spacewalk. Flight day five shows pilot Pam Melroy and Mission Specialist Dave Wolf working inside of the International Space Station's Quest Airlock. Flight day six is shown with Dave Wolf and Piers Sellers exiting their spacesuits inside of the Quest Airlock Module after a successful spacewalk. This presentation ends with views of the International Space Station's installed S(1) Truss, rotation of the radiator assembly and the radiator's coolant tubing.
CASI
Extravehicular Activity; Space Transportation System; Spacecraft Maintenance; Integrated Truss Structure S1; Robotics; NASA Space Programs

20030019201 NASA Johnson Space Center, Houston, TX USA
STS–112 Mission Highlights Resource, Part 3 of 3
Jan. 22, 2003; In English; 38 min., 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2003009346; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The STS-112 Mission begins with a view of the center radiator on the S(1) Truss. A good view of the International Space Station's (ISS) Destiny Laboratory, Soyuz Crew Return Vehicle and Quest Airlock are shown from a video camera located at the end of the S(1) Truss Segment. The ISS Canadarm 2 is shown getting in position for spacewalk three. Highlights of flight day eight begin with Pilot Pam Melroy and Mission Specialist Fyodur Yurchikhin shown inside of the Quest Airlock closing the hatch as spacewalkers David Wolf and Piers Sellers move in the outer compartment of the Airlock to begin Extravehicular Activity 3 (EVA 3). During EVA 3, Dave Wolf and Piers Sellers are installing spool positioning devices on ammonia lines located on the ISS. Robot Arm Operators Peggy Whitson and Sandy Magnus are shown reviewing procedures for operating the robot arm. A view of Piers Seller climbing back into the Quest Airlock is presented. During flight day nine, robot arm operators Pam Melroy, Jeff Ashby and Peggy Whitson are in the process of removing spacesuits worn by David Wolf and Piers Sellers. A final farewell of the nine crewmembers shown inside of the Destiny Laboratory is presented during flight day ten. The undocking of Space Shuttle Atlantis from the International Space Station is shown on flight day eleven. This presentation ends on flight day 12 with a view of head up displays and the actual landing of the Space Shuttle Atlantis.
CASI
Space Transportation System; International Space Station; Robotics; Extravehicular Activity; Atlantis (Orbiter); Integrated Truss Structure S1

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SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes satellites; space platforms; space stations; spacecraft systems and components such as thermal and environmental controls; and spacecraft control and stability characteristics. For life support systems, see 54 Man/System Technology and Life Support. For related information, see also 05 Aircraft Design, Testing and Performance, 39 Structural Mechanics, and 16 Space Transportation and Safety.

19940009155 NASA Langley Research Center, Hampton, VA, USA
Scout: The unsung hero of space
Mar 1, 1991; In English; 30 min. playing time, in color and black and white, with sound
Report No.(s): NONP–NASA–VT–93–185304; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A history of the Scout program, managed by LaRC for 30 years, is presented.
Author (revised)
Scout Launch Vehicle; Scout Project

19940009161 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 post–flight press conference
Feb 1, 1990; In English; 19 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185309; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Video footage of the post-flight press conference of STS-32 is presented. The footage is narrated by the crew, and it covers the following topics: launch, deployment of Syncom IV-5, retrieval of the Long Duration Exposure Facility, in-orbit activities, and the landing.
Author (revised)
Conferences; Space Transportation System; Space Transportation System Flights

19940009164 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
High velocity gas gun
Oct 1, 1988; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185311; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A video tape related to orbital debris research is presented. The video tape

covers the process of loading a High Velocity Gas Gun and firing it into a mounted metal plate. The process is then repeated in slow motion.
Author (revised)
Gas Guns; Hypervelocity Guns; Space Debris

19940010310 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 8
Feb 1, 1988; In English; 28 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190213; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
How various NASA satellites are used is illustrated. Satellites included are TIROS, ECHO, RELAY, HEAO, ERTS, LANDSAT, and ATS.
CASI
Satellite Communication; Satellite Imagery; Satellite Tracking

19940010754 NASA Marshall Space Flight Center, Huntsville, AL, USA
Long Duration Exposure Facility is coming home
Nov 1, 1989; In English; 2 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190454; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes how the Long Duration Exposure Facility will provide knowledge of the effects of space on various materials over a long period of time.
CASI
Long Duration Exposure Facility; Spaceborne Experiments

19940010794 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Orbiting solar operations
Jul 1, 1988; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190381; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A short video presentation about the capabilities, accomplishments, and limitations of the Orbiting Solar Operations is presented.
CASI
Solar Activity; Solar Observatories

19940010796 NASA Goddard Space Flight Center, Greenbelt, MD, USA
TDRS video clip
Jan 1, 1989; In English; 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190383; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents Tracking and Data Relay Satellite and Goddard Space Flight Center involvement.
CASI
Satellite Communication; TDR Satellites

19940010801 NASA Marshall Space Flight Center, Huntsville, AL, USA
Space Station: The link to America's future
Feb 1, 1989; In English; 5 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190451; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape documents the planned design and development of the Space Station.
CASI
NASA Space Programs; Space Station Freedom

19940010805 NASA Marshall Space Flight Center, Huntsville, AL, USA
Inertial Upper Stage
Feb 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190452; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape details the importance of the Inertial Upper Stage in projecting various satellites from the Shuttle's cargo bay.
CASI
Inertial Upper Stage; Orbit Insertion; Payload Delivery (STS)

19940010823 NASA, Washington, DC, USA
Comet Halley returns
Dec 1, 1985; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190406; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the five exploratory spacecraft, representing several countries, that will study Comet Halley: Giotto, Vega 1 and 2, Planet A, and Sakigaki.
CASI
Giotto Mission; Halley'S Comet; Vega Project

19940010963 NASA, Washington, DC, USA
First US Mars landing
Jun 1, 1976; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190467; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows the launches of Viking 1 and 2 and discusses objectives of the first mission to Mars.
CASI
Mars Landing; Space Exploration; Viking Mars Program

19940010985 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Dare to dream
Jun 1, 1989; In English; 5 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190309; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Space Station Freedom and discusses the purpose of this international project.
CASI
Mission Planning; Space Station Freedom

19940011023 NASA Langley Research Center, Hampton, VA, USA
Long Duration Exposure Facility retrieval animation
Nov 1, 1989; In English; 4 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190223; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video is a computer animation of a Long Duration Exposure Facility (LDEF) retrieval.
CASI
Long Duration Exposure Facility; Spacecraft Recovery

19940011024 NASA Langley Research Center, Hampton, VA, USA
Long Duration Exposure Facility
Jun 1, 1989; In English; 4 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190224; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A summary of the Long Duration Exposure Facility from launch through plans for the retrieval is presented.
CASI
Long Duration Exposure Facility; Mission Planning; Space Shuttle Payloads; Spacecraft Launching; Spacecraft Recovery

19940011037 NASA, Washington, DC, USA
Space Station resource reel
Jul 1, 1990; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190471; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents a series of takes and sequences with model photography of 1990 Space Station design.
CASI
Space Stations; Spacecraft Design

19940014448 NASA, Washington, DC, USA
LDEF update
Oct 1, 1990; In English; 3 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198199; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explores the research being done on the Long Duration Exposure Facility (LDEF), a satellite carrying 57 experiments designed to study

the effects of the space environment, which had been in orbit for almost 6 years, and was retrieved and brought back to Earth by the Space Shuttle Astronauts. The video shows scenes of the retrieval of LDEF, as well as scenes of ongoing research into the data returned with the satellite from experiments on external coating, contamination of optical materials by thermal control paint, the effects of cosmic rays on different materials, and the effect of the space environment on 12 million tomato seeds that have since been planted.
CASI
Earth Orbital Environments; Environmental Tests; Long Duration Exposure Facility; Space Shuttle Payloads; Spacecraft Recovery

19940014449 NASA, Washington, DC, USA
Designing Space Station
Oct 1, 1986; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198200; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of preparations for the construction of Space Station Freedom (SSF) is presented. The video includes footage of astronauts testing materials for erectable structures in space both in the Shuttle bay while in orbit and in a neutral buoyancy tank at McDonald Douglas' Underwater Test Facility. Also shown are footage of robot systems that will assist the astronauts in building SSF, a computer simulation of an Orbiting Maneuvering Vehicle, solar dynamic mirrors that will power SSF, and mockups of the living quarters of the SSF.
CASI
Orbital Assembly; Space Station Freedom; Spacecraft Design

19940014492 NASA Goddard Space Flight Center, Greenbelt, MD, USA
TDRS press release
Oct 1, 1988; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This material is released to both local and national broadcast media showing the Tracking and Data Relay Satellite (TDRS). The tape has split audio to facilitate ease of customizing for individual broadcast formats.
CASI
Functional Design Specifications; TDR Satellites

19940029053 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Cosmic Background Radiation Explorer (COBE)
Oct 1, 1989; In English; 12 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12929; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains the mission of the Cosmic Background Radiation Explorer (COBE) prior to its November 1989 launch. It also includes animated footage on the Big Bang theory.
CASI
Background Radiation; Big Bang Cosmology; Cosmic Background Explorer Satellite; Spaceborne Astronomy

19940029055 NASA, Washington, DC, USA
United States/Russia space cooperation documentary
Dec 1, 1993; In English; 24 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12937; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video documents the initiative to develop a multinational, permanent space research laboratory. Historical background on the U.S. and Soviet manned space flight program as well as joint efforts such as the Apollo-Soyuz link up is shown. The current initiative will begin with collaborative missions involving NASA's space shuttle and Russia's Mir space station, and culminate in a permanently manned space station involving the U.S., Russia, Japan, Canada, and ESA. Shown are computer simulations of the proposed space station. Commentary is provided by the NASA administrator, former astronauts, cosmonauts, and Russian and American space experts.
CASI
International Cooperation; Manned Space Flight; NASA Space Programs; Space Stations; U.S.S.R. Space Program

19940029074 NASA Lewis Research Center, Cleveland, OH, USA
Dynamic analysis for Space Station Freedom
Jan 1, 1991; In English; 13 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12954; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video utilizes computer animations to identify the structure, functions, and design of the Space Station Freedom.
CASI
Computer Animation; Dynamic Structural Analysis; Space Station Freedom

19950004137 NASA, Washington, DC, USA
Space Station quarterly, May 1992
May 1, 1992; In English; 10 min. 12 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23141; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This quarterly report discusses the First International Microgravity Laboratory, the building of space station truss structures at the Johnson Space Center, the building of the living and laboratory modules at the Marshall Space Flight Center, and the Lewis Research Center's work on power for the space station. The video includes a segment on the Japanese Experiment Module.
CASI
Space Laboratories; Space Station Power Supplies; Space Station Structures; Space Stations; Spacecraft Modules

19950004141 NASA, Washington, DC, USA
Aero–Space Plane: Flexible access to space
Aug 1, 1991; In English; 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23146; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The most recently designed X-30 (National Aerospace Plane) is described. The video feature also chronicles the development of the X-plane series, beginning with the X-1.
CASI
Aerospace Planes; National Aerospace Plane Program; X-31 Aircraft

19950010526 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Houston, I think we've got a satellite
Jan 1, 1992; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–34902; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video highlights the record breaking mission of STS-49, the maiden voyage of the Space Shuttle Endeavor. It includes the dramatic capture, repair, and reboost of the INTELSAT VI Satellite, as well as the ASEM experiment. The effectiveness of certain EVA techniques for the future construction of a space station is demonstrated.
JSC
Construction; Endeavour (Orbiter); Extravehicular Activity; Intelsat Satellites; Space Shuttles; Space Stations

19950012624 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Gemini 8, This is Houston, flight
Jan 1, 1966; 26p; In English; 25 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39135; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The historic first docking in space with the Agena is completed. Camaras record the harrowing experiences of the astronauts as Gemini VIII wildly gyrates through space following a malfunction. The spacecraft is separated from the Agena, brought under control and reentry is achieved.
JSC
Agena Rocket Vehicles; Gemini Spacecraft; Gemini 8 Flight; Malfunctions; Spacecraft Docking

19950015441 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Tethered satellite: Forces and motion
Oct 21, 1994; In English; 21 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42566; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
In this 'Lift off to Learning' series, Loren Shriver, commander of STS 46, and the other members of the mission (Claude Nicollier, Marsha Ivins, Andrew

Allen, Jeffrey Hoffman, Franklin Chiang-Diaz, and Franco Maerba) use computer graphics, and physical experiments to explain how the tethered satellite to be deployed during their mission will be raised, how it works, the influence of the Shuttle on the satellite and the satellite's influence on the Shuttle's orbit, the gravitational effects, and other effects concerning the Theoretical Physics used to plan this mission (gravity gradient force, center of mass, angular momentum, centrifugal force, and coriolis effect). This video ends with a discussion of the technology transfer and utilization of this tethered satellite concept and design.
CASI
Computer Graphics; Computerized Simulation; Gravitational Effects; Mission Planning; Payload Deployment & Retrieval System; Space Shuttle Missions; Spaceborne Experiments; Tethered Satellites; Theoretical Physics

19950016125 NASA, Washington, DC, USA
Hey! What's Space Station Freedom?
Vonehrenfried, Dutch, NASA, USA; Jan 1, 1992; In English; 28 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42907; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video, 'Hey! What's Space Station Freedom?', has been produced as a classroom tool geared toward middle school children. There are three segments to this video. Segment One is a message to teachers presented by Dr. Jeannine Duane, New Jersey, 'Teacher in Space'. Segment Two is a brief Social Studies section and features a series of Presidential Announcements by President John F. Kennedy (May 1961), President Ronald Reagan (July 1982), and President George Bush (July 1989). These historical announcements are speeches concerning the present and future objectives of the USA' space programs. In the last segment, Charlie Walker, former Space Shuttle astronaut, teaches a group of middle school children, through models, computer animation, and actual footage, what Space Station Freedom is, who is involved in its construction, how it is to be built, what each of the modules on the station is for, and how long and in what sequence this construction will occur. There is a brief animation segment where, through the use of cartoons, the children fly up to Space Station Freedom as astronauts, perform several experiments and are given a tour of the station, and fly back to Earth. Space Station Freedom will take four years to build and will have three lab modules, one from ESA and another from Japan, and one habitation module for the astronauts to live in.
CASI
Education; International Space Station; Modules; Orbital Assembly; Space Erectable Structures; Space Laboratories; Space Platforms; Space Station Freedom; Space Station Payloads; Structural Design

19950023212 Roland House, Arlington, VA, USA
Hernandez Engineering: NASA
Apr 22, 1992; In English; Sponsored by NASA, Washington; 2 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46019; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A short explanation of NASA's accomplishments and goals are discussed in this video. Space Station Freedom, lunar bases, manned Mars mission, and robotic spacecrafts to explore other worlds are briefly described.
CASI
Aerospace Engineering; NASA Space Programs; Research Projects; Technological Forecasting; Technology Assessment

19950024433 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mir 18 post flight presentation
Jul 18, 1995; In English; 29 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–59072; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The post flight presentation for the Mir 18 Mission is featured on this video, with both the American astronauts and Russian Cosmonauts present for the press conference. They included: Gibson; Precourt; Baker; Harbough; Dunbar; Strekalov; Dezhurov; and Thagard. Film footage and photographic slides of the various activities performed aboard the Mir Space Station and the spaceborne experiments accomplished during the flight mission are presented. Each of the operations are explained by the cosmonauts, with brief views of the Atlantis-Mir Earth orbital rendezvous over the Red Sea included.
CASI
Astronauts; Cosmonauts; Earth Orbital Rendezvous; Earth Orbits; International Cooperation; Mir Space Station; Russian Space Program; Space Missions; Space Shuttles

19990032576 NASA Johnson Space Center, Houston, TX USA
Delta II Mars Pathfinder
Dec. 04, 1998; In English; Videotape: 1 hour 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036756; No Copyright; Avail: CASI; V04, Videotape-VHS

Final preparations for lift off of the DELTA II Mars Pathfinder Rocket are shown. Activities include loading the liquid oxygen, completing the construction of the Rover, and placing the Rover into the Lander. After the countdown, important visual events include the launch of the Delta Rocket, burnout and separation of the three Solid Rocket Boosters, and the main engine cutoff. The cutoff of the main engine marks the beginning of the second stage engine. After the completion of the second stage, the third stage engine ignites and then cuts off. Once the third stage engine cuts off spacecraft separation occurs.
CASI
Mars (Planet); Mars Pathfinder; Mars Missions; Unmanned Spacecraft

19990032577 NASA Johnson Space Center, Houston, TX USA
Mars Climate Orbiter
Dec. 11, 1998; In English; Videotape: 1 hour 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036757; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The purpose of this mission is to study the climate history and the water distribution of Mars. Beautiful panoramic views of the shuttle on the launch pad, engine ignition, Rocket launch, and the separation and burnout of the Solid Rocket Boosters are shown. The footage also includes an animation of the mission. Detailed views of the path that the Orbiter traversed were shown. Once the Orbiter lands on the surface of Mars, it will dig a six to eight inch hole and collect samples from the planets' surface. The animation also included the prospective return of the Orbiter to Earth over the desert of Utah. The remote sensor on the Orbiter helps in finding the exact location of the Orbiter so that scientists may collect the sample and analyze it.
CASI
Mars (Planet); Mars Surface; Mars Environment; Spacecraft Reentry; Return to Earth Space Flight; Mars Sample Return Missions; Mars Surface Samples; Mars Climate Orbiter

19990032578 NASA Johnson Space Center, Houston, TX USA
Delta II Deep Space I Launch
Oct. 24, 1998; In English; Videotape: 1 hour 33 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999036758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The final preparations of the DELTA II Deep Space I Launch Mission are presented. The footage includes the loading of liquid oxygen, views of the shuttle on the launch pad, countdown, ignition of the engine, launch, burnout and separation of the three Solid Rocket Boosters, separation of the probe from the spacecraft occurring over the Indian Ocean.
CASI
Deep Space 1 Mission; Flyby Missions; NASA Space Programs; Interplanetary Spacecraft

19990117248 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Press Conference from JPL
Jul. 27, 1995; In English; Videotape: 44 min. 20 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–1999206977; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The press conference concerns the Orbiter Deflection maneuver that had taken place earlier that day. The participants in the press conference, spoke of the success of the maneuver, which was performed perfectly. The Galileo project was a cooperative effort with the German Space Agency. Two members of the

German Space Agency were introduced. There was a review of the trip to Jupiter, and the probe release. The deflection maneuver was important to getting the Probe on the correct path for the descent into the atmosphere of Jupiter. A brief video showed simulations of the probe release and the descent of the probe into the atmosphere. There was discussion about the failure of the high gain antenna to deploy, and the requirement to use the low gain antenna instead. A full scale model of the probe was shown.
CASI
Galileo Project; Galileo Spacecraft; Jupiter Atmosphere; Jupiter (Planet); Interplanetary Trajectories

20000012873 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur/GOES–J News Conference, Part 2 of 2
May 18, 1995; In English; Videotape: 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206992; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage includes a continuation of the discussions on Geostationary Satellites, the Automatic Surface Observation System (ASOS), and the Doppler Radar Network lead by Frederick Ostby, Director of the National Severe Storms Forecast Center. Live Coverage also shows the question and answer session between the panelists and the audience. This abstract describes the content of tape 2 of 2, 1 having a Report Number of NONP-NASA-VT-2000000038.
CASI
Atlas Centaur Launch Vehicle; Conferences

20000013559 NASA Kennedy Space Center, Cocoa Beach, FL USA
TRW Video News: Chandra X–ray Observatory
July 1999; In English; Videotape: 7 min. 47 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000010635; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center sponsored video release presents live footage of the Chandra X-ray Observatory prior to STS-93 as well as several short animations recreating some of its activities in space. These animations include a Space Shuttle fly-by with Chandra, two perspectives of Chandra's deployment from the Shuttle, the Chandra deployment orbit sequence, the Initial Upper Stage (IUS) first stage burn, and finally a "beauty shot", which represents another animated view of Chandra in space.
CASI
X Ray Astrophysics Facility; Computer Animation

20000014071 NASA Kennedy Space Center, Cocoa Beach, FL USA
Apollo 11 Launch
Jan. 28, 1999; In English; Videotape: 59 min., 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008131; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy Space Center video release presents the countdown and liftoff of Apollo 11, the first manned journey to the Moon which began at Pad A, Launch Complex 39, Kennedy Space Center, Florida at 9:32 a.m. EDT on July 16, 1969. The crew of Apollo 11 included Commander Neil A. Armstrong, Command Module pilot Michael Collins, and Lunar Module pilot Edwin E. Aldrin, Jr. Several different camera viewpoints of the spacecraft as well as over-head shots of the Kennedy launch control center are presented prior to liftoff. Other footage includes shots of President Lyndon B. Johnson and his wife among the Florida audience viewing liftoff. During the countdown several audio updates from Kennedy launch control are presented as to the status of pre-launch testing and system readiness. Captivating footage from liftoff to the spacecraft nearing the outer Earth atmosphere is shown as the video ends with Neil Armstrong's confirmation of engine skirt separation and launch escape tower separation from the spacecraft.
CASI
Apollo 11 Flight; Liftoff (Launching); Countdown

20000033143 NASA Johnson Space Center, Houston, TX USA
International Space Station: Expedition 2000
Jan. 01, 2000; In English; Videotape: 55 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043347; No Copyright; Avail: CASI; V03, Videotape-VHS

Live footage of the International Space Station (ISS) presents an inside look at the groundwork and assembly of the ISS. Footage includes both animation and live shots of a Space Shuttle liftoff. Phil West, Engineer; Dr. Catherine Clark, Chief Scientist ISS; and Joe Edwards, Astronaut, narrate the video. The first topic of discussion is People and Communications. Good communication is a key component in our ISS endeavor. Dr. Catherine Clark uses two soup cans attached by a string to demonstrate communication. Bill Nye the Science Guy talks briefly about science aboard the ISS. Charlie Spencer, Manager of Space Station Simulators, talks about communication aboard the ISS. The second topic of discussion is Engineering. Bonnie Dunbar, Astronaut at Johnson Space Flight Center, gives a tour of the Japanese Experiment Module (JEM). She takes us inside Node 2 and the U.S. Lab Destiny. She also shows where protein crystal growth experiments are performed. Audio terminal units are used for communication in the JEM. A demonstration of solar arrays and how they are tested is shown. Alan Bell, Project Manager MRMDF (Mobile Remote Manipulator Development Facility), describes the robot arm that is used on the ISS and how it maneuvers the Space Station. The third topic of discussion is Science and Technology. Dr. Catherine Clark, using a balloon attached to a weight, drops the apparatus to the ground to demonstrate Microgravity. The bursting of the balloon is observed. Sherri Dunnette, Imaging Technologist, describes the various cameras that are used in space. The types of still cameras used are: 1) 35 mm, 2) medium format cameras, 3) large format cameras, 4) video cameras, and 5) the DV camera. Kumar Krishen, Chief Technologist ISS, explains inframetrics, infrared vision cameras and how they perform. The Short Arm Centrifuge is shown by Dr. Millard Reske, Senior Life Scientist, to subject astronauts to forces greater than 1-g. Reske is interested in the physiological effects of the eyes and the muscular system after their exposure to forces greater than 1-g.
CASI
International Space Station; Expeditions; Assembling; Astronauts

20000057580 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Moved from Hangar M to Complex 17 at Cape Canaveral Air Station
Jul. 17, 1995; In English; Videotape: 3 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078588; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This Kennedy Space Center video presents a live footage of Delta XTE move to CX 17.
CASI
Delta Launch Vehicle; X Ray Timing Explorer; Ground Support Equipment; Space Transportation

20000057581 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Moved to Vertical at Cape Canaveral Air Station Hangar AO
Jul. 11, 1995; In English; Videotape: 3 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078589; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This Kennedy Space Center video presents a live footage of Delta XTE move to vertical at CCAS AO.
CASI
Delta Launch Vehicle; X Ray Timing Explorer; Space Transportation; Ground Support Equipment

20000057582 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta 181 News Release
Feb. 04, 1988; In English; Videotape: 5 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078600; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Delta-181 mission was a military tracking exercise with released sub-satellites. It was also engaged in research and exploration of the upper atmosphere and the Earth Limb. This videotape consists of an animated film, which reviews the rocket stages, the launch and orbital insertion. It also shows

the planned release of the sub-satellites in two groups. The plans for Earth limb observations are also shown.
CASI
Military Spacecraft; Earth Observations (From Space); Satellite Constellations; Microsatellites

20000057583 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Pre–Launch Press Conference
Jul. 23, 1992; In English; Videotape: 62 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078601; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video presents a live coverage of a pre-launch press conference on the Delta II/Geotail Mission. George Diller, NASA Public Affairs, presents the panel. The panel consists of James Womack, NASA Launch Manager, Kennedy Space Center; Mario Acuna, Project Scientist, Goddard Space Flight Center; ATSuiro Nishida, Project Manager, ISAS (Institute of Space and Astronautical Science) Tokyo; Michael Calabrese, Program Manager, NASA Headquarters; Kenneth Sizemore, Project Manager, GSFC; Tono Uesugi, Project Manager, ISAS; John Beckham, Delta Launch Manager, GSFC; and Joel Tumbiolo, Launch Weather Officer, CCAFS (Cape Canaveral Air Force Station). ATSuiro Nishida presents the objectives of the Geotail Mission which are: 1) to determine the characteristics of the Geomagnetic Tail; 2) to understand the internal instability that leads to sudden energy releases; 3) to clarify the source of plasma in the tail; and 4) to study the structure of important interfaces such as the Magnetopause. Mario Acuna gives illustrations of the Magnetosphere. James Womack discusses the countdown and status of the mission. Tono Uesugi discusses spacecraft readiness for the July 24, 1992 launch, and Joel Tumbiolo gives the weather forecast for the launch. The press conference concludes with a question and answer period. See NONP-NASA-VT-200078605 for additional questions and footage.
CASI
Geomagnetic Tail; Prelaunch Summaries; Spacecraft Launching; Delta Launch Vehicle

20000057584 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Spacecraft Removed from Transfer Cannister at Hangar AO, CCAS
Jun. 01, 1995; In English; Videotape: 7 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078617; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The X-ray Timing Explorer (XTE) is a satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, X-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. It was launched on Dec. 30, 1995. This videotape shows the spacecraft being removed from the transfer cannister. After the spacecraft is set down, the foil covering is removed by workers in clean room clothing.
CASI
X Ray Timing Explorer; Spaceborne Astronomy; Spacecraft Structures

20000057586 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II Geotail Test D5040
Jul. 24, 1992; In English; Videotape: 1 min. 48 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078621; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents live footage of the Delta II Expendable Launch Vehicle Geotail test. The Geotail Satellite was launched aboard Delta II to study the dynamics of the Earth's magnetotail over a wide range of distance. The mission lasted almost four years.
CASI
Delta Launch Vehicle; Geomagnetic Tail; Earth Magnetosphere

20000057588 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Fairing Installation at Complex 17–B CCAS
Nov. 30, 1995; In English; Videotape: 5 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078624; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Delta XTE (X-Ray Timing Explorer) fairing installation is presented. The fairing is installed to provide a smooth surface for the airflow. The primary purpose of the fairing is to reduce drag. The installation of the fairing occurred at complex 17-B CCAS (Cape Canaveral Air Station).
CASI
Fairings; X Ray Timing Explorer; Delta Launch Vehicle; Installing

20000057589 NASA Kennedy Space Center, Cocoa Beach, FL USA
GOES 9 Spacecraft at Astrotech Plus Exterior and Logo
Apr. 21, 1995; In English; Videotape: 7 min. 15 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078625; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This Kennedy Space Center video presents live footage of the GOES (Geostationary Operational Environmental Satellite) at Astrotech with views of its exterior and the Space Systems Loral logo. The GOES mission is to provide weather imagery and quantitative sounding data for weather forecasting and related services.
CASI
GOES 9; Aerospace Systems

20000057590 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas GEOS–J Arrives at KSC and Uncanning at Astrotech
Feb. 22, 1995; In English; Videotape: 13 min. 5 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078628; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the Atlas GEOS-J from a military aircraft. Also shown is the uncovering covering of these components.
CASI
Atlas Launch Vehicles; GEOS Satellites (ESA); Geosari Project; Arrivals

20000057591 NASA Kennedy Space Center, Cocoa Beach, FL USA
Arrival of SOHO Satellite at Kennedy Space Center–Atlas Launch
Aug. 01, 1995; In English; Videotape: 3 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078630; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the SOHO satellite from the aircraft.
CASI
SOHO Mission; ESA Satellites; Arrivals

20000058129 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas SOHO Booster and Centaur Erection
Sep. 29, 1995; In English; Videotape: 8 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078650; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The launch vehicle for the Solar Heliospheric Observatory (SOHO) mission is a two stage Atlas-IIAS (Atlas/Centaur). The Atlas, consists of a solid rocket booster stage powered by four Thiokol Castor IVA solid rocket boosters (SRB) and a core vehicle stage (booster and sustainer) powered by Rocketdyne MA-5A liquid propellant engines (RP-1 fuel and liquid oxygen). The multiple firing Centaur is powered by two Pratt and Whitney (RL10A-4) liquid hydrogen and liquid oxygen engines with extendible nozzles. This video shows the erection of the Atlas booster and transportation (to 36-B launching pad) and erection of the Centaur.
CASI
Atlas Centaur Launch Vehicle; Launch Vehicles; SOHO Mission; Space Shuttle Boosters; Ground Handling; Preflight Operations

20000058130 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Payload Mate to Atlas/Centaur at the SAEF 2
Aug. 18, 1995; In English; Videotape: 5 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078651; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The footage shows the Solar and Heliospheric Observatory's (SOHO)

payload mating with the Atlas Centaur launch vehicle in the Spacecraft Assembly and Encapsulation Facility (SAEF-2).
CASI
Atlas Centaur Launch Vehicle; SOHO Mission; Preflight Operations; Payloads

20000058132 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Spacecraft Solar Panel Deployment, Hangar AO at Cape Canaveral Air Station
Jun. 06, 1995; In English; Videotape: 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078586; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The footage shows technicians in the clean room checking and adjusting the deployment mechanism of the solar panel for XTE spacecraft. Other scenes show several technicians making adjustments to software for deployment of the solar panels.
CASI
Deployment; Solar Cells; Panels; Solar Collectors

20000058143 NASA Kennedy Space Center, Cocoa Beach, FL USA
XTE Payload at Hangar AO
Aug. 14, 1995; In English; Videotape: 3 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078618; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The X-ray Timing Explorer (XTE), launched on Dec. 30, 1995, is a satellite that observes the fast-moving, high-energy worlds of black holes, neutron stars, X-ray pulsars and bursts of X-rays that light up the sky and then disappear forever. This videotape shows the XTE satellite being worked on by personnel in clean room clothing. The XTE is mounted on a base, which moves the satellite from the vertical to the horizontal position, to allow for access to various parts.
Author
Clean Rooms; X Ray Timing Explorer

20000058144 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas Centaur 77 GOES–J Wet Dress Rehearsal at Cape Canaveral Air Station
May 03, 1995; In English; Videotape: 6 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078614; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A Wet Dress Rehearsal (WDR) was successfully run on Atlas/Centaur 77 launch vehicle. The WDR verifies the launch readiness of the vehicle, the launch support equipment at the pad and in the blockhouse, the countdown procedure, and the launch countdown operations of the Eastern Range. During this countdown test liquid hydrogen, liquid oxygen and RP-1 propellants are aboard the vehicle, verifying the structural integrity of the Atlas first stage and Centaur upper stage tanks.
CASI
Atlas Centaur Launch Vehicle; Prelaunch Tests; Structural Analysis; Spacecraft Structures

20000058147 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Pre–Launch Press Conference
Jul. 23, 1992; In English; Videotape: 10 min. 59 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078605; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents a continuation of the question and answer period on the Delta II/Geotail Mission. For the first part of the press conference, see NONP-NASA-VT-2000078601.
CASI
Geomagnetic Tail; Spacecraft Launching; Prelaunch Summaries; Delta Launch Vehicle

20000058148 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Wind Mating to Upper Stage at PHSF
Oct. 14, 1994; In English; Videotape: 14 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078595; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the mating of the Delta Wind to the Upper Stage rocket engine at the Payload Hazardous Servicing Facility (PHSF).
CASI
Spacecraft Components; Bonding; Upper Stage Rocket Engines

20000058149 NASA Kennedy Space Center, Cocoa Beach, FL USA
XTE Delta 2nd Stage Erection at Complex 17A, Cape Canaveral Air Station
Jul. 28, 1995; In English; Videotape: 4 min. 30 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078592; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the erection of the Delta 2nd Stage vehicle at launch pad 17A. Scenes include the lifting of the component onto the launch pad.
CASI
Construction; Aircraft Maintenance; Flight Operations; Preflight Operations

20000058150 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Lifted To Work Stand
Jun. 28, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078590; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage of the XTE (X-Ray Timing Explorer) being lifted to the work stand is presented.
CASI
X Ray Timing Explorer; Supports; Cranes

20000059213 NASA Kennedy Space Center, Cocoa Beach, FL USA
WIND Mated to Delta
Oct. 19, 1994; In English; Videotape: 6 min. 4 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078622; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video release presents footage of the mating of NASA's WIND payload to the Delta launch vehicle at Cape Canaveral Air Station's complex 17B. The video includes shots of the workcrews as well as wide angle views of the spacecraft in its launching position. WIND was launched on November 1, 1994 and is the first of two NASA spacecraft in the Global Geospace Science initiative and part of the International Solar Terrestrial Physics (ISTP) Project.
CASI
Payloads; Delta Launch Vehicle; Launch Vehicle Configurations

20000059214 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Launch with Pre–Launch Activities
Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078607; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage contains scenes from both the launch pad and Mission Directors Center from T minus 4 minutes and counting until launch. The launch has a short window of 5 minutes. The Geotail satellite is a joint effort between NASA and the International Solar Terrestrial Physics Program. It was developed by the Japanese Inst. of Space and Astronautical Science.
CASI
Geomagnetic Tail; Launching; Delta Launch Vehicle

20000059215 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Pre–Launch Press Conference
Jul. 23, 1992; In English; Videotape: 10 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078603; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This footage contains scenes from the Geotail press conference. It covers a brief question and answer period. Questions about costs associated with the space mission were discussed.
CASI
Conferences; Geomagnetic Tail; Costs

20000059216 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta II/Geotail Launch with Pre–Launch Activities
Jul. 24, 1992; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078602; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The footage contains scenes from both the launch pad and the Mission Directors Center. Pre-launch activities include fueling of both the 1st and 2nd stages of the engines and 2nd stage helium/nitrogen pressurization. The launch has a short window of 5 minutes.
CASI
Geomagnetic Tail; Launching; Refueling; Delta Launch Vehicle

20000059217 NASA Kennedy Space Center, Cocoa Beach, FL USA
Geotail Video News Release
Jul. 20, 1992; In English; Videotape: 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078599; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Geotail mission, part of the International Solar Terrestrial Physics (ISTP) program, measures global energy flow and transformation in the magnetotail to increase understanding of fundamental magnetospheric processes. The satellite was launched on July 24, 1992 onboard a Delta II rocket. This video shows with animation the solar wind, and its effect on the Earth. The narrator explains that the Geotail spacecraft was designed and built by the Institute of Space and Astronautical Science (ISAS), the Japanese Space Agency. The mission objectives are reviewed by one of the scientist in a live view. The video also shows an animation of the orbit, while the narrator explains the orbit and the reason for the small launch window.
CASI
Geomagnetic Tail; Solar Wind; Solar Terrestrial Interactions; Satellite Orbits

20000059218 NASA Kennedy Space Center, Cocoa Beach, FL USA
ATLAS–SOHO: Satellite Arrival and Uncrating, Uncrating of the Propulsion Unit and Electric Module
Aug. 01, 1995; In English; Videotape: 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078597; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The SOHO satellite, part of the International Solar-Terrestrial Physics Program (ISTP), is a solar observatory designed to study the structure, chemical composition, and dynamics of the solar interior. It will also observe the structure (density, temperature and velocity fields), dynamics and composition of the outer solar atmosphere, and the solar wind and its relation to the solar atmosphere. The spacecraft was launched on December 2, 1995. This video shows the unloading of the satellite from the transport plane at the Kennedy Space Station and the lowering to an awaiting flatbed truck. The video also shows the uncrating of the satellite, the propulsion unit and the electric module in a clean room.
CASI
Clean Rooms; SOHO Mission; Solar Observatories; Scientific Satellites; Unloading

20000059219 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Lift and Mate at Complex 17A
Aug. 16, 1995; In English; Videotape: 7 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078594; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of the lift and mate of NASA's X-ray Timing Explorer (XTE) to a McDonnell Douglas Delta II rocket at Launch Complex 17A, Cape Canaveral Air Station. The video includes shots of the workcrews as well as wide angle views of the spacecraft in its launching position. The XTE was launched into a circular orbit with an altitude of 600 km and an inclination of 23 degrees on Dec. 30, 1995.
CASI
X Ray Timing Explorer; Ground Support Equipment; Delta Launch Vehicle

20000059220 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta Near Launch Activities, Launch Complex 17B, Cape Canaveral Air Station
Feb. 17, 1996; In English; Videotape: 6 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078593; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents footage of pre-launch activities as well as the actual spacecraft launching of NASA's Near Earth Asteroid Rendezvous (NEAR) spacecraft aboard a McDonnell Douglas Delta II rocket. The spacecraft was launched from Launch Complex 17B, Cape Canaveral Air Station, 17 February 1996.
CASI
Preflight Operations; Near Earth Asteroid Rendezvous Mission; Delta Launch Vehicle; Spacecraft Launching

20000060865 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Spacecraft Arrives at CCAS Skid Strip
May 31, 1995; In English; Videotape: 6 min. 49 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078616; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the U.S Air Force Aircraft "Air Mobility Command" approaching, and landing at the Cape Canaveral Air Station Skid Strip (CCAS). The truck carrying the Delta XTE Spacecraft is also shown as it leaves the Air Mobility Command.
CASI
Delta Launch Vehicle; Arrivals

20000062361 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Mission Science Briefing
Oct. 31, 1995; In English; Videotape: 1 hr. 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081535; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Footage shows the SOHO Mission Pre-Launch Science Briefing. The moderator of the conference is Fred Brown, NASA/GSFC Public Affairs, introduces the panel members. Included are Professor Roger Bonnet, Director ESA Science Program, Dr. Wesley Huntress, Jr., NASA Associate Administrator for Space Science and Dr. Vicente Domingo, ESA SOHO Project Scientist. Also present are several members from the SOHO Team: Dr. Richard Harrison, Art Poland, and Phillip Scherrer. The discussions include understanding the phenomena of the sun, eruption of gas clouds into the atmosphere, the polishing of the mirrors for the SOHO satellite, artificial intelligence in the telescopes, and the launch and operating costs. The panel members are also seen answering questions from various NASA Centers and Paris.
CASI
SOHO Mission; ESA Satellites; Conferences

20000062728 NASA Kennedy Space Center, Cocoa Beach, FL USA
GEOS–I Satellite Applications Briefing
Apr. 12, 1994; In English; Videotape: 53 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081542; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows a panel discussion on the GEOS-I Satellite. The moderator George Diller, NASA Public Affairs, introduces the panel members. Panel members include Dr. Joe Friday, Director of the National Weather Service and Dr. Bob Sheets, from the National Hurricane Center. Discussions include infrared and microwave imagery, the GEOS-I satellite, and the gathering of weather and hurricane data.
CASI
GEOS Satellites (ESA); Conferences

20000064069 NASA Kennedy Space Center, Cocoa Beach, FL USA
Dutch Viking TROS Aktua Special
Sep. 02, 1986; In English; Videotape: 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081534; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the night vertical takeoff of the Viking Hollan hot air balloon. The crew is shown participating in survival technique training, boarding the plane to depart to Canada, and preparing for the vertical takeoff in the hot air balloon across the Atlantic Ocean. Scenes also include the making of the capsule for the balloon, some flight activities, and the landing of the balloon.
CASI
Vertical Takeoff; Balloon Flight; Vertical Flight; Climbing Flight; Vertical Landing; Crash Landing

20000064717 NASA Marshall Space Flight Center, Huntsville, AL USA
Starfire I/ Consort III Launch
May 16, 1990; In English; Videotape: 28 min. 11 sec. playing time, in color. with sound
Report No.(s): NONP–NASA–VT–2000081529; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Consort 3 is a commercial suborbital rocket that carried 12 microgravity experiments. It was launched on a Starfire rocket on May 16, 1990, from the Naval Ordnance Missile Test Station facilities at the U.S. Army's White Sands Missile Range (WSMR), NM. The videotape opens with approximately 2 minutes of a man speaking into a microphone but there is no sound. This is followed by a brief summary of the payload, and the expected trajectory, a view of the launch vehicle, the countdown and the launch. The videotape then shows a film clip from the University of Alabama, with Dr. Francis Wessling, project manager for the Consort 3 project, speaking about the mission goals in the materials sciences experimentation. The video shows footage of the payload being assembled. The next section is a discussion by Dr. Roy Hammustedt, of Pennsylvania State University, who reviews the Penn State Bio Module,and the goal of learning about the effects of gravity on physiology. This is followed by George Maybee, from McDonald Douglas, who spoke about the payload integration process while the video shows some of the construction. The last section of the videotape shows a press conference at the launch site. Ana Villamil answers questions from the press about the flight.
CASI
Launching; Microgravity; Payloads; Low Gravity Manufacturing; Gravitational Physiology; Physiological Effects

20000064899 NASA Kennedy Space Center, Cocoa Beach, FL USA
AC–67/FLTSATCOM Launch with Isolated Cam Views/ Freeze of Lightning/ Press Conference
Mar. 26, 1987; In English; Videotape: 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078604; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The FLTSATCOM system provides worldwide, high-priority UHF communications between naval aircraft, ships, submarines, and ground stations and between the Strategic Air Command and the national command authority network. This videotape shows the attempted launch of the 6th member of the satellite system on an Atlas Centaur rocket. Within a minute of launch a problem developed. The initial sign of the problem was the loss of telemetry data. The videotape shows three isolated views of the launch, and then a freeze shot of a lightning strike shortly after the launch. The tape then shows a press conference, with Mr. Wolmaster, Mr. Gibbs, and Air Force Colonel Alsbrooke. Mr. Gibbs summarizes the steps that would be taken to review the launch failure. The questions from the press mostly concern the weather conditions, and the possibility that the weather might have caused the mission failure.
CASI
Fleet Satellite Communication System; Launching; Lightning; Failure; Liftoff (Launching); Launchers

20000067665 NASA Kennedy Space Center, Cocoa Beach, FL USA
TOPEX/POSEIDON Launch from Guiana Space Center Aboard an Ariane 42P
Aug. 10, 1992; In English; Videotape: 22 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081530; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the Launch Control Center (LCC) as they prepare for launch. During preparation Charles Bigot, Chairman and C.E.O. of Arianespace, and Jean-Daniel Levi, Director of CNES spoke briefly about the join effort between National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA). The NASA administrator, Don Golding also made a brief speech via telephone before the launching. Live footage also shows the launching of the TOPEX/POSEIDON satellite.
CASI
Poseidon Satellite; TOPEX; Spacecraft Launching; Ariane Launch Vehicle

20000067668 NASA Kennedy Space Center, Cocoa Beach, FL USA
Pegasus Departs from KSC
Feb. 09, 1993; In English; Videotape: 2 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081536; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the departure of the Pegasus launch vehicle from Kennedy Space Center (KSC).
CASI
Pegasus Air-Launched Booster; Air Launching; B-52 Aircraft

20000068517 NASA Kennedy Space Center, Cocoa Beach, FL USA
Atlas–Uncrating of SOHO satellite at the SAEF 2
Aug. 05, 1995; In English; Videotape: 6 min. 58 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000081537; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the removal of the SOHO satellite from its packaging at the Spacecraft Assembly and Encapsulation Facility (SAEF) 2.
CASI
SOHO Mission; Scientific Satellites

20000068936 NASA Kennedy Space Center, Cocoa Beach, FL USA
TOPEX Press Conference (2 of 2)
Feb. 26, 1993; In English; Videotape: 21 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081532; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows the continuation of the TOPEX Press Conference. The panelists are seen answering questions from the participating audience as well as from NASA Centers. Answers address Kelvin waves, pulses of warm water, sea surface temperature, and the direction in which the project is heading. Also presented are TOPEX/POSEIDON playbacks of the topography and currents of the World Ocean. The video also shows stills of the Central Pacific Ocean from Nov. 1992 to Jan. 1993 and observations of the El Nino events.
CASI
Conferences; TOPEX; Poseidon Satellite; Oceanography; Ocean Currents; Topography; Kelvin Waves

20000070492 NASA Kennedy Space Center, Cocoa Beach, FL USA
AC–67 Press Conference
Mar. 26, 1987; In English; Videotape: 29 min., 05 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078609; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On March 26, 1987, after the launch of an Atlas/Centaur rocket with a payload of a Navy Communications Satellite, a problem developed and the rocket was lost. This videotape is a press conference held to review the incident. Mr. John Gibb, the Atlas-Centaur Program Manager at Lewis Research Center, opens the press conference with a statement that reviews the situation, and what is known about the accident. He reviews the constraints to launch and explains that to the best of his knowledge there was no violation of these constraints. He further states that a review panel will investigate the circumstances and make recommendations. The press conference is then opened up to questions. Most of the questions concern the weather conditions and the existence of lightning in the area. The Air Force representative, Colonel John Albrook, is asked if the loss of the satellite would pose any problems. He answers that there were several

satellites performing the role for which this satellite was slated, and that these were still healthy, and capable of continuing for a considerable length of time.
CASI
Lightning; Weather; Flight Hazards; Meteorological Parameters; Liftoff (Launching)

20000080526 NASA Kennedy Space Center, Cocoa Beach, FL USA
Delta XTE Solar Panel Deployment and Stowing
Jun. 13, 1995; In English; Videotape: 6 min. 17 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078591; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents live footage of the Delta XTE Solar Panel Deployment and Stowing.
CASI
Deployment; Stowage (Onboard Equipment); Delta Launch Vehicle; X Ray Timing Explorer; Solar Energy

20000118254 NASA Kennedy Space Center, Cocoa Beach, FL USA
TDRS and the TDRS System
Jul. 19, 1991; In English; Videotape: 10 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000148086; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the Tracking and Data Relay Satellite (TDRS) system is given, including a brief history, the purpose of the TDRS, and who controls the satellite. The S-band and KU-band antennae are described. Footage of the TDRS-E (the fifth TDRS) deployment and images of various spacecraft from space are shown, along with computer simulations of the TDRS's operation.
CASI
Deployment; TDR Satellites; Satellite Antennas

20010029210 NASA Johnson Space Center, Houston, TX USA
International Space Station Overview
Jun. 07, 1997; In English; Videotape: 11 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041435; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the construction of the International Space Station (ISS) is given through computerized animations of the assembly of the various modules. The importance of the experiments to take place on board the ISS are described. The experiments focus on the fields of medicine, liquids, technology, agriculture, and the effects of microgravity. An outline of which countries provided which modules is given, and details about the modules are provided.
CASI
International Space Station; Space Station Modules; Construction; Spaceborne Experiments

20010029211 NASA Johnson Space Center, Houston, TX USA
ISS Animation Resource Reel
June 2000; In English; Videotape: 22 min. 47 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001041436; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A collection of computerized animations show various International Space Station (ISS) components and stages of assembly. Various clips show the following: (1) Space Shuttle dock and fly-around views; (2) Russian Proton rocket launch; (3) Service Module Zvezda flight; (4) Russian Progress vehicle, STS-92 Discovery, and the Soyuz spacecraft dock with ISS (separately); (5) Z-1 truss and Pressurized Mating Adapter 3 installation; (6) STS-97 installation of solar arrays; (7) STS-98 Destiny Laboratory Module installation; (8) ESA, Russian, and Columbus Attached Pressurized Modules; (9) fly-around of Russian research modules, US modules, and Kibo module; (10) view of truss structure; (11) Space Station fly-around; (12) solar arrays tracking the sun; (13) ISS Remote Manipulator System (robotic arm) attach and detach; (14) interior and exterior views of Columbus Attached Pressurized Module; (15) CETA Cart on ISS truss; (16) zoom out from ISS to broad Earth shot; and (17) ISS assembly sequence.
CASI
International Space Station; Installing; Space Station Modules; Service Modules; Assemblies

20010029213 NASA Johnson Space Center, Houston, TX USA
ISS General Resource Reel
January 2001; In English; Videotape: 49 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041438; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the construction and evolution of the International Space Station (ISS) is seen through a collection of video clips. Live footage shows the following: (1) the launch of Zarya on the Russian Proton rocket; (2) spacewalks from various assembly missions, including STS-88, STS-96, STS-101, STS-92, STS-106, and STS-97; (3) Zvezda docking to ISS as seen from the camera in the docking port; (4) the launch of the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) on Soyuz and the spacecraft's docking with ISS; and (5) the US Destiny Laboratory Module, Leonardo and Rafaello Modules, Mobile Base System, Kibo Experiment Module, US Airlock, US Habitation Module, and ISS Remote Manipulator System (robotic arm) during processing. Computerized animations show the ISS as the Space Shuttle docks; the Progress Module as it docks to ISS; interior and exterior views of the Columbus Orbital Facility; and an ISS assembly sequence.
CASI
Extravehicular Activity; International Space Station; Construction; Spacecraft Docking; Space Station Modules; Orbital Assembly

20010029215 NASA Johnson Space Center, Houston, TX USA
Go for Assembly: Building the International Space Station
Sep. 18, 1997; In English; Videotape: 11 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041440; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the improvements made on the spacewalking suits and equipment used to assemble the International Space Station (ISS) while in orbit is presented. Details are given on the adjustable heaters and helmet lights. The tools used are shown, and the safety equipment, such as space life jackets and stiff tethers, are described. Astronaut training in the Neutral Buoyancy Laboratory (NBL) and shuttle simulators also are seen.
CASI
International Space Station; Astronaut Training; Safety Devices; Tetherlines

20010029216 NASA Johnson Space Center, Houston, TX USA
International Space Station Video Progress Report
Oct. 01, 2000; In English; Videotape: 7 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041441; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A narrated overview of the construction and assembly of the International Space Station (ISS) is given through a collection of clips ranging from the launch of the Russian Proton rocket containing the Zvezda module to computerized animations showing the installation of the Zarya and Unity connecting modules. Footage from some of the space missions that assembled the ISS in space (i.e., STS-106 and STS-92) are seen. The Z1 truss (including the deployment of the solar arrays), Destiny Laboratory Module, Leonardo Module, the Japanese Kibo Experiment Module, Columbus Pressurized Module, and the ISS's robotic arm are seen. Animations show the assembly and evolution of the ISS as new components are added.
CASI
International Space Station; Zarya Control Module; Installing; Construction; Assembling

20010029217 NASA Johnson Space Center, Houston, TX USA
International Space Station General Resource Reel
Nov. 01, 1998; In English; Videotape: 78 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041442; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The construction and evolution of the International Space Station (ISS) is seen through various clips. Live footage shows the following: (1) the Zarya Module under construction and during launch preparations; (2) the Unity Module under construction, during launch preparations, and being lowered into the payload canister; (3) STS-88 Mission Specialists Jerry Ross and Jim Newman during training for their spacewalks, including activities in the Neutral

Buoyancy Laboratory (NBL); (4) Zarya and Unity docking to the Service Module; (5) the Expedition 1 crew (William Shepherd, Yuri Gidzenko, and Sergei Krikalev) during emergency escape training in the Black Sea and during water survival training at Johnson Space Center; (6) the X-38 Crew Return Vehicle Drop Test; and (7) the US Destiny Laboratory Module, Pressurized Mating Adapter (PMA), Service Module, Italian Multi-Purpose Logistics Module, US Airlock, and US Habitation Module under construction. Computerized animations show the following: (1) an ISS fly-around; (2) the STS-88 Space Shuttle as it docks with Zarya and attaches Zarya to the Unity Module; (3) the Space Shuttle as it docks with ISS and installs the Z1 truss segment and PMA; (4) the Soyuz spacecraft as it docks with ISS; (5) interior and exterior views of the Columbus Attached Pressurized Module; and (6) a Transhab animation showing the interior and exterior and marking the components.
CASI
International Space Station; Construction; Spacecraft Docking; Orbital Assembly; Space Station Modules

20010033318 NASA Kennedy Space Center, Cocoa Beach, FL USA
Expedition 1 Crew News Conference
Aug. 02, 2000; In English; Videotape: 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047881; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The crewmembers of Expedition 1, William Shepherd, Yuri Gidzenko, and Sergei Krikalev, are seen during this prelaunch press conference where they describe their preparations and expectations for living on the International Space Station (ISS). They then answer questions from the press.
CASI
International Space Station; Spacecrews

20010035851 NASA Kennedy Space Center, Cocoa Beach, FL USA
Zvezda Launch Coverage
Jul. 12, 2000; In English; Videotape: 45 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048900; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Footage shows the Proton Rocket (containing the Zvezda module) ready for launch at the Baikonur Cosmodrome in Kazakhstan, Russia. The interior and exterior of Zvezda are seen during construction. Computerized simulations show the solar arrays deploying on Zvezda in space, the maneuvers of the module as it approaches and connects with the International Space Station (ISS), the installation of the Z1 truss on the ISS and its solar arrays deploying, and the installations of the Destiny Laboratory, Remote Manipulator System, and Kibo Experiment Module. Live footage then shows the successful launch of the Proton Rocket.
CASI
International Space Station; Computerized Simulation; Spacecraft Launching; Spacecraft Docking

20010035852 NASA Kennedy Space Center, Cocoa Beach, FL USA
ISS Expedition 1 Pre–Launch Press Conference
Oct. 19, 2000; In English; Videotape: 42 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001048899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Expedition 1 crewmembers William Shepherd, Yuri Gidzenko, and Sergei Krikalev are introduced in this prelaunch press conference. Each crewmember gives a brief statement about his expectations for the upcoming mission and they answer questions from the press.
CASI
Prelaunch Summaries; Crew Procedures (Inflight); International Space Station; Spacecrews

20010036657 NASA Kennedy Space Center, Cocoa Beach, FL USA
ISS Service Module Pre–Launch
Jul. 07, 2000; In English; Videotape: 61 min. 27 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001052178; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Various shots show Discovery at the launch pad during the final 30-minute countdown. The prelaunch conditions are described and information is given on the upcoming launch and the orbiter's docking with the International Space Station (ISS). A brief collage of rollout and launch footage of STS-92 Endeavour commemorates the 100th Space Shuttle mission and the 100th anniversary of the Philadelphia Orchestra (also seen). The music of '2001: A Space Odyssey) is played by the orchestra.
CASI
Countdown; Spacecraft Launching; Spacecraft Docking; Discovery (Orbiter)

20010038856 NASA Johnson Space Center, Houston, TX USA
Zarya Resource Reel
Dec. 08, 1998; In English; Videotape: 40 min. 45 sec. playing time, in color, with sound (no narration)
Report No.(s): NONP–NASA–VT–2001041443; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

An overview of the Zarya Module (part of the International Space Station) is given through various clips of its construction, launch, and installation. Computerized animations show the deployment of Zarya's solar panels, Zarya's motor firing to a higher orbit, and the installation of Zarya to the Unity Module using the STS-88 Endeavour's robotic arm. Live footage shows the following: (1) Zarya and the Proton Rocket under construction at the Khrunichev State Research and Production Center in Moscow, Russia; (2) Zarya launch preparations (test deployment of solar arrays) at the Baikonur Cosmodrome in Kazakstan, Russia; (3) prelaunch activities (inspection, Proton Rocket rollout to launch pad); (4) the launch of Zarya on the Proton Rocket at the Baikonur Cosmodrome; and (5) Endeavour's capture of Zarya and its berthing to Unity.
CASI
Construction; Spacecraft Launching; Zarya Control Module; Solar Arrays

20010115334 NASA Johnson Space Center, Houston, TX USA
Skylab: Space Station I
Jan. 24, 1996; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181401; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows a number of astronauts describing the importance of man's continued space exploration. Footage shows the interior of Skylab as the crew performs experiments (solar effects, Earth observation), monitors their health, and going about their day-to-day lives.
CASI
Astronauts; Health; Space Exploration; Skylab Program

20010116514 NASA Johnson Space Center, Houston, TX USA
Apollo Presentation
Jan. 01, 2001; In English; Videotape: 7 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001174288; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of scenes from the Apollo 11 mission, from the speech President Kennedy gave declaring America's intention to go to the Moon through the Lunar Module liftoff from the Moon's surface, including footage from the Apollo 11 spacecraft launch, astronaut activities on the lunar surface, the placing of the American flag on the surface on the Moon, and an astronaut on the Lunar Rover.
CASI
Astronauts; Lunar Surface; Moon; Apollo 11 Flight

20010116515 NASA Johnson Space Center, Houston, TX USA
Legacy of Skylab
May 11, 1989; In English; Videotape: 9 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001174286; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of footage from the Skylab missions. The three three-man crews are seen as they perform experiments (solar effects, Earth observations), exercise, and play in zero gravity.
CASI
Skylab Program; Spacecrews

20010117031 NASA Johnson Space Center, Houston, TX USA
Spaceship Skylab: Wings of Discovery
Jan. 01, 2001; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001181398; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows footage from the missions on the Skylab space station. The resident astronauts are seen as they perform spacewalks and various scientific experiments, including solar studies, Earth observations, metal alloy creation, and the effects of microgravity on the human body. The importance of these experiments is described.
CASI
Skylab Program; Solar Activity Effects; Spaceborne Experiments; Gravitational Effects; Earth Observations (From Space)

19
SPACECRAFT INSTRUMENTATION AND ASTRIONICS

Includes the design, manufacture, or use of devices for the purpose of measuring, detecting, controlling, computing, recording, or processing data related to the operation of space vehicles or platforms. For related information, see also 06 Aircraft Instrumentation and Avionics; For spaceborne instruments not integral to the vehicle itself see 35 Instrumentation and Photography; For spaceborne telescopes and other astronomical instruments see 89 Astronomy, Instrumentation and Photography; For spaceborne telescopes and other astronomical instruments see 89 Astronomy.

19940014483 NASA Marshall Space Flight Center, Huntsville, AL, USA
ASTRO–1 to explore invisible universe
Nov 1, 1989; In English; 3 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198207; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the ASTRO 1 observatory and its ten day mission aboard SpaceLab on NASA's Space Shuttle, which Marshall Space Flight Center (MSFC) and Goddard Space Flight Center (GSFC) astronomers will use to study distant stars, supernovae, and black holes. The observatory contains ultraviolet and x ray telescopes that will capture images earth-bound observatories can't, due to interference from the earth's atmosphere. The video contains footage of the instrument being loaded on the shuttle, animations of anticipated images to be captured, and scenes of the SpaceLab Control Center at MSFC.
CASI
Astro Missions (STS); Ground Stations; Loading Operations; Spaceborne Astronomy; Spaceborne Telescopes

19950004105 NASA Lewis Research Center, Cleveland, OH, USA
SAMS (space acceleration measurement system)
Feb 1, 1994; In English; 7 min. 30 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–93–23163; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The SAMS unit flew on STS-62 to monitor onboard accelerations that could disrupt shuttle experiments. This highly sensitive instrument can measure, condition, and record low-gravity accelerations at as many as three experiment sites simultaneously.
LeRC
Acceleration (Physics); Accelerometers; Microgravity; Onboard Equipment; Space Shuttles; Spacecraft Instruments

20010018497 NASA Kennedy Space Center, Cocoa Beach, FL USA
National Anthem
Oct. 08, 1991; In English; Videotape: 2 min. 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023118; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A montage of video clips over the years, footage shows the spacecrews, launch, and landing for different orbiters and missions. Clips include the Endeavour and Atlantis Orbiters and are shown to the music of the American National Anthem.
CASI
Spacecraft Launching; Spacecraft Landing; Spacecrews

20
SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines; and spacecraft auxiliary power sources. For related information, see also 07 Aircraft Propulsion and Power; 28 Propellants and Fuels; 15 Launch Vehicles and Launch Operations; and 44 Energy Production and Conversion.

19940009144 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
SSME testing at Stennis Space Center
Mar 1, 1989; In English; 9 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185327; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Different views of Space Shuttle Main Engine test firings on all three test stands including closeup of engine, day, and night firings are presented.
Author (revised)
Space Shuttle Main Engine; Test Firing

19940009152 NASA Lewis Research Center, Cleveland, OH, USA
Low thrust space propulsion
Jul 1, 1987; In English; 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185302; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of low rocket engine propulsion concepts for space missions is presented. Chemical and electrical rocket engines are shown. Animation illustrates propulsion applications.
Author (revised)
Chemical Propulsion; Electric Propulsion; Engine Design; Low Thrust Propulsion; Rocket Engines; Spacecraft Propulsion

19940010756 NASA Marshall Space Flight Center, Huntsville, AL, USA
Advanced Solid Rocket Motor
Mar 1, 1989; In English; 2 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190456; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape describes the redesign and construction of the Advanced Solid Rocket Motor.
CASI
Advanced Solid Rocket Motor (STS); Solid Propellant Rocket Engines

19940010878 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 10
Mar 1, 1988; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190216; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Electric propulsion engine research from the 1960's is looked at.
CASI
Electric Propulsion; Engines

19940011030 NASA Lewis Research Center, Cleveland, OH, USA
Futurepath 1
Apr 1, 1988; In English; 27 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190228; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video looks at the photovoltaic and solar dynamic power systems being developed for Freedom and the Advanced Turboprop Program.
CASI
Photovoltaic Conversion; Solar Dynamic Power Systems; Space Station Power Supplies; Turboprop Aircraft

19940027312 NASA Lewis Research Center, Cleveland, OH, USA
Solar connection
Jan 1, 1992; In English; 14 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the Work package 4, an electrical power system being developed by NASA Lewis Research Center, for use on the Space Station Freedom. It shows footage and explains steps in building and testing of actual

flight hardware for Space Station Freedom. Details are given of the threat that plasma poses on cells.
CASI
Space Station Freedom; Space Station Power Supplies

19940029051 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
ASRM testing at Stennis Space Center (proposed)
Jan 1, 1993; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12923; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This summary of the Advanced Solid Rocket Motor (ASRM) program at Stennis Space Center has a specific focus on the environmental impact.
CASI
Advanced Solid Rocket Motor (STS); Environment Effects; Environment Protection; Rocket Test Facilities; Test Firing

19940029076 NASA Lewis Research Center, Cleveland, OH, USA
One fantastic ride
Jan 1, 1991; In English; 14 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of work being done by the Space Propulsion Technology Division at LeRC. This division conducts research on chemical, nuclear-thermal, and solar propulsion systems and propellants. Two ongoing projects highlighted are a low-thrust rocket for moving around in Earth orbit and large unmanned cargo rockets, both for use with the Space Station.
CASI
Aerospace Engineering; Chemical Propulsion; Nuclear Propulsion; Propellants; Propulsion System Configurations; Propulsion System Performance; Solar Propulsion; Spacecraft Propulsion

19950004114 NASA Lewis Research Center, Cleveland, OH, USA
Low thrust propulsion no. CV–110
May 1, 1990; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23169; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents an overview of low thrust rocket engine propulsion concepts for space missions. Chemical and electrical rocket engines are shown. Animation illustrates various propulsion applications.
LeRC
Low Thrust Propulsion; Rocket Engines; Spacecraft Propulsion

20000058151 NASA Kennedy Space Center, Cocoa Beach, FL USA
XTE Solid Motor Installation at Pad 17–A, Cape Canaveral Air Station
Jul. 25, 1995; In English; Videotape: 16 min. 48 sec. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000078587; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This NASA Kennedy Space Center video presents live footage of the installation of the XTE (X-Ray Timing Explorer) Solid Rocket Motor at Launch Pad 17-A. The installation takes place at Cape Canaveral Air Station, Florida.
CASI
Installing; X Ray Timing Explorer; Launching Pads; Solid Propellant Rocket Engines

20000118239 NASA Kennedy Space Center, Cocoa Beach, FL USA
OV–105 Endeavour Main Engine Press Showing at VAB
Oct. 31, 1990; In English; Videotape: 4 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000152211; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows press members inspecting Endeavour's main engine before installation as a Vehicle Assembly Building (VAB) official answers questions.
CASI
Endeavour (Orbiter); Prelaunch Summaries; Engines

20010019014 NASA Kennedy Space Center, Cocoa Beach, FL USA
SOHO Solid Rocket Booster Installation
Nov. 04, 1995; In English; Videotape: 8 min. 42 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001023116; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage shows the arrival (via truck) and installation of the solid rocket boosters onto the SOHO spacecraft.
CASI
Installing; Booster Rocket Engines

24
COMPOSITE MATERIALS

Includes physical, chemical, and mechanical properties of laminates and other composite materials.

19940010872 NASA, Washington, DC, USA
Better airplane wings
Nov 1, 1989; In English; 3 min. 23 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190243; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The videotape discusses the new composites that will be used to create lighter yet stronger aircraft wings.
CASI
Aircraft Design; Composite Materials; Composite Structures; NASA Programs; Wings

19940029244 NASA Lewis Research Center, Cleveland, OH, USA
National aerospace plane
Jul 1, 1990; In English; 5 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13533; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video concentrates on materials being developed and tested at LeRC for possible use in NASP.
CASI
Aerospace Planes; Aircraft Construction Materials; National Aerospace Plane Program; Spacecraft Construction Materials

25
INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY

Includes the analysis, synthesis, and use inorganic and organic compounds; combustion theory; electrochemistry; and photochemistry. For related information see also 34 Fluid Dynamics and Thermodynamics, For astrochemistry see category 90 Astrophysics.

19940027377 NASA Lewis Research Center, Cleveland, OH, USA
Solid surface
Dec 1, 1992; In English; 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9946; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes the development of the Solid Surface Combustion Experiment (SSCE) by researchers at NASA LeRC. The experiment studies fire spreading over a small solid fuel sample subjected to microgravity conditions in Earth orbit. Buoyant convection, which determines the heat transfer in fires on Earth, disappears in microgravity; hence, this experiment will help researchers understand how fires act on Earth.
CASI
Combustion Physics; Fires; Flame Propagation; Heat Transfer; Microgravity; Solid Surfaces

19950020784 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Chemical engineering: Measurements for a competitive age
Jan 1, 1986; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49098; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The NIST (National Institute of Standards and Technology) activities

supporting chemical research, environmental research, combustion and fuel research, and related industries are described in this video. Highlights include private sector involvement in the research and associated and guest scientist programs, the calibration of customers' instruments, and the direct funding for the NIST research projects by outside industries.
CASI
Chemical Engineering; Combustion Chemistry; Combustion Physics; Environmental Chemistry; Research Projects; Technology Assessment; Units of Measurement

26
METALS AND METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals and metallic materials; and metallurgy.

19940009143 NASA Marshall Space Flight Center, Huntsville, AL, USA
Mid–deck experiments, STS–26
Sep 1, 1988; In English; 3 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185326; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Phase partitioning, ISO electric focusing, automated directional solidification furnace, mesoscale experiment, and others are explained.
Author (revised)
Space Shuttle Payloads; Spaceborne Experiments

27
NONMETALLIC MATERIALS

Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials. For composite materials see 24 Composite Materials.

19940010840 NASA, Washington, DC, USA
Restoring Miss Liberty
Apr 1, 1985; In English; 4 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190403; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows how a NASA inorganic coating for metal was used on the Statue of Liberty during it recent refurbishment.
CASI
Inorganic Coatings; Metal Coatings; Protective Coatings; Restoration

29
SPACE PROCESSING

Includes space-based development of materials, compounds, and processes for research or commercial application. Also includes the development of materials and compounds in simulated reduced–gravity environments. For legal aspects of space commercialization see 84 Law, Political Science and Space Policy.

19940010807 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 SSIP briefing
Jan 1, 1988; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190354; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Lloyd Bruce, student experimenter, explains his Titanium Grain Formation Experiment. Dr. Charles Scaife demonstrates Richard Cavoli's Crystal Membrane Experiment.
CASI
Crystal Structure; Grain Boundaries; Space Shuttle Missions; Spaceborne Experiments; Titanium

19940010922 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 protein growth (PCG) experiment
Jun 1, 1989; In English; 2 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190330; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Nelson and Lounge are shown working on the Protein Crystal Growth experiment aboard the Space Shuttle.
CASI
Protein Crystal Growth; Space Processing; Spaceborne Experiments

19940027378 NASA Lewis Research Center, Cleveland, OH, USA
Defying gravity
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9947; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape examines microgravity research that is ongoing at LeRC. The video details the development of the Multiple Axis Space Test and its use in training the Mercury 7 astronauts. The LeRC drop tower is discussed, and a comparison is made between research being done at LeRC and rides anyone can experience at the nearby Cedar Point Amusement Park.
CASI
Astronauts; Education; Gravitation; Microgravity

19950004106 NASA Lewis Research Center, Cleveland, OH, USA
In–situ monitoring of crystal growth using MEPHISTO
Feb 1, 1994; In English; 8 min. 30 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23164; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This experiment flew on STS-62 and is the continuation of a collaborative US-French study of the process of crystal formation. Knowledge from this experiment will support the development of techniques to grow higher quality semiconductor crystals on Earth.
LeRC
Crystal Growth; In Situ Measurement; Semiconductors (Materials); Space Shuttle Payloads; Spaceborne Experiments

19950004113 NASA Lewis Research Center, Cleveland, OH, USA
TES (Thermal Energy Storage) video news release
Feb 1, 1994; In English; 3 min. 30 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23161; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
TES is an in-space technology experiment that flew on STS-62. Its intent is to investigate the behavior of two different thermal energy storage materials as they undergo repeated melting and freezing in the microgravity environment.
LeRC
Heat Storage; Spaceborne Experiments

19950004151 NASA Lewis Research Center, Cleveland, OH, USA
IDGE (Isothermal Dendritic Growth Experiment)
Feb 1, 1994; In English; 10 min. 55 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23166; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Isothermal Dendritic Growth Experiment (IDGE) flew on STS-62 to study the microscopic, tree-like structures (dendrites) that form within metals as they solidify from molten materials. The size, shape, and orientation of these dendrites affect the strength and usefulness of metals. Data from this experiment will be used to test and improve the mathematical models that support the industrial production of metals.
LeRC
Crystal Growth; Dendritic Crystals; Isothermal Processes; Mathematical Models; Metals; Space Shuttle Payloads

19970005007 NASA Johnson Space Center, Houston, TX USA
Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 2 of 4
Feb. 20, 1996; In English; Videotape: 40 min. playing time, in color, with soundideotape 2 of 4ideotape 2 of 4ape-2 of 4
Report No.(s): NONP–NASA–VT–97–1997005938; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The report presents the results of the flight experiment Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation

conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m(exp 2)). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 2 of 4.
CASI
Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970005013 NASA Johnson Space Center, Houston, TX USA
Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 4 of 4
Feb. 20, 1996; In English; Videotape: 32 min. playing time, in color, with soundideotape 4 of 4ideotape 4 of 4ape-4 of 4
Report No.(s): NONP–NASA–VT–97–1997005940; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The report presents the results of the flight experiment Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m(exp 2)). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 4 of 4.
CASI
Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970005031 NASA Johnson Space Center, Houston, TX USA
Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 1 of 4
Feb. 20, 1996; In English; Videotape: 1 hr. 22 min. playing time, in color, with soundideotape 1 of 4ideotape 1 of 4ape-1 of 4
Report No.(s): NONP–NASA–VT–97–1997005937; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of the flight experiment Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m(exp 2)). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 1 of 4.
CASI
Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

19970005057 NASA Johnson Space Center, Houston, TX USA
Tank Pressure Control Experiment: Thermal Phenomena in Microgravity. Tape 3 of 4
Feb. 20, 1996; In English; Videotape: 1 hr. 30 min. playing time, in color, with soundideotape 3 of 4ideotape 3 of 4ape-3 of 4
Report No.(s): NONP–NASA–VT–97–1997005939; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The report presents the results of the flight experiment Tank Pressure Control Experiment/Thermal Phenomena (TPCE/TP) performed in the microgravity environment of the space shuttle. TPCE/TP, flown on the Space Transportation System STS-52, was a second flight of the Tank Pressure Control Experiment (TPCE). The experiment used Freon 113 at near saturation conditions. The test tank was filled with liquid to about 83 percent by volume. The experiment consisted of 21 tests. Each test generally started with a heating phase to increase the tank pressure and to develop temperature stratification in the fluid, followed by a fluid mixing phase for the tank pressure reduction and fluid temperature equilibration. The heating phase provided pool boiling data from large (relative to bubble sizes) heating surfaces (0.1046 m by 0.0742 m) at low heat fluxes (0.23 to 1.16 kW/m(exp 2)). The system pressure and the bulk liquid subcooling varied from 39 to 78 kPa and 1 to 3 deg C, respectively. The boiling process during the entire heating period, as well a jet-induced mixing process for the first 2 min. of the mixing period, was also recorded on video. Analyses of data from the two flight experiments (TPCE and TPCE/TP) and their comparison with the results obtained in drop tower experiments suggest that as Bond number approaches zero the flow pattern produced by an axial jet and the mixing time can be predicted by the Weber number. This is video tape 3 of 4.
CASI
Tanks (Containers); Bubbles; Flow Distribution; Fluid Jets; Freon; Jet Mixing Flow; Microgravity; Pressure Reduction; Heat Flux

31
ENGINEERING (GENERAL)

Includes general research topics to engineering and applied physics, and particular areas of vacuum technology, industrial engineering, cryogenics, and fire prevention. For specific topics in engineering see categories 32 through 39.

19940011046 NASA, Washington, DC, USA
Building a lunar base
Jun 1, 1986; In English; 4 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190472; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video looks at the testing of lunar materials as a possible building material for lunar bases.
CASI
Construction Materials; Lunar Bases; Lunar Rocks; Lunar Soil; Materials Tests

19950020783 National Inst. of Standards and Technology, Gaithersburg, MD, USA
NIST Automated Manufacturing Research Facility (AMRF): March 1987
Herbert, Judith E., editor, National Inst. of Standards and Technology, USA; Kane, Richard, editor, National Inst. of Standards and Technology, USA; Mar 1, 1987; In English; 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49097; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The completion and advances to the NIST Automated Manufacturing Research Facility (AMRF) is described in this video. The six work stations: (1) horizontal machining; (2) vertical machining; (3) turning machinery; (4) cleaning and deburring; (5) materials handling; and (6) inspection are shown and uses for each workstation are cited. Visiting researchers and scientists within

NIST describe the advantages of each of the workstations, what the facility is used for, future applications for the technological advancements from the AMRF, including examples of how AMRF technology is being transferred to the U.S. Navy industry and discuss future technological goals for the facility.
CASI
Automatic Control; Government/Industry Relations; Industrial Plants; Research and Development; Research Facilities; Technology Assessment; Technology Utilization; Workstations

20000058145 Bionetics Corp., Cocoa Beach, FL USA
Cooler Deployment, GOES J on ATLAS
Mar. 14, 1995; In English; Videotape: 5 min. 13 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000078613; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This NASA Kennedy Space Center video release presents footage of workcrews overseeing the cooler deployment on the GOES-J weather satellite that will be launched on the Atlas Centaur rocket from Complex 36 at the Cape Canaveral Air Station.
CASI
Coolers; GOES Satellites; Spacecraft Components

32
COMMUNICATIONS AND RADAR

Includes radar; radio, wire, and optical communications; land and global communications; communications theory. For related information see also 04 Aircraft Communications and Navigation; and 17 Space Communications, Spacecraft Communications, Command and Tracking; for search and rescue see 03 Air Transportation and Safety, and 16 Space Transportation and Safety.

19940010819 NASA Goddard Space Flight Center, Greenbelt, MD, USA
COBE video news
Oct 1, 1989; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190396; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape was produced for hand-out to both local and national broadcast media as a prelude to the launch of the Cosmic Background Explorer. The tape consists of short clips with multi-channel sound to facilitate news media editing.
CASI
Cosmic Background Explorer Satellite; News Media; Spacecraft Launching

19950022753 NASA, Washington, DC, USA
High resolution microwave survey
Scheibe, J., editor, NASA, USA; Sep 18, 1992; In English; 12 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46001; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Research information on radar tracking systems, computer animation of star formation, footage of solar systems, and desert radar equipment and research facilities are contained in this video. Frank Drake, President of SETI (Search for Extraterrestrial Intelligence) Institute is interviewed along with Jill Tarter, NASA's High Resolution Microwave Survey Project Scientist.
CASI
Computer Animation; High Resolution; Microwaves; Radar Tracking; Radio Astronomy; Radio Communication

33
ELECTRONICS AND ELECTRICAL ENGINEERING

Includes development, performance, and maintainability of electrical/electronic devices and components; related test equipment. and microelectronics and integrated circuitry. For related information see also 60 Computer Operations and Hardware; and 76 Solid-State Physics. For communications equipment and devices see 32 Communications and Radar.

19940029077 NASA Lewis Research Center, Cleveland, OH, USA
Space electronics video: Research for today and tomorrow
Jan 1, 1991; In English; 7 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12957; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of work being done by the different branches of the Space Electronics Division at LeRC. The video highlights electron beam, solid state, high speed circuit design and, high frequency communication research.
CASI
Electron Beams; Electronic Equipment; NASA Programs; Solid State Devices

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FLUID MECHANICS AND THERMODYNAMICS

Includes fluid dynamics and kinematics and all forms of heat transfer; boundary layer flow; hydrodynamics; hydraulics; fluidics; mass transfer and ablation cooling. For related information see also 02 Aerodynamics.

19940010773 NASA Ames Research Center, Moffett Field, CA, USA
The 1989 computational fluid dynamics highlights
Jan 1, 1989; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190433; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This document presents highlights of 1989's CFD graphics, which show shuttle flight problems, F-18 flows, artificial heart, and rotorstrator with more complex blades.
CASI
Computational Fluid Dynamics; Numerical Flow Visualization; Scientific Visualization

19940010779 NASA, Washington, DC, USA
Riblets: New speed technology
Mar 1, 1987; In English; 3 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190439; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document discusses a new drag reduction technology called riblets, which may have helped win yachting's America's Cup.
CASI
Boundary Layer Control; Drag Reduction; Hydrodynamics; Riblets

19940010958 NASA Ames Research Center, Moffett Field, CA, USA
The 1988 computational fluid dynamics highlights
Jan 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190443; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video highlights the 1988 CFD graphics which show zero gravity phenomena, boundary layers, aeroelasticity, rotor blades, stators, jet ground effects, the F-18, flow about the shuttle, hypersonic flow, and flow in an artificial heart.
CASI
Computational Fluid Dynamics; Computer Graphics; Computerized Simulation; Fluid Flow; Numerical Flow Visualization; Scientific Visualization

19940027380 NASA Lewis Research Center, Cleveland, OH, USA
Thermocapillary convection in evaporating sessile drops
Jan 1, 1986; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9958; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The purpose of this video is to understand the effects of surface tension on fluid convection. The fluid system chosen is the liquid sessile droplet to show the importance in single crystal growth, the spray drying and cooling of metal, and the advance droplet radiators of the space stations radiators. A cross sectional representation of a hemispherical liquid droplet under ideal conditions is used to show internal fluid motion. A direct simulation of buoyancy-dominant convection and surface tension-dominant convection is graphically displayed. The clear differences between two mechanisms of fluid transport, thermocapillary convection, and bouncy dominant convection is illustrated.
CASI
Capillary Flow; Convection; Convective Heat Transfer; Cooling Systems; Crystal Growth; Drops (Liquids); Drying; Evaporation; Single Crystals; Spacecraft Radiators; Sprayers

19950004104 NASA Lewis Research Center, Cleveland, OH, USA
ZENO: A critical fluid light scattering experiment
Feb 1, 1994; In English; 7 min. 25 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23162; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The ZENO experiment flew on the STS-62, it is designed to verify intriguing, but previously untested, theories in fluid physics. These theories attempt to describe dramatic changes in the properties of fluids near the critical temperature at which the vapor and liquid forms co-exist.
LeRC
Critical Temperature; Fluids; Light Scattering; Liquid Phases; Physics; Spaceborne Experiments; Vapor Phases

19950009484 NASA Langley Research Center, Hampton, VA, USA
Two–dimensional scramjet inlet unstart model: Wind–tunnel blockage and actuation systems test
Holland, Scott D., NASA Langley Research Center, USA; Nov 1, 1994; In English; Videotape supplement: 10 min. 52 sec. playing time, in color, in VHS and Beta formats
Contract(s)/Grant(s): RTOP 763-23-35-08
Report No.(s): NONP–NASA–SUPPL–VT–94–32020; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This supplement to NASA TM 109152 shows the Schlieren video (10 min. 52 sec., color, Beta and VHS) of the external flow field and a portion of the internal flow field of a two-dimensional scramjet inlet model in the NASA Langley 20-Inch Mach 6 Tunnel. The intent of the overall test program is to study (both experimentally and computationally) the dynamics of the inlet unstart; this (phase I) effort examines potential wind-tunnel blockage issues related to model sizing and the adequacy of the actuation systems in accomplishing the start and unstart. The model is equipped with both a moveable cowl and aft plug. Windows in the inlet sidewalls allow limited optical access to the internal shock structure. In the video, flow is from right to left, and the inlet is oriented inverted with respect to flight, i.e., with the cowl on top. The plug motion is obvious because the plug is visible in the aft window. The cowl motion, however, is not as obvious because the cowl is hidden from view by the inlet sidewall. The end of the cowl actuator arm, however, becomes visible above the inlet sidewalls between the windows when the cowl is up (see figure 1b of the primary document). The model is injected into the tunnel and observed though several actuation sequences with two plug configurations over a range of unit freestream Reynolds number at a nominal freestream Mach number of 6. The framing rate and shutter speed of the camera were too slow to fully capture the dynamics of the unstart but did prove sufficient to identify inlet start and unstart. This series of tests indicated that the model was appropriately sized for this facility and identified operability limits required first to allow the inlet to start and second to force the unstart.
Author
Engine Inlets; Flow Distribution; Flow Visualization; Free Flow; Hypersonic Inlets; Hypersonic Wind Tunnels; Inlet Flow; Schlieren Photography; Supersonic Combustion Ramjet Engines; Wind Tunnel Tests

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INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors; measuring instruments and gauges; detectors; cameras and photographic supplies; and holography. For aerial photography see 43 Earth Resources and Remote Sensing. For related information see also 06 Avionics and Aircraft Instrumentation; and 19 Spacecraft Instrumentation.

19940010774 NASA, Washington, DC, USA
Space Station Freedom
Jul 1, 1990; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190434; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents great model photography along with astronaut activity as practiced in mockup.
CASI
Astronaut Training; Space Station Freedom; Spacecraft Models

19940010831 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 crew photo in building 4
Apr 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190371; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the Space Shuttle crew learning how to use the photography equipment they will have on board the Space Shuttle.
CASI
Astronaut Training; Photographic Equipment; Space Shuttle Orbiters; Spaceborne Photography

19940010843 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 IMAX camera training
Nov 1, 1989; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190365; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown learning how to load the IMAX camera and use it. This training takes place on the middeck of the CCT.
CASI
Astronaut Training; Cameras; Space Shuttle Missions

19940010901 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 IMAX camera audio class FFT
Mar 1, 1989; In English; 15 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190340; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The astronauts are shown how to work the audio portion of the IMAX camera system.
CASI
Astronaut Training; Astronauts; Audio Equipment; Cameras; Space Shuttle Missions

19940010907 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 crew IMAX camera training
Jan 1, 1989; In English; 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190343; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The crew is shown learning to use the IMAX camera system.
CASI
Astronaut Training; Cameras; Education; Onboard Equipment; Space Shuttles; Spacecrews

19940010924 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 Arriflex and IMAX camera training
Aug 1, 1989; In English; 19 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190264; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The STS-34 crew is shown being taught how to use the 16-mm Arriflex camera.
CASI
Cameras; Spaceborne Photography; Spacecrews

19940010932 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew photo training and habitation procedures
Nov 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190351; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown studying photography equipment they will carry into orbit, and how to take the best shots possible.
CASI
Astronaut Training; Photographic Equipment; Photography

19940010990 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 payload specialists Durrance and Parise: 70mm photo training and cabin familiarization
Apr 1, 1990; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190296; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows astronauts Durrance and Parise being trained with photography equipment.
CASI
Astronaut Training; Astronauts; Photographic Equipment; Space Flight Training; Space Shuttle Missions; Space Transportation System Flights

19940010999 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Johnson Space Center and downtown Houston, Texas aerials
Aug 1, 1988; In English; 7 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190319; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows various aerial shots of the NASA JSC. Views of downtown Houston, TX, are also provided.
CASI
Aerial Photography; Houston (TX); Research Facilities

19940011319 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–31 crew Linof, Arriflex, and IMAX camera training
Mar 1, 1990; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190282; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The crew is shown on the roof of Bldg. 1 at the NASA Johnson Space Center learning about the Linof camera system. The crew is shown taking pictures with the Linof camera from the roof.
CASI
Astronaut Training; Cameras

19970035033 NASA Lewis Research Center, Cleveland, OH USA
Improved Optical Techniques for Studying Sonic and Supersonic Injection into Mach 3 Flow
Buggele, Alvin E., NASA Lewis Research Center, USA; Seasholtz, Richard G., NASA Lewis Research Center, USA; Sep. 1997; 22p; In English; 42nd; International Society for Optical Engineering Conference, 27 Jul. - 1 Aug. 1997, San Diego, CA, USA; Sponsored by International Society for Optical Engineering, USA; Original contains color illustrations
Contract(s)/Grant(s): RTOP 953-74-40
Report No.(s): NONP–NASA–VT–1997067113; No Copyright; Avail: CASI; A03, Hardcopy; A01, Microfiche; V01, Videotape-VHS
Filtered Rayleigh Scattering and shadowgraph flow visualization were used to characterize the penetration of helium or moist air injected transversely at several pressures into a Mach 3 flow in the NASA Lewis 3.81 inch by 10 inch continuous flow supersonic wind tunnel. This work is in support of the LOX (liquid oxygen) Augmented Nuclear Thermal Rocket program. The present study used an injection-seeded, frequency doubled ND:YAG pulsed laser to illuminate a transverse section of the injectant plume. Rayleigh scattered light was passed through an iodine absorption cell to suppress stray laser light and was imaged onto a cooled CCD camera. The scattering was based on condensation of water vapor in the injectant flow. Results are presented for various configurations of sonic and supersonic injector designs mounted primarily in the floor of the tunnel. Injectors studied include a single 0.25 inch diameter hole, five 0. 1 12 inch diameter holes on 0. 177 inch spacing, and a 7 deg. half angle wedge. High speed shadowgraph flow visualization images were obtained with several video camera systems. Roof and floor static pressure data are presented several ways for the three configurations of injection designs with and without helium and/or air injection into Mach 3 flow. A 12 min. video supplement is also included.
Author
Rayleigh Scattering; Shadowgraph Photography; Flow Visualization; Fluid Injection; Helium; Injectors; Fuel Injection; Supersonic Flow; Wind Tunnel Tests; Water Vapor; Continuum Flow; Pulsed Lasers

19970035939 TRW Space and Electronics Group, PMMW Camera Consortium, Redondo Beach, CA USA
PMMW Camera TRP, Phase 1 ***Final Report, Jun. 1994 - Jul. 1997***
1997; 32p; In English
Contract(s)/Grant(s): NCC1-196
Report No.(s): NONP–NASA–VT–1997057310; No Copyright; Avail: CASI; A03, Hardcopy; A01, Microfiche; V01, Videotape-VHS
Passive millimeter wave (PMMW) sensors have the ability to see through fog, clouds, dust and sandstorms and thus have the potential to support all-weather operations, both military and commercial. Many of the applications, such as military transport or commercial aircraft landing, are technologically stressing in that they require imaging of a scene with a large field of view in real time and with high spatial resolution. The development of a low cost PMMW focal plane array camera is essential to obtain real-time video images to fulfill the above needs. The overall objective of this multi-year project (Phase 1) was to develop and demonstrate the capabilities of a W-band PMMW camera with a microwave/millimeter wave monolithic integrated circuit (MMIC) focal plane array (FPA) that can be manufactured at low cost for both military and commercial applications. This overall objective was met in July 1997 when the first video images from the camera were generated of an outdoor scene. In addition, our consortium partner McDonnell Douglas was to develop a real-time passive millimeter wave flight simulator to permit pilot evaluation of a PMMW-equipped aircraft in a landing scenario. A working version of this simulator was completed. This work was carried out under the DARPA-funded PMMW Camera Technology Reinvestment Project (TRP), also known as the PMMW Camera DARPA Joint Dual-Use Project. In this final report for the Phase 1 activities, a year by year description of what the specific objectives were, the approaches taken, and the progress made is presented, followed by a description of the validation and imaging test results obtained in 1997.
Derived from text
Cameras; Spatial Resolution; Millimeter Waves; Microwaves; Imaging Techniques; High Resolution

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MECHANICAL ENGINEERING

Includes mechanical devices and equipment; machine elements and processes. For cases where the application of a device or the host vehicle is emphasized see also the specific category where the application or vehicle is treated. For robotics see 63 Cybernetics, Artificial Intelligence, and Robotics; and 54 Man/System Technology and Life Support.

19940009131 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Goddard Space Flight Center robotics demo
Nov 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185317; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Documentary footage of a fascinating look at Goddard Space Flight Center's Robotic Capability during a demonstration by Goddard robotics engineers is presented.
Author
Documentation; NASA Programs; Robot Control; Robotics; Tests

19940010790 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robotics for Space Station tape 2
Sep 1, 1989; In English; 16 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190376; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video shows robotics for the Space Station.
CASI
Robotics; Space Stations

19940010795 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robotics in space
Nov 1, 1988; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190382; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Produced for the AIAA symposium, this fast paced video shows robotics and telerobotics in the exploration of space.
CASI
Robotics; Space Exploration

19940010799 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robotics for Space Station, tape 1
Aug 1, 1989; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190386; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Shot on location at the Goddard Robotics Laboratory, this video uses state

of the art Wavefront animation to take the viewer on a tour of the robotics that may, someday, be a part of Space Station Freedom.
CASI
Robotics; Space Station Freedom

19940010811 NASA, Washington, DC, USA
Future of robotics
Apr 1, 1989; In English; 2 min. 3 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190390; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape describes robotic research such as the EVA retriever and virtual reality.
CASI
Extravehicular Activity; Robotics; Virtual Reality

19940010874 NASA, Washington, DC, USA
Unistick vehicle controller
Oct 1, 1986; In English; 4 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190416; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A single stick control system, like the lunar rover, is presented as a control to enable disadvantaged individuals to drive with only one hand.
CASI
Control Sticks; Manual Control; Technology Utilization

19940010983 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
EVA retriever demonstration
Apr 1, 1988; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190307; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The EVA retriever is demonstrated in the Manipulator Development Facility (MDF). The retriever moves on the air bearing table 'searching' for its target, in this case tools 'dropped' by astronauts on orbit.
CASI
Extravehicular Activity; Retrieval; Target Acquisition

19940010986 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–41 VCS training with mission specialist Bruce Melnick and Bill Shepard
Sep 1, 1990; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190310; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronaut Bill Shepard is shown using the Voice Command System (VCS) in the Manipulative Development Facility (MDF) under the eye of project engineers and crew trainers. The video shows VCS in action moving cameras around the MDF payload bay mockup.
CASI
Remote Handling; Voice Control

19940027298 NASA Lewis Research Center, Cleveland, OH, USA
High temperature NASP engine seal development
Jan 1, 1992; In English; 6 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9950; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details research being conducted at the Lewis Research Center on high temperature engine seal design for the National Aerospace Plane. To maximize the speed, the jets on the NASP extract oxygen from the air rather than carry large liquid fuel tanks; this creates temperatures within the jet of over 5000 F. to prevent these potentially explosive gases from escaping, researchers are developing new technologies for use in the engine seals. Two examples explained are the ceramic wafer seal and the braided ceramic rope seal. Computer simulations and laboratory footage are used to illustrate the workings of these seals. Benefits for other aerospace and industrial applications, as well as for the space shuttle, are explored.
CASI
Aerospace Planes; Ceramics; Engine Parts; High Temperature; National Aerospace Plane Program; Refractory Materials; Seals (Stoppers)

19940029080 NASA Lewis Research Center, Cleveland, OH, USA
The Stirling engine
Jan 1, 1992; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12960; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Stirling engine, an external combustion engine which creates heat energy to power the motor, and can use many types of fuel. It can be used for both stationary and propulsion purposes and has advantages of better fuel economy and cleaner exhaust than internal combustion engines. The engine is shown being road tested at Langley Air Force Base.
CASI
Engine Tests; Stirling Engines

19940029611 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Robotics Demo Peer Group review
Jan 1, 1994; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13714; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This animated color video shows the Shuttle robot arm performing construction on the Spacelab.
CASI
Remote Manipulator System; Robot Arms; Telerobotics

19940031006 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Teleoperation and supervised autonomy for ORU exchange
Aug 1, 1990; In English; 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15920; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents scenes demonstrating current telerobotics technology, specifically teleoperation with the aid of a computer.
CASI
Teleoperators; Telerobotics

20000032743 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–36 : Turbo Pump Deinstalled and Being Inspected
Feb. 07, 1990; In English; Videotape: 2 min. 42 sec. playing time, in color, no sound except background noise
Report No.(s): NONP–NASA–VT–2000043338; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
STS-36 was the sixth shuttle mission dedicated to the Department of Defense. The mission was launched onboard the shuttle Atlantis, on Feb 28, 1990. This videotape opens with shots of the shuttle on the launch pad and shows the removal of a turbo pump, and visual and internal inspection of the pump.
CASI
Inspection; Turbine Pumps; Space Shuttle Orbiters

20000034859 NASA Johnson Space Center, Houston, TX USA
STS–36: Hydrogen Turbo Pump Removal Preps
Feb. 02, 1990; In English; Videotape: 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000043339; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Live footage shows workers preparing for the removal of the hydrogen pump turbo.
CASI
Hydrogen; Turbine Pumps; Fuel Pumps; Removal

38
QUALITY ASSURANCE AND RELIABILITY

Includes approaches to, and methods for reliability analysis and control, inspection, maintainability, and standardization.

19940010847 NASA Marshall Space Flight Center, Huntsville, AL, USA
IG nuts and bolts
Jul 1, 1988; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190450; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape supports and explains the importance of Quality and Assurance Testing.
CASI
NASA Programs; Quality Control

19940029215 NASA Marshall Space Flight Center, Huntsville, AL, USA
Activities of the NASA centers
Nov 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12964; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video highlights the NASA centers and their activities. Additionally, the commitment of the NASA centers to quality assurance is presented.
CASI
NASA Programs; Quality Control; Research Facilities

39
STRUCTURAL MECHANICS

Includes structural element design, analysis and testing; dynamic responses of structures; weight analysis; fatigue and other structural properties; and mechanical and thermal stresses in structure. For applications see 05 Aircraft Design, Testing and Performance and 18 Spacecraft Design, Testing and Performance.

19940027313 NASA Lewis Research Center, Cleveland, OH, USA
Futurepath 3
Oct 1, 1989; In English; 28 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9962; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The story of research and technology at NASA Lewis Research Center's Structures Division is presented. The job and designs of the Structures Division needed for flight propulsion is described including structural mechanics, structural dynamics, fatigue, and fracture. The video briefly explains why properties of metals used in structural mechanics need to be tested. Examples of tests and simulations used in structural dynamics (bodies in motion) are briefly described. Destructive and non-destructive fatigue/fracture analysis is also described. The arc sprayed monotape (a composite material) is explained, as are the programs in which monotape plays a roll. Finally, the National Aero-Space Plane (NASP or x-30) is introduced, including the material development and metal matrix as well as how NASP will reduce costs for NASA.
CASI
Aerospace Planes; Dynamic Structural Analysis; National Aerospace Plane Program; Propulsion System Configurations; Propulsion System Performance

43
EARTH RESOURCES AND REMOTE SENSING

Includes remote sensing of earth features, phenomena and resources by aircraft, balloon, rocket, and spacecraft; analysis or remote sensing data and imagery; development of remote sensing products; photogrammetry; and aerial photographs. For instrumentation see 35 Instrumentation and Photography.

19940010772 NASA, Washington, DC, USA
Views from space
Feb 1, 1990; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190432; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document shows how views from the shuttle provide valuable information as to the condition of earth.
CASI
Earth Observations (From Space); Environmental Monitoring; Remote Sensing; Space Shuttle Orbiters

19940010824 NASA, Washington, DC, USA
Combating malaria
Nov 1, 1989; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190407; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows the use of remote sensing to better target mosquito larvae for more effective control.
CASI
Insects; Parasitic Diseases; Remote Sensing

19940010837 NASA, Washington, DC, USA
Finding fish from above
Jan 1, 1991; In English; 2 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190400; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape shows how the use of satellites can help locate fish. The demonstration is intended for the fishing industry.
CASI
Fishes; Fishing; Industries; Satellite Observation; Technology Utilization

19940010861 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 Shuttle Earth views, April 1990, part 1 and part 2
Jan 1, 1990; In English; 1 hr. 30 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190362; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video features Earth views compiled from a variety of footage shot during shuttle missions. Included are parts of North America, Africa, Europe, the Orient, and the Middle East.
CASI
Earth Observations (From Space); Space Shuttle Missions

19940010936 NASA, Washington, DC, USA
Testing the waters from space
Dec 1, 1986; In English; 2 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190421; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

It is explained how an infrared radiometer can accurately measure ocean surface temperature.
CASI
Earth Observations (From Space); Infrared Radiometers; Ocean Surface; Surface Temperature; Thermal Mapping

19940010955 NASA, Washington, DC, USA
Improved mapping system
Jan 1, 1991; In English; 3 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190441; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video explains the system of mapping terrain made more accurate with NASA technology.
CASI
Aerospace Technology Transfer; Geodetic Accuracy; Mapping; NASA Programs; Technology Utilization; Terrain; Topography

19940029092 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
A collection of The Movies
Mar 28, 1991; In English; 21 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12934; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video contains computer-generated animation made from still data sets processed by computer to give the illusion of flying around the objects. 'Earth the Movie' uses cloud data from satellites and geographical data from maps. 'LA the Movie' was taken from LANDSAT data of the Los Angeles area. This was the first experimental demonstration of the technology. 'Mars the

Movie' was taken from Viking orbiter data. 'Miranda' the Movie was made from a mosaic of 9 frames taken by Voyager of the Uranium moon, Miranda. The last movie is 'Monterey the Bay'.
CASI
Earth Observations (From Space); Remote Sensing; Satellite Imagery

19940029242 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
EOCAP: Commercial Earth observations program
Jan 1, 1994; In English; 8 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12926; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Earth Observations Commercial Applications Program (EOCAP) is described. This video explains how EOCAP has aided in the development of new and commercial products.
CASI
Earth Observations (From Space); Earth Observing System (EOS); Earth Resources; Resources Management

19960025967 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 4
Apr. 26, 1995; In English; Videotape: 59 min. 30 sec. playing time, in color, no soundt-4
Report No.(s): NONP–NASA–VT–96–1996031301; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this fourth part of a four part video compilation of Space Shuttles' Earth views various geographical areas are shown, including both land and water masses. The views covered the Middle East (Saudi Arabia, Sinai, Jordan , Egypt, Iran, Iraq, Kuwait, Bahrain, Qutar, and the United Arab Emirates), northeastern Africa (Yemen, Oman, Ethiopia, Somalia, and Djibouti), Russia, Siberia, India, SRi Lanka, Tibet, Bhutan, western China, and Mongolia. Various lakes, seas, rivers, and islands are shown, along with several pieces of film footage of sunsets, moon sets, clouds, and tropical storms. Each film clip has a heading that names the shuttle and the geographical location of the footage.
CASI
Space Shuttles; Earth Observations (From Space); Color Photography; Geographic Distribution

19960025968 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 2
Apr. 26, 1995; In English; Videotape: 58 min. 55 sec. playing time, in color, no soundt-2
Report No.(s): NONP–NASA–VT–96–1996031299; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this second part of a four part video compilation of Space Shuttles' Earth views various geographical areas are shown, including both land and water masses. The views cover the southwestern, south central, and eastern United States, and the Caribbean area, Mexico, Gulf of Mexico, and South America (Ecuador, Peru, Brazil, Bolivia, Argentina, Chile, and Paraguay). Each film clip has a heading that names the shuttle and the geographical location of the footage.
CASI
Space Shuttles; Earth Observations (From Space); Geographic Distribution; Color Photography

19960025969 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 1
Apr. 26, 1995; In English; Videotape: 59 min. 17 sec. playing time, in color, no soundt-1
Report No.(s): NONP–NASA–VT–96–1996031298; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a four part video compilation of Space Shuttles' Earth views, Canada, the western coastal states of the USA (from Oregon to southern California), and the southwestern and lower south central USA (from Texas to the Gulf of Mexico) geographical areas are presented from space observations. Each film clip has a heading that names the shuttle and the geographical location of the footage.
CASI
Space Shuttles; Earth Observations (From Space); Geographic Distribution; Color Photography

19960026020 NASA Johnson Space Center, Houston, TX USA
Shuttle Earth Views, 1994, Part 3
Apr. 26, 1995; In English; Videotape: 59 min. 10 sec. playing time, in color, no soundt-3
Report No.(s): NONP–NASA–VT–96–1996031300; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this third part of a four part video compilation of Space Shuttles' Earth views various geographical areas are shown, including both land and water masses. The views cover South America, Asia (North Vietnam, Laos, Cambodia, China, Malaysia, Thailand, Java, various islands, Burma, Philippines, Taiwan, Guam), New Guinea, Australia, Morocco, Southern Europe (Spain, Portugal, Algeria, Italy, Sicily, Greece, Former Republic of Yugoslavia, Tunisia), and parts of the Middle East (Libya, Saudi Arabia, Egypt, Israel, Jordan, Sinai, Cyprus, Lebanon, Iraq), the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Mediterranean, Dead, Coral, Tyrrhenian, Adriatic, Ionian, Red, South China, Mindanao, Arafura, Sulu, Java, and China Seas. Each film clip has a heading that names the shuttle and the geographical location of the footage.
CASI
Space Shuttles; Earth Observations (From Space); Geographic Distribution; Color Photography; Europe; Middle East; Asia; South America; Australia; Indonesia; Mediterranean Sea; Atlantic Ocean; Pacific Ocean; Indian Ocean

19970020396 NASA Goddard Space Flight Center, Greenbelt, MD USA
Glacier Bay, Alaska, from the Ground, Air, and Space
Hall, Dorothy K., NASA Goddard Space Flight Center, USA; Feb. 23, 1997; In English; Videotape: 13 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997032489; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This tape uses a combination of video, three-dimensional computer imaging, and still photographs to provide a descriptive overview of the life-cycle and environmental effects of glaciers. An historical prospective of researchers and the contribution that they have made to the understanding of glaciers and Glacier Bay is presented. The data collected from these scientists have been documented and used by means of scientific visualization in the hope of learning how glacial activity relates to climate changes.
CASI
Glaciers; Environment Effects; Scientific Visualization; Climate Change; Glacial Drift; Satellite Imagery; Imaging Techniques

19970041021 North Dakota Univ., Dept. of Space Studies, Grand Forks, ND USA
What is the Value of Space Exploration? – A Prairie Perspective
1995; 48p; In English; What is the Value of Space Exploration? - A Prairie Perspective, 1-2 Nov. 1995, Grand Forks, ND, USA; Sponsored by NASA Washington, USA
Contract(s)/Grant(s): NAGw-4524
Report No.(s): NONP–NASA–VT–1997082334; No Copyright; Avail: CASI; A03, Hardcopy; A01, Microfiche; V02, Videotape-VHS

The symposium addresses different topics within Space Exploration. The symposium was fed, using satellite downlinks, to several communities in North Dakota, the first such symposium of its type ever held. The specific topics presented by different community members within the state of North Dakota were: the economic, cultural, scientific and technical, political, educational and social value of Space Exploration. Included is a 22 minute VHS video cassette highlighting the symposium.
CASI
Conferences; North Dakota; Space Exploration; Education

44
ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells; and solar, geothermal, windpower, and waterwave conversion systems; energy storage; and traditional power generators. For technologies related to nuclear energy production see 73 Nuclear Physics. For related information see also 07 Aircraft Propulsion and Power; 20 Spacecraft Propulsion and Power, and 28 Propellants and Fuels.

19950004112 NASA Lewis Research Center, Cleveland, OH, USA
SAMPIE (Solar Array Module Plasma Interactions Experiment)
Feb 1, 1994; In English; 7 min. 20 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23160; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

SAMPIE is an in-space technology experiment that flew on STS-62. Its intent is to investigate the potentially damaging effects of space plasma (gases) on different types, sizes, and shapes of solar cells, solar modules, and spacecraft materials.
LeRC
Earth Orbital Environments; Plasma Interactions; Solar Arrays; Solar Cells

45
ENVIRONMENT POLLUTION

Includes atmospheric, water, soil, noise, and thermal pollution.

19940009129 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Arctic ozone expedition
Feb 1, 1989; In English; 18 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185316; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Documenting the expedition of scientists to the uppermost reaches of the North Pole, this tape shows what is involved in collecting this valuable climatic data.
Author
Arctic Regions; Data Acquisition; Ozone; Polar Meteorology

19940010765 NASA, Washington, DC, USA
Mars look–alike
Oct 1, 1987; In English; 4 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190465; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation describes a research trek to western Antarctica to study it's ecosystem as a first step in the future exploration of Mars.
CASI
Antarctic Regions; Mars Environment

19940010816 NASA, Washington, DC, USA
Saving Yellowstone
Nov 1, 1988; In English; 3 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190394; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape explains how NASA participated in controlling the devastating forest fires that consumed parts of Yellowstone National Park.
CASI
Forest Fires; Technology Utilization; Yellowstone National Park (ID-MT-WY)

19940010817 NASA Goddard Space Flight Center, Greenbelt, MD, USA
TOMS computer graphics
Nov 1, 1988; In English; 3 min. 46 sec. playing, in color, with sound
Report No.(s): NONP–NASA–VT–93–190395; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape explains how NASA participated in controlling the devastating forest fires that consumed parts of Yellowstone National Park.
CASI
Computer Graphics; Forest Fires; Total Ozone Mapping Spectrometer; Yellowstone National Park (ID-MT-WY)

19940010856 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Atlas of TOMS ozone, 1978–1988
Feb 1, 1989; In English; 41 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190253; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video contains very graphic images of the seasonal accumulation and depletion of the world's ozone layer, as depicted by the Total Ozone Mapping Satellite (TOMS).
CASI
Annual Variations; Ozone; Ozone Depletion; Ozonosphere; Total Ozone Mapping Spectrometer

19940010877 NASA, Washington, DC, USA
What's killing the trees?
Oct 1, 1987; In English; 3 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190419; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The possible causes for forest decline are discussed, including acid rain on Camel's Hump Mountain, Vermont.
CASI
Acid Rain; Forest Management; Forests

19940010891 NASA, Washington, DC, USA
Global Greenhouse Expedition
Oct 1, 1990; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190411; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video covers an airborne study of greenhouse gases in the atmosphere.
CASI
Atmospheric Composition; Global Warming; Greenhouse Effect

19940010892 NASA, Washington, DC, USA
Arctic ozone
Apr 1, 1989; In English; 4 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190412; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Recent research on ozone done in the Arctic region is detailed and an update on information is gained from the previous Antarctic research.
CASI
Arctic Regions; Ozone Depletion

19940010935 NASA, Washington, DC, USA
Louisiana delta study
Feb 1, 1990; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190420; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The project studies the causes of land erosion and sediment transport in order to protect the Delta's resources.
CASI
Erosion; Land Management; Sediment Transport

19940010952 NASA, Washington, DC, USA
Forest fire study
Mar 1, 1987; In English; 3 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190413; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The impact of natural fires on our environment is examined, especially regarding greenhouse gases.
CASI
Environment Effects; Forest Fires; Greenhouse Effect

19940014487 NASA, Washington, DC, USA
Ozone hole
Feb 1, 1988; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198215; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The first segment of this video gives an overview of the Ozone Hole Airborne Arctic Stratospheric Expedition, an international effort using balloon payloads, ground based instruments, and airborne instruments to study ozone

depletion and the hole in the ozone over Antarctica which occurs every spring. False color imagery taken from NASA's Nimbus 7 satellite which documents daily changes in ozone is also shown. The second segment of this video shows actual take-off and flight footage of the two aircraft used in the experiment: the DC-8 Flying Laboratory and the high flying ER-2.
CASI
Airborne Equipment; Arctic Regions; Expeditions; Ozone Depletion; Research Aircraft; Satellite Imagery; Stratosphere

19940014494 NASA Goddard Space Flight Center, Greenbelt, MD, USA
October 1979–1989 Southern Hemisphere total ozone as seen by TOMS
Nov 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198222; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is raw video from space taken by the Total Ozone Mapping Satellite (TOMS).
CASI
Ozone; Total Ozone Mapping Spectrometer

19940029045 NASA Ames Research Center, Moffett Field, CA, USA
Ozone hole airborne Arctic stratospheric expedition (pre–flight)
Feb 1, 1989; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12928; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Ozone research done in the Antarctic region is detailed.
CASI
Antarctic Regions; Ozone Depletion; Ozonometry; Stratosphere

19940030997 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Insight to global change: EOS/SAR mission
Jun 1, 1990; In English; 8 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15911; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation describes the methods and instrumentation used to help in determining future climate changes on Earth and explains the benefits of experimentation with synthetic aperture radar (SAR). It also gives a better understanding of the burning of fossil fuels, deterioration of the biosphere and deforestation of the rain forest which causes the green house effect.
CASI
Climate Change; Earth Observing System (EOS); Remote Sensing; Synthetic Aperture Radar

19950004307 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
The desert tortoise: A delicate balance
Aug 1, 1992; In English; Prepared in cooperation with Dept. of the AF, Edwards AFB, CA; 14 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23639; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This award winning program looks at the efforts to preserve the desert tortoise in and around the Edwards Air Force Base, CA area. It also explains what people should do if they come in contact with a tortoise. This video was produced in cooperation with Edwards Air Force Base.
DFRC
Endangered Species; Environment Protection; Mojave Desert (CA); Turtles

19950011633 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Evolution of the Southern Hemisphere ozone hole as seen by TOMS from August 1979 to December 1991
Aug 3, 1994; In English; 5 min. 45 sec. running time, in color, no sound
Report No.(s): NONP–NASA–VT–95–37003; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The computerized color images of the Total Ozone Mapping Spectrometer (TOMS) showed the ozone distribution and levels in the Earth's southern hemisphere from August 1979 to December 1991 in this video. The annual variations were presented in a monthly format and the ozone levels were measured in Dobson units.
CASI
Annual Variations; Atmospheric Circulation; Computer Graphics; Earth Atmosphere; Ozone Depletion; Southern Hemisphere; Total Ozone Mapping Spectrometer

46
GEOPHYSICS

Includes earth structure and dynamics, aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism. For related information see 47 Meteorology and Climatology; and 93 Space Radiation.

19940009147 NASA Marshall Space Flight Center, Huntsville, AL, USA
CRRES to blaze new trails in orbit
Jul 1, 1990; In English; 2 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185329; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The purpose of the Combined Release Radiation Effects Satellite in re-mapping and planning protection for future spacecraft is described.
Author (revised)
CRRES (Satellite); Radiation Protection; Spacecraft Shielding

19940010809 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Southern and Northern Hemisphere total ozone as seen by TOMS
Mar 1, 1989; In English; 24 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190389; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This videotape contains raw footage of this planet's upper atmosphere for use in the preparation of environmental and Earth monitoring presentation.
CASI
Northern Hemisphere; Ozone; Southern Hemisphere; Total Ozone Mapping Spectrometer; Upper Atmosphere

19940010890 NASA, Washington, DC, USA
Global climate study
Jul 1, 1989; In English; 3 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190410; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The Global Surface Radiation Budget Experiment, which determines if current climate models are accurate, is explained.
CASI
Climate; Earth Radiation Budget Experiment; Radiation

19950004148 NASA, Washington, DC, USA
SPRITE video news release
Jul 1, 1994; In English; 2 min. 46 sec. playing time, no sound
Report No.(s): NONP–NASA–VT–94–23136; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation provides the initial observations of high altitude atmospheric flashes above thunderstorms from the SPRITE upper atmospheric optical emissions campaign.
CASI
Atmospheric Radiation; Thunderstorms; Upper Atmosphere

19950004572 NASA, Washington, DC, USA
Dante's volcano
Sep 1, 1994; In English; 14 min. 40 sec. playing time
Report No.(s): NONP–NASA–VT–94–25775; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video contains two segments: one a 0:01:50 spot and the other a 0:08:21 feature. Dante 2, an eight-legged walking machine, is shown during field trials as it explores the inner depths of an active volcano at Mount Spurr, Alaska. A NASA sponsored team at Carnegie Mellon University built Dante to withstand earth's harshest conditions, to deliver a science payload to the interior of a volcano, and to report on its journey to the floor of a volcano. Remotely controlled from 80-miles away, the robot explored the inner depths of the volcano and information from onboard video cameras and sensors was relayed via satellite to scientists in Anchorage. There, using a computer generated image,

controllers tracked the robot's movement. Ultimately the robot team hopes to apply the technology to future planetary missions.
CASI
Remote Control; Robotics; Robots; Volcanoes; Walking Machines

19950010566 NASA, Washington, DC, USA
Forecasting earthquakes
Jan 1, 1994; In English; 11 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–35012; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video there are scenes of damage from the Northridge Earthquake and interviews with Dr. Andrea Donnelan, Geophysics at JPL, and Dr. Jim Dolan, earthquake geologist from Cal. Tech. The interviews discuss earthquake forecasting by tracking changes in the earth's crust using antenna receiving signals from a series of satellites called the Global Positioning System (GPS).
JPL
Earth Crust; Earthquakes; Forecasting; Geological Surveys; Global Positioning System

19950017243 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
The atmosphere below
Jan 1, 1992; In English; Its Liftoff to Learning Series; 16 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43941; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this educational 'Liftoff to Learning' video series, astronauts from the STS-45 Space Shuttle Mission (Kathy Sullivan, Byron Lichtenberg, Brian Duffy, Mike Foale, David Leestma, Charlie Bolden, and Dirk Frimont) explain and discuss the Earths atmosphere, its needs, the changes occurring within it, the importance of ozone, and some of the reasons behind the ozone depletion in the Earths atmosphere. The questions of: (1) what is ozone; (2) what has happened to the ozone layer in the atmosphere; and (3) what exactly does ozone do in the atmosphere, are answered. Different chemicals and their reactions with ozone are discussed. Computer animation and graphics show how these chemical reactions affect the atmosphere and how the ozone hole looks and develops at the south pole during its winter season appearance.
CASI
Annual Variations; Carbon Dioxide; Chemical Reactions; Chlorofluorocarbons; Climate Change; Earth Atmosphere; Global Warming; Nitrogen Compounds; Ozone; Ozone Depletion; Ozonosphere

19950020174 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica: Then and now
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 54 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42903; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This real-time educational video series, featuring Camille Jennings from Maryland Public Television, includes information from Antarctic scientists and interactive discussion between the scientists and school children from both Maryland and Hawaii. This is part of a 'Passport to Knowledge Special' series. In this part of the four part Antarctic series, the history of Antarctica from its founding to the present, its mammals, plants, and other life forms are shown and discussed. The importance of Antarctica as a research facility is explained, along with different experiments and research that the facilities there perform.
CASI
Antarctic Regions; Biology; Botany; Histories; Meteorology; Research Facilities

19950020175 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica: The coldest, windiest place on Earth
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 1 hr. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42904; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this first part of a four part 'Passport to Knowledge Special', hosted by Camille Jennings from Maryland Public Television, children from Maryland and Texas schools had the opportunity to directly interact with and ask questions of scientists and researchers in Antarctica live. The physical characteristics of Antarctica are featured, along with their effects on the human and microbiological organisms living in the region. The reasons behind the clothing worn in the Antarctic and the importance of the meteorological station are featured. Interviews with Professor Ian Dolziel (U of Texas) and Lt. commander John Joseph, NSFA (the head of the Navy Meteorology Center) occur with the school children, along with actual video footage of the surrounding geological features and geography. The 'Weatherops' is located at McMurdo Station, Antarctica.
CASI
Antarctic Regions; Geography; Geology; Marine Meteorology; McMurdo Sound; Microbiology; Organisms; Weather Stations

19950020176 Maryland Public Television, Owings Mills, MD, USA
Live from Antarctica, volume 4
Jan 1, 1994; In English; Sponsored by NASA; NSF; PBS K-12 Learning Services; DOE; Amoco; and Duracell Its Passport to Knowledge Special Series; 57 min. playing time. in color, with sound
Report No.(s): NONP–NASA–VT–95–42905; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this fourth video of a four part 'Passport to Knowledge Special', hosted by Camille Moody Jennings from Maryland Public Television, children from Maryland and Alaska public schools had the opportunity to directly interact with and ask questions of scientists and researchers from the Antarctic, and learn about the different geological and meteorological research going on in the Antarctic and McMurdo Base at McMurdo Sound. The scientists questioned included: Donal Manahan (biologist from Un. of So. California), who described some of the geological features from Hut Point, the historic hut built by Capt. Scott in 1902; SRidar Anandakrishnan (Penn State Un.) whose research includes ice plate movement of the central ice sheet and earthquakes and how they affect the sheet; and Lt. j.g. Kate McNitt, who spends her winters investigating the trace gases, aerosols, CFC's and ozone levels over the Antarctic area that are affecting the seasonal ozone hole that appears in that region. Historical film footage of Capt. Scott's exploration of the Antarctic is included.
CASI
Air Pollution; Air Sampling; Antarctic Regions; Atmospheric Composition; Earthquakes; Histories; Marine Meteorology; McMurdo Sound; Meteorological Balloons; Ozone Depletion; Plates (Tectonics); Topology; Weather Forecasting

47
METEOROLOGY AND CLIMATOLOGY

Includes weather observation forecasting and modification

19920025002 NASA Langley Research Center, Hampton, VA, USA
Inertial oscillation of a vertical rotating draft with application to a supercell storm: Video supplement to NASA Technical Paper 3230
Costen, Robert C., NASA Langley Research Center, USA; Stock, Larry V., Hampton Univ., USA; Sep 15, 1992; In English; 8 min., color, sound, VHS
Contract(s)/Grant(s): RTOP 506-41-41-01
Report No.(s): NONP–NASA–VT–92–125097; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video (8 min., color, sound, VHS), animation depicts the inertial oscillation of a new mathematical model ('vertical rotating draft') for spinning up a single supercell storm. The oscillation consists of a long quiescent phase when the draft is large in diameter and rotates anticyclonically and a short intense phase when the draft is small and cyclonic. During the intense phase, the rotating draft resembles a supercell. The physical basis for the oscillation is depicted by tracking air parcels in the draft as they move along inertial circles (projected on a horizontal plane), where the horizontal pressure gradient is zero and the Coriolis force balances the centrifugal force. A side view of the oscillation shows that contraction and expansion are linked, respectively, to buoyantly driven compressible downdraft and updraft. An aerial view tracks the draft as it moves above the surface of the Earth and turns to the right during the intense phase. Radar echoes from a supercell storm are superimposed for comparison. The data appear to support only the intense phase. A critical experiment would measure

the predominantly downward flow that theoretically occurs before the right turn in a supercell track and causes contraction and spin-up.
CASI
Atmospheric Circulation; Atmospheric Models; Computerized Simulation; Mathematical Models; Oscillations; Rotation; Thunderstorms; Vertical Air Currents

19940010753 NASA Marshall Space Flight Center, Huntsville, AL, USA
Mesoscale lightning
Apr 1, 1989; In English; 2 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190453; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape addresses ongoing lightning research and how data is valuable to upcoming projects.
CASI
Lightning; Mesoscale Phenomena

19940010853 NASA, Washington, DC, USA
Wind shear and heavy rain
Jul 1, 1989; In English; 2 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190250; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document looks at research on countering the effects of wind shear and heavy rain situations on flight stability.
CASI
Aerodynamic Stability; Aircraft Stability; Rain; Rainstorms; Wind Shear

19940010957 NASA Ames Research Center, Moffett Field, CA, USA
Venus lightning
Jul 1, 1990; In English; 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190442; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This document presents scenes of earth lightning with dramatic sound, views of Venus clouds rotating, and diagrams of Venusian weather.
CASI
Cloud Cover; Lightning; Thunderstorms; Venus (Planet); Venus Clouds; Weather

19940029044 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Hurricane Andrew mission
Sep 21, 1992; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12925; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains how NASA used their information on space development technology to assist in hurricane relief efforts.
CASI
Aerospace Engineering; Disasters; Hurricanes; Technology Utilization

48
OCEANOGRAPHY

Includes the physical, chemical and biological aspects of oceans and seas; ocean dynamics, and marine resources. For related information see also 43 Earth Resources and Remote Sensing.

19940010808 NASA Goddard Space Flight Center, Greenbelt, MD, USA
Coastal zone color scanner: Nimbus 7
May 1, 1989; In English; 15 min. 10 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190388; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape is a soundless presentation showing the global ocean color for scientific purposes. The tape makes excellent B-roll for use in editing.
CASI
Coastal Zone Color Scanner; Nimbus 7 Satellite; Oceans; Water Color

19940010876 NASA, Washington, DC, USA
Ocean wave study
May 1, 1991; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190418; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An international study of waves in the Atlantic Ocean is explained. The study is to determine the effect of the waves on the transfer of energy between sea and air.
CASI
Air Water Interactions; Energy Transfer; Water Waves

51
LIFE SCIENCES (GENERAL)

Includes general research topics related to plant and animal biology (non–human); ecology; microbiology; and also the origin, development, structure, and maintenance, of animals and plants in space and related environmental conditions. For specific topics in life sciences see categories 52 through 55.

19940010762 NASA, Washington, DC, USA
Plant research
Apr 1, 1985; In English; 3 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190462; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation addresses Stennis research on the use of plants for the purification of water and air for living in space and on Earth.
CASI
Air Purification; Plants (Botany); Water Treatment

19940010905 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 crew with student experiment
Feb 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190342; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
John Vellinger, student experimenter, and Mark Deuser, Kentucky Fried Chicken Sponsor, are shown explaining the Chicken Embryo experiment to the crew.
CASI
Chickens; Embryos; Experiment Design; Spaceborne Experiments; Students

19940029058 NASA, Washington, DC, USA
Assisting wine growers
Jan 1, 1993; In English; 6 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12940; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video documents efforts at NASA Ames Research Center to assist wine growers in the Napa valley in their fight against a root parasite which is destroying millions of dollars worth of grape crops. NASA researchers are using airborne scanners and remote sensing equipment to detect the parasite before it becomes entrenched, so that growers can treat the harvest to resist infestation.
CASI
Crop Vigor; Infestation; Parasites; Remote Sensing; Vineyards

19940029264 NASA John F. Kennedy Space Center, Cocoa Beach, FL, USA
KSC wildlife show
Jan 1, 1994; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12936; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video highlights footage of the many forms of animal and plant life that inhabit the environs surrounding KSC. Shown are birds, alligators, butterflies, and plants as they react to shuttle launches and other activities eminating from KSC.
CASI
Cape Kennedy Launch Complex; Environment Effects; Habitats; Spacecraft Launching; Wildlife

19950023871 Interface Video Systems, Inc., Washington, DC, USA
Life sciences program
Jan 1, 1995; In English; 17 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46006; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This Life Science Program video examines the variety of projects that study both the physiological and psychological impacts on astronauts due to extended

space missions. The hazards of space radiation and microgravity effects on the human body are described, along with these effects on plant growth, and the performance of medical procedures in space. One research technique, which is hoped to provide help for future space travel, is the study of aquanauts and their life habits underwater.
CASI
Aerospace Medicine; Gravitational Effects; Gravitational Physiology; Life Sciences; Long Duration Space Flight; NASA Space Programs; Psychological Factors; Radiation Effects; Space Missions

20010028790 Indiana Univ.-Purdue Univ., Dept. of Geology, Indianapolis, IN USA
Dino Fest
Rosenberg, Gary D., Editor, Indiana Univ.-Purdue Univ., USA; Wolberg, Donald L., Editor, Indiana Univ.-Purdue Univ., USA; Spencer, Randall S., Editor, Paleontological Society, USA; 1994; 512p; In English, 24-26 Mar. 1994, Indianapolis, IN, USA; Sponsored by Paleontological Society, USA; Videotape: 2 hours playing time, in color, with sound
Contract(s)/Grant(s): NAG3-11657ept-7
Report No.(s): NONP–NASA–VT–1997087409; No Copyright; Avail: CASI; A22, Hardcopy; A04, Microfiche; V04, Videotape-VHS
This document and videotape represent the proceedings of the first Dinofest conference, which was unprecedented in bringing together exhibits of dinosaurs and other fossils and attracting many of the world's leading paleontologists and science educators, students and the public. This first Dinofest consisted of scores of exhibits that included live and fossil plants, invertebrates and vertebrates. Lasting three weeks, the event concluded with a three-day symposium, providing dinosaur experts from around the country a forum to discuss their research and ideas with the public and other scientists. The document presents the talks of many of the scientists. The videotape is from an interactive television broadcast relayed by a NASA satellite that enabled children at remote locations to ask questions of a panel of dinosaur experts, literally reaching an audience around the world.
CASI
Conferences; Fossils; Paleobiology; Paleontology; Reptiles

52
AEROSPACE MEDICINE

Includes the biological and physiological effects of atmospheric and space flight (weightlessness, space radiation, acceleration, and altitude stress) on the human being; and the prevention of adverse effects on those environments. For psychological and behavioral effects of aerospace environments see 53 Behavioral Science. For the effects of space on animals and plants see 51 Life Sciences.

19940010777 NASA, Washington, DC, USA
Cool suit
Feb 1, 1988; In English; 3 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190437; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains how a boy born with no sweat glands now lives a relatively normal life.
CASI
Chronic Conditions; Cooling Systems; Diseases; Disorders; Medical Equipment; Suits; Sweat; Temperature Control

19940010780 NASA, Washington, DC, USA
New insulin pump
Feb 1, 1988; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190440; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details the Programmable Implant Medicine Monitoring System.
CASI
Endocrinology; Insulin; Medical Equipment; Medical Science; Pumps

19940010798 NASA Goddard Space Flight Center, Greenbelt, MD, USA
GSFC Fun Run
Oct 1, 1988; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190385; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows Goddard's commitment to it's employees physical well-being by highlighting the Spring 1988 Goddard Fun Run.
CASI
Physical Exercise; Recreation

19940010836 NASA, Washington, DC, USA
Space adaptation
May 1, 1991; In English; 3 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190399; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape discusses space adaptation syndrome and a training simulator that may help astronauts adjust to microgravity before space flight.
CASI
Astronaut Training; Space Adaptation Syndrome; Training Simulators

19940010839 NASA, Washington, DC, USA
Laser artery repair
Apr 1, 1985; In English; 3 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190402; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape demonstrates the capabilities of the excimer laser and the angioscope for treating heart disease.
CASI
Arteries; Excimer Lasers; Heart Diseases; Surgery

19940010895 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living well in space: Monitoring environment
Jul 1, 1989; In English; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190334; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Environmental Health Systems (EHS). Progress in experiments concerning water quality, toxicology, microbiology, and radiation are addressed.
CASI
Environmental Monitoring; Health; Space Habitats; Spacecraft Environments

19940010896 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living well in space: Ensuring crew capability
Jul 1, 1989; In English; 7 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190335; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Exercise Countermeasure Facility (ECF). The ECF provides a comprehensive exercise program to allow astronauts to remain physically fit during extended stays in space. Featured are the Exercise Development Laboratory, the Exercise Physiology Laboratory, the Anthromorphic and Biomechanical Laboratory, and the Artificial Intelligence Laboratory.
CASI
Aerospace Medicine; Astronauts; Biodynamics; Countermeasures; Exercise Physiology; Exobiology; Gravitational Physiology; Physical Exercise; Physical Fitness; Physiological Effects

19940010897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living well in space: Clinical care challenge
Jul 1, 1989; In English; 9 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190336; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the Health Maintenance Facility (HMF). The HMF provides inflight medical care including prevention, diagnosis, and care during

transport if the patient must be evacuated. A comparison to medical services found in a large hospital is used to describe the HMP's subsystems.
CASI
Aerospace Medicine; Aerospace Safety; Clinical Medicine; Health; Medical Equipment; Medical Services; Space Stations

19940010908 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 crew training for lower body negative pressure unit and AFE
Nov 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190272; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Dunbar, Ivins, and Low are shown preparing for the checkouts of the Lower Body Negative Pressure (LBNP) and American Flight Echocardiograph (AFE) tests. Dunbar gets into the LBNP suit, while technicians look on. Experiments on Dunbar are conducted while other crew members and technicians record data.
CASI
Astronaut Training; Astronauts; Echocardiography; Lower Body Negative Pressure; Physiological Tests; Spacecrews; Weightlessness Simulation

19940010984 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Answering the space medicine challenge
Aug 1, 1988; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190308; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The development of the Space Station Health Maintenance Facility (HMF) is featured. The HMF will provide necessary inflight medical care, including prevention, diagnosis, treatment, and care during transport if the patient must be evacuated from Space Station.
CASI
Aerospace Medicine; Health; Space Stations; Spacecrews

19950004138 NASA, Washington, DC, USA
Spacelab Life Sciences–1
Aug 1, 1991; In English; 3 min. 53 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23142; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STS-40, carrying Spacelab Life Sciences-1, was the first dedicated to study the human body in microgravity. Experiments regarding adaptation to space and readaptation to the world of gravity are discussed in this video. Spacelab is another precursor to long-term science aboard the space station.
CASI
Bioastronautics; Space Adaptation Syndrome; Spaceborne Experiments; Spacelab

19950004139 NASA, Washington, DC, USA
Aircraft to medicine
Dec 1, 1991; In English; 3 min. 5 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23143; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video discusses how the technology of computer modeling can improve the design and durability of artificial joints for human joint replacement surgery. Also, ultrasound, originally used to detect structural flaws in aircraft, can also be used to quickly assess the severity of a burn patient's injuries, thus aiding the healing process.
CASI
Aerospace Technology Transfer; Computer Aided Design; Medical Science; Ultrasonic Tests

19950004150 NASA Lewis Research Center, Cleveland, OH, USA
Telemedicine Spacebridge
May 1, 1994; In English; 6 min. 44 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23165; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is an overview on NASA's Telemedicine Spacebridge Project, which lets US doctors consult with Russian clinicians thousands of miles away by demonstration of the feasibility of live, two-way, full-bandwidth video as a medical tool.
LeRC
Clinical Medicine; International Cooperation; Medical Electronics; Medical Equipment; Medical Services; Teleconferencing; Video Communication; Video Equipment

19990116193 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Robotic Assisted Microsurgery – RAMS FY'97
Oct. 15, 1997; In English; Videotape: 5 min., 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999202515; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

JPL and Microdexterity Systems collaborated to develop new surgical capabilities. They developed a Robot Assisted Microsurgery (RAM) tool for surgeons to use for operating on the eye, ear, brain, and blood vessels with unprecedented dexterity. A surgeon can hold the surgical instrument with motions of 6 degrees of freedom with an accuracy of 25 microns in a 70 cu cm workspace. In 1996 a demonstration was performed to remove a microscopic particle from a simulated eyeball. In 1997, tests were performed at UCLA to compare telerobotics with mechanical operations. In 5 out of 7 tests, the RAM tool performed with a significant improvement of preciseness over mechanical operation. New design features include: (1) amplified forced feedback; (2) simultaneous slave robot instrumentation; (3) index control switch on master handle; and (4) tool control switches. Upgrades include: (1) increase in computational power; and (2) installation of hard disk memory storage device for independent operation and independent operation of forceps. In 1997 a final demonstration was performed using 2 telerobotics simultaneously in a microsurgery suture procedure to close a slit in a thin sheet of latex rubber which extended the capabilities of microsurgery procedures. After completing trials and demonstrations for the FDA the potential benefits for thousands of operations will be exposed.
CASI
Telerobotics; Surgical Instruments; Robotics; Degrees of Freedom; Surgery; Robots

53
BEHAVIORAL SCIENCES

Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

19940010764 NASA, Washington, DC, USA
Teacher in space
Dec 1, 1985; In English; 4 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190464; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation covers the Teacher in Space program from the competition and selection process to the training of Christa McAuliffe and Barbara Morgan.
CASI
Astronauts; Education; Instructors; NASA Programs

19940011026 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts number 1
Sep 1, 1988; In English; 28 min. 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190225; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The story of the selection and training of the seven Mercury astronauts is presented. A re-release of US Project Mercury.
CASI
Astronaut Training; Mercury Project; Personnel Selection

20010116355 NASA Johnson Space Center, Houston, TX USA
Expedition 4 Crew Training Clip
Nov. 15, 2001; In English; Videotape: 40 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001194278; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video shows clips of the Expedition 4 crewmembers, Commander Yuri Onufrienko and Flight Engineers Carl Walz and Daniel Bursch, during various parts of their training, including T-38 operations at Ellington, training in the virtual reality laboratory, Hydrolab training in Russia, International Space Station (ISS) food selection, and ISS Hab equipping and procedures in the Space Station Mockup and Test/Training Facility (SSMTF).
CASI
Spacecrews; Astronaut Training; International Space Station

54
MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human factors engineering; bionics, man–machine, life support, space suits and protective clothing. For related information see also 16 Space Transportation and 52 Aerospace Medicine..

19940009128 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 Magellan IUS/EVA training in WETF
Apr 1, 1989; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185315; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Thagard and Lee suit up and enter the WETF to practice working the Magellan mockup in a zero-g environment.
Author
Extravehicular Activity; Inertial Upper Stage; Magellan Project (NASA); Microgravity; Space Shuttle Mission 61-A; Space Shuttle Payloads; Weightlessness Simulation

19940009138 NASA, Washington, DC, USA
New prosthetic devices
May 1, 1991; In English; 3 min. 36 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185322; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Using robotic techniques, NASA researchers have developed end-effectors designed to meet individual needs of hand and below the elbow amputees that are more efficient than the traditional hook.
Author
End Effectors; Prosthetic Devices; Robotics

19940009142 NASA, Washington, DC, USA
Recycling in space
May 1, 1991; In English; 3 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185325; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
NASA's effort to provide a completely enclosed life support system that offers food and recycled air, water, and waste for long-duration space travel or settlements is explained.
Author (revised)
Closed Ecological Systems; Environmental Engineering; Long Duration Space Flight; Recycling

19940010317 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 EVA payload training in WETF
Apr 1, 1990; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190289; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Footage showing astronauts Lounge and Hoffman donning EVA suits while astronaut Durrance watches is presented. The footage also shows Lounge and Hoffman working on an ASTRO-1 mockup in the WETF.
Author (revised)
Astro Missions (STS); Astronaut Training; Extravehicular Activity; Payloads; Spacecrews; Weightlessness Simulation

19940010721 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 crew training: EMU walk through and EVA prep and post
Apr 1, 1990; In English; 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190285; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows astronauts Hoffman, Gardner, and Lounge donning the Extravehicular Mobility Unit (EMU) and performing checks on the system.
CASI
Astronaut Training; Extravehicular Activity; Extravehicular Mobility Units

19940010722 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–35 Crew training: Bailout in CCT, firefighting, TAGS class and bailout in WETF
Apr 1, 1990; In English; 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190286; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Several aspects of crew training are shown including bailout exercises from the CCT and in the Weightless Environment Training Facility.
CASI
Astronaut Training; Bailout; Egress; Weightlessness Simulation

19940010751 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Brown, Mark
Jul 1, 1989; In English; 8 min. 20 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190302; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Mark Brown is shown during ASCAN training programs including parachute and classroom instruction.
CASI
Astronaut Training; Astronauts

19940010812 NASA, Washington, DC, USA
Supporting life in space
Apr 1, 1989; In English; 3 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190391; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape examines NASA research regarding the growing of plants for food during long-duration space travel. The primary focus is on the Controlled Ecological Life Support System (CELLS).
CASI
Consumables (Spacecrew Supplies); Food Production (In Space); Long Duration Space Flight

19940010813 NASA, Washington, DC, USA
Ancient skills: Modern use
Nov 1, 1988; In English; 2 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190392; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows how Navajo Indians are involved in making the spacesuits of the future.
CASI
American Indians; Space Suits

19940010830 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–30 EVA prep in CCT: Grabe, Lee, and Thagard
Apr 1, 1989; In English; 5 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190370; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Grabe, Thagard, and Lee practice donning extravehicular activity (EVA) suits while in the CCT.
CASI
Astronaut Training; Space Shuttle Missions; Space Suits

19940010832 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 pre–launch and post–landing egress
Mar 1, 1989; In English; 18 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190372; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video shows crew emergency egress training. It includes practice after being hoisted to the ceiling and descending a rope.
CASI
Astronaut Training; Crew Procedures (Inflight); Crew Procedures (Preflight); Egress; Space Shuttles

19940010857 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–37 CETA evaluation with Ross
Jul 1, 1990; In English; 5 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190292; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows Astronaut Ross donning an EVA suit and performing various tasks on the Crew and Equipment Translation Aide (CETA) equipment.
CASI
Astronaut Locomotion; Astronaut Maneuvering Equipment; Extravehicular Activity; Orbital Servicing; Space Station Structures; Space Technology Experiments; Space Tools

19940010886 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 final bench review
Oct 1, 1989; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190261; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Space Shuttle crew is shown looking through equipment they will carry into orbit, including clothing, personal effects, and camera.
CASI
Space Shuttle Orbiters; Spacecrews

19940010887 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 crew bailout exercise in CCT
Aug 1, 1989; In English; 10 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190262; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows crews practicing bailout procedures in the CCT.
CASI
Astronaut Training; Bailout; Space Shuttle Missions

19940010888 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–34 Chang–Diaz and E. Baker during Galileo contingency training in WETF
Sep 1, 1989; In English; 16 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190263; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Chang-Diaz and Baker are shown donning suits for submersion in the Weightless Environment Training Facility (WETF). Once in the water, they work on the Galileo mockup.
CASI
Astronaut Training; Crew Procedures (Inflight); Weightlessness Simulation

19940010889 NASA, Washington, DC, USA
Firefighters breathing system
Apr 1, 1989; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190409; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The improvement of protective gear for fire fighters is presented, including the breathing system.
CASI
Breathing Apparatus; Protective Clothing

19940010898 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
International food research project
Oct 1, 1989; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190337; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Dr. Selina Ahmed, an associate professor of Human Nutrition, explains the purpose of the international Food Research Project to food tasters.
CASI
Food; International Cooperation; Nutrition

19940010902 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 EVA prep in FFT
Jan 1, 1989; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190341; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Blaha, Springer, and Bagian are shown donning suits in the FFT. Blaha runs through checklists while the other two suit up in the airlock.
CASI
Astronauts; Extravehicular Activity; Space Shuttle Missions; Space Transportation System Flights

19940010904 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 LDEF EVA training in WETF with Low and Dunbar
Nov 1, 1989; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190270; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Low and Dunbar are shown entering the Weightless Environment Training Facility to perform tasks they might be called on to do if extravehicular activity were required during their mission to retrieve the Long Duration Exposure Facility.
CASI
Astronaut Training; Astronauts; Extravehicular Activity; Long Duration Exposure Facility; Payload Retrieval (STS); Spacecrews; Weightlessness Simulation

19940010909 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 crew food tasting in building 45
Jan 1, 1989; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190345; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown tasting food that will be served on the Space Shuttle.
CASI
Consumables (Spacecrew Supplies); Food; Spacecrews; Taste

19940010910 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–32 bailout training in WETF
Dec 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190273; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is shown practicing water survival techniques in the Weightless Environment Training Facility in case of a bailout during the launch or landing.
CASI
Astronaut Training; Bailout; Water Landing

19940010912 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–29 crew bailout in WETF
Feb 1, 1989; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190346; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The crew is donning life vests and being dropped into the WETF. Once in the water, the crew is trained on water survival techniques.
CASI
Astronaut Training; Bailout; Marine Environments; Protective Clothing; Spacecrews; Survival; Vests; Water

19940010914 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–28 Adamson and Brown EMU walk through
Jul 1, 1989; In English; 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190347; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Adamson and Brown are shown working on EMU suit, donning EVA gear, and entering vacuum chamber.
CASI
Astronaut Training; Astronauts; Extravehicular Activity; Extravehicular Mobility Units; Spacecrews

19940010915 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 emergency egress training
Nov 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190322; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The STS-33 crew is shown donning flight survival gear, then entering the

CCT for bailout exercises. After completion of the exercises in the CCT, the bailout procedures are practiced in the FFT.
CASI
Astronaut Training; Bailout; Egress

19940010917 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN land survival training
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190324; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video tape shows astronaut candidates training at Fairchild AFB with signal flares, setting up tents, making fires, fishing, and signaling a helicopter with mirrors and radios.
CASI
Astronaut Training; Survival

19940010918 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
1990 ASCAN ground egress/parasail
Feb 1, 1991; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190325; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video tape shows astronaut candidates practicing ground egress and parachute landing procedures.
CASI
Astronaut Training; Egress; Parachute Descent

19940010919 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Crew escape certification test
Aug 1, 1988; In English; 2 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190327; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape shows the Shuttle hatch jettison test at Rockwell facilities. The video also shows a Shuttle escape pole deployment test from a NASA aircraft, and an emergency egress test performed by a volunteer Navy parachutist using the pole and a parachute escape system.
CASI
Egress; Escape Systems; Hatches; Jettisoning; Space Shuttle Orbiters

19940010928 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 EMU and RMS contingency training
Dec 1, 1988; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190348; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video shows astronauts donning their EMU suits and Astronauts Shepard and Ross training in the WETF on the RMS, which will not come down.
CASI
Astronaut Training; Astronauts; Extravehicular Mobility Units; Spacecrews

19940010929 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–33 Carter and Thorton during WETF activities
Nov 1, 1989; In English; 8 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190268; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts Carter and Thorton are shown suiting up for work in the WETF (Weightless Environment Training Facility). (The payload mockup shown is not related to the STS-33 mission. It is a mockup of the Upper Atmosphere Research Satellite (UARS), which is scheduled to fly in the early 1990's.)
CASI
Astronaut Training; Astronauts; Space Flight Training; Spacecrews; Weightlessness Simulation

19940010931 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew post–insertion deorbit–prep in CCT
Nov 1, 1988; In English; 14 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190350; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown donning harness backpacks and suits for post-insertion activities in the CCT. Once on the CCT middeck, astronauts take off suits and practice stowing seats.
CASI
Astronauts; Space Shuttle Missions; Space Transportation System Flights; Spacecrews

19940010933 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–27 crew fire training and glove molding
Nov 1, 1988; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190352; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown during fire training exercises and space suit glove molding.
CASI
Astronaut Training; Casting; Fire Fighting; Fires; Gloves; Space Suits; Spacecrews

19940010962 NASA, Washington, DC, USA
Food for space
Jan 1, 1985; In English; 3 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190466; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explores the food preparation and selection over the years of space flight.
CASI
Consumables (Spacecrew Supplies); Food; Preparation

19940010968 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–31 Hubble space telescope contingency training in WETF with McCandless and Sullivan
Feb 1, 1989; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190277; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronauts McCandless adn Sullivan are shown suiting up for training with a telescope mockup in the Weightless Environment Training Facility (WETF).
CASI
Astronaut Training; Space Suits; Weightlessness Simulation

19940010980 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–38 crew training: Habitation equipment procedures, bailout in CCT, 70mm photo class, EVA prep and post, and firefighting
Jul 1, 1990; In English; 20 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190291; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Several aspects of crew training are shown, including habitation equipment procedures and bailout procedures (both in CCT), 70mm photo class, EVA prep and post, and firefighting.
Author (revised)
Astronaut Training; Bailout; Extravehicular Activity; Fire Fighting; Space Habitats; Spacecrews

19940010981 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Adamson, Jim
Jul 1, 1989; In English; 11 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190304; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Jim Adamson is shown during ASCAN training programs including T-38 training, parachute and liferaft training, and classroom instruction.
CASI
Parachutes; T-38 Aircraft

19940010987 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–37 astronauts Ross and Apt during CETA hardware checkout
Mar 1, 1990; In English; 7 min. 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190293; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronauts Ross and Apt are shown checking out Crew and Equipment Translation Aide (CETA) equipment.
CASI
Astronaut Maneuvering Equipment; Checkout; Extravehicular Activity; Space Station Structures; Space Technology Experiments; Space Tools

19940010989 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–36 crew EVA prep and post–training, bailout exercises, final bench review
Feb 1, 1990; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190295; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The crew is shown in the CCT airlock checking out EVA equipment and practicing bailout exercises. They are also shown looking over equipment they will carry into space including medical equipment, clothing, and cameras.
CASI
Air Locks; Astronaut Training; Extravehicular Activity; Space Flight Training; Space Shuttle Missions; Space Suits; Space Transportation System Flights; Spacecraft Equipment; Spacecrews

19940010997 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 crew clothing, glove molding, and personal hygiene
Jul 1, 1988; In English; 19 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190317; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This videotape shows the crew during various phases of flight clothing fit checks, space suit glove molding, and selection of personal hygiene articles for use onboard the Shuttle.
CASI
Space Suits; Space Transportation System Flights; Spacecrews

19940011034 NASA, Washington, DC, USA
Space suit design
Jun 1, 1987; In English; 3 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190468; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows how space suits evolved to those being designed for the Space Station Freedom.
CASI
Design Analysis; Space Suits

19940011041 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mark 111 suit test evaluation in WETF with Jerry Ross
Oct 1, 1989; In English; 7 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190301; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Astronaut Jerry Ross tests the new Mark 111 spacesuit in the WETF. The Mark 111 could be used as the main spacesuit on the Space Station Freedom.
CASI
Design Analysis; Space Suits

19950016854 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Living in space
Brown, Ray, editor, NASA Lyndon B. Johnson Space Center, USA; Jan 1, 1993; In English; Its Liftoff to Learning Series; 9 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43939; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
In this educational video from the 'Liftoff to Learning' series, astronauts from the STS-56 Mission (Ken Cockell, Mike Foale, Ellen Ochoa, Steve Oswald, and Ken Cameron) explain and show through demonstrations how microgravity affects the way astronauts live onboard the Space Shuttle, and how these same daily habits or processes differ on Earth. A tour of the Space Shuttle is given, including the sleeping compartments, the kitchen area, the storage compartments, and the Waste Collection System (or WCS, as they call it). Daily habits (brushing teeth, shampooing hair and bathing, eating,...) are explained and actively illustrated, along with reasons of how these applications differ from their employment on Earth
CASI
Aircraft Compartments; Crew Workstations; Earth Gravitation; Education; Gravitational Effects; Microgravity; Space Shuttle Missions; Spaceborne Experiments; Spacecraft Modules

19950022759 Lockheed Engineering and Sciences Co., Washington, DC, USA
Lockheed Stabilizer System for space exercise equipment
Feb 25, 1992; In English; Sponsored by NASA, Washington; 5 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–95–46004; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Through the use of computer animation, the Lockheed Stabilizer System for spaceborne exercise equipment is shown. A bicycle mounted onto a shuttle floor demonstrates the range of vibrations that occur without the Lockheed Stabilizer. There is animation of the stabilizer system's tests and normal protein crystal growth in microgravity environments. Actual short clips of astronauts exercising in space are also presented.
CASI
Computer Animation; Control Stability; Control Systems Design; Microgravity; Physical Exercise; Stabilized Platforms; Vibration Effects

20010029212 NASA Johnson Space Center, Houston, TX USA
1995 ASCAN Training: Land Survival
Jan. 01, 1995; In English; Videotape: 61 min. 28 sec. playing time, in color, with sound; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Footage shows astronaut candidates during land survival training, where they are seen performing such activities as constructing shelters, making nets, and finding food.
CASI
Astronaut Training; Survival

20010029214 NASA Johnson Space Center, Houston, TX USA
ASCAN Training: Egress and Parasail Training
Jan. 01, 1995; In English; Videotape: 49 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001041439; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Footage shows astronaut candidates during emergency egress and parasail training, performing such activities as practicing seat ejection procedures, power line landing, and parachute landing and release.
CASI
Astronaut Training; Egress; Parachute Descent

20010059253 NASA Lewis Research Center, Cleveland, OH USA
Moonwalking Series, Episode 2: Adapting to a Space Environment
[2001]; In English; Videotape: 29 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001095020; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This episode (second in a four-part series) shows the procedures Apollo operators used in order to make sure the astronauts would be able to survive in outer space, namely testing man's limitations and preferences (atmospheric pressure, temperature range, breathing gas, acceleration protection) and adapting the Columbia Module to account for these limitations. This show explains the function of the different stages of the moon rocket, i.e., how the stages separate and what becomes of them. We pick up the moonwalk story by looking back at some of the old classic space films that were a Hollywood perspective on future space travel.
Author (revised)
Aerospace Environments; Astronauts; Moon; Astronaut Training; Extravehicular Activity

55
EXOBIOLOGY

Includes astrobiology; planetary biology; and extraterrestrial life. For the biological effects of aerospace environments on humans see 52 Aerospace medicine; on animals and plants see 51 Life Sciences. For psychological and behavioral effects of aerospace environments see 53 Behavioral Science.

19940027883 NASA Ames Research Center, Moffett Field, CA, USA
The quest for contact
Feb 1, 1992; In English; 32 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9978; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video details the history and current efforts of NASA's Search for Extraterrestrial Intelligence program. The video explains the use of radiotelescopes to monitor electromagnetic frequencies reaching the Earth, and the analysis of this data for patterns or signals that have no natural origin. The video presents an overview of Frank Drake's 1960 'Ozma' experiment, the current META experiment, and planned efforts incorporating an international Deep Space Network of radiotelescopes that will be trained on over 800 stars.
CASI
Deep Space Network; Extraterrestrial Intelligence; Project Seti; Radio Telescopes

60
COMPUTER OPERATIONS AND HARDWARE

Includes hardware for computer graphics, firmware and data processing. For components see 33 Electronics and Electrical Engineering. For computer vision see 63 Cybernetics, Artificial Intelligence and Robotics.

19940009136 NASA Ames Research Center, Moffett Field, CA, USA
Cray Y–MP
Nov 1, 1988; In English; 12 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185321; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows the installation of the Cray Y-MP, a computer four times faster than any other computer at Ames. Computer room scenes, aeronautical and space applications, and other non-aerospace applications are also included.
Author (revised)
Cray Computers; Research Facilities

19940010755 NASA Marshall Space Flight Center, Huntsville, AL, USA
NASA Spacelink computer
May 1, 1989; In English; 2 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190455; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video tape introduces Spacelink, a computer resource that educators and students can access. The purpose of Spacelink is to stimulate interest in math and science.
CASI
Computers; Education; Information Systems

19940010982 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Freedom system Text and Graphics Systems (TAGS)
Apr 1, 1989; In English; 1 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190306; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Text and Graphics Systems (TAGS) is a high-resolution facsimile system that scans test or graphics material and converts the analog SCAN data into serial digital data. This video shows the TAGS in operation.
CASI
Analog Data; Character Recognition; Computer Graphics; Digital Data

19940014488 NASA, Washington, DC, USA
The world's most powerful computer
Oct 1, 1986; In English; 2 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198216; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The use of the Cray 2 supercomputer, the fastest computer in the world, at ARC is detailed. The Cray 2 can perform 250 million calculations per second and has 10 times the memory of any other computer. Ames researchers are shown creating computer simulations of aircraft airflow, waterflow around a submarine, and fuel flow inside of the Space Shuttle's engines. The video also details the Cray 2's use in calculating airflow around the Shuttle and its external rockets during liftoff for the first time and in the development of the National Aero Space Plane.
CASI
Computerized Simulation; Cray Computers; Research Facilities; Supercomputers

19940027310 NASA Lewis Research Center, Cleveland, OH, USA
The vision machines
Apr 1, 1993; In English; 22 min. playing time, in color with sound
Report No.(s): NONP–NASA–VT–94–9957; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The thoughts of computer scientists at LeRC on the direction that computer development is taking and future implications are explored. Experts discuss the coming information superhighway and technologies such as fiber optics and neural networks. The impact of future computers on education, laboratory research, telecommunications, and science visualization.
CASI
Communication Networks; Computer Networks; Fiber Optics; Multimedia; Neural Nets

61
COMPUTER PROGRAMMING AND SOFTWARE

Includes software engineering, computer programs, routines, algorithms, and specific applications, e.g., CAD/CAM. For computer software applied to specific applications, see also the associated category.

19940009163 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Six degree of freedom
Nov 1, 1990; In English; 7 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185310; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This animated clip shows operations of the Six Degree of Freedom (DOF) computer during a simulated mission. The clip is intercut with live video of a shuttle crew 'docking' with Space Station Freedom.
Author (revised)
Computerized Simulation; Degrees of Freedom; Space Shuttle Orbiters; Spacecraft Docking

19940032011 NASA Langley Research Center, Hampton, VA, USA
EM–ANIMATE: A computer program for displaying and animating electromagnetic near–field and surface–current solutions: Video supplement to NASA Technical Memorandum 4539
Hom, Kam W., NASA Langley Research Center, USA; May 1, 1994; In English; 6 min., color, sound, VHS
Contract(s)/Grant(s): RTOP 505-59-70-03
Report No.(s): NONP–NASA–VT–94–12970; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this video, several examples of electromagnetic field and surface-current animation sequences are shown to demonstrate the visualization capabilities of the EM-ANIMATE computer program. These examples show the animation of total and scattered electric near fields from test bodies of a flat plate, a corner reflector, and a sphere. These test cases show the electric-field behavior caused by different scattering mechanisms through the animation of electromagnetic data from the EM-ANIMATE routine.
Author (revised)
Animation; Applications Programs (Computers); Computer Graphics; Computerized Simulation; Electromagnetic Fields; Electromagnetic Scattering; Near Fields; Scientific Visualization; Surface Properties

19950004143 NASA, Washington, DC, USA
Virtual reality
Dec 1, 1991; In English; 3 min. 32 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23148; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation discusses how virtual reality enables scientists to 'explore' other worlds without leaving the laboratory. The applicability of virtual reality for scientific visualization is also discussed.
CASI
Computerized Simulation; Virtual Reality

19950023827 NASA Ames Research Center, Moffett Field, CA, USA
Telepresence media resource tape
Jan 31, 1992; In English; Sponsored by NASA, Washington; 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–57872; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Dr. Michael McGreevey (NASA's Ames Research Center) explains what virtual reality is and how NASA uses this concept. Computer animation of different planets using virtual reality is shown. One Ames research tool, the Virtual Wind Tunnel allows air flow to be studied inside the tunnel from any conceivable location. Dr. Carol Stoker (NASA's Ames Research Center) comments on Telepresence, one form of virtual reality.
CASI
Computerized Simulation; Man Machine Systems; Motion Simulation; Teleoperators; Virtual Reality; Wind Tunnels

19960028547 NASA Johnson Space Center, Houston, TX USA
Images of Earth and Space: The Role of Visualization in NASA Science
Mar. 06, 1996; In English; Videotape: 17 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–96–1996060600; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Fly through the ocean at breakneck speed. Tour the moon. Even swim safely in the boiling sun. You can do these things and more in a 17 minute virtual journey through Earth and space. The trek is by way of colorful scientific visualizations developed by the NASA/Goddard Space Flight Center's Scientific Visualization Studio and the NASA HPCC Earth and Space Science Project investigators. Various styles of electronic music and lay-level narration provide the accompaniment.
CASI
Scientific Visualization; Computational Fluid Dynamics; Computerized Simulation; Education

63
CYBERNETICS, ARTIFICIAL INTELLIGENCE AND ROBOTICS

Includes feedback and control theory, information theory, machine learning, and expert systems. For related information see also 54 Man/System Technology and Life Support.

19940011042 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Programmable Remapper project
Jul 1, 1990; In English; 23 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190305; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows how the Remapper Project helps with many problems including vision problems. It shows the Remapper in action as it tracks several objects around the moon. The video is narrated by Dr. Richard Juday, Robotic Vision, Manager at the Johnson Space Center.
CASI
Computer Vision; Image Resolution; Robot Sensors; Tracking (Position)

64
NUMERICAL ANALYSIS

Includes iteration, differential and difference equations, and numerical approximation.

19960001040 California Inst. of Tech., Irvine, CA, USA
The story of pi
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1989; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 26 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–68010; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The early history and the uses of the mathematical notation - pi - are presented through both film footage and computer animation in this 'Project Mathematics' series video. Pi comes from the first letter in the Greek word for perimeter. Archimedes, and early Greek mathematician, formulated the equations for the computation of a circle's area using pi and was the first person to seriously approximate pi numerically, although only to a few decimal places. By 1985, pi had been approximated to over one billion decimal places and was found to have no repeating pattern. One use of pi is the application of its approximation calculation as an analytical tool for determining the accuracy of supercomputers and software designs.
CASI
Applications of Mathematics; Computation; Computer Animation; Histories

19960001064 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 3 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1994; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 30 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–67470; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics' series video, the addition formulas of sines and cosines are explained and their real life applications are demonstrated. Both film footage and computer animation is used. Several mathematical concepts are discussed and include: Ptolemy's theorem concerned with quadrilaterals; the difference between a central angle and an inscribed angle; sines and chord lengths; special angles; subtraction formulas; and a application to simple harmonic motion. A brief history of the city Alexandria, its mathematicians, and their contribution to the field of mathematics is shown.
Author
Angles (Geometry); Cosine Series; Simple Harmonic Motion; Sine Series; Theorems; Trigonometry

19960001065 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 2 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1993; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 29 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–67471; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The Law of Sines and the Law of Cosines are introduced and demonstrated in this 'Project Mathematics' series video using both film footage and computer animation. This video deals primarily with the mathematical field of Trigonometry and explains how these laws were developed and their applications. One significant use is geographical and geological surveying. This includes both the triangulation method and the spirit leveling method. With these methods, it is shown how the height of the tallest mountain in the world, Mt. Everest, was determined.
Author
Cosine Series; Geography; Geological Surveys; Laws; Planetary Mapping; Sine Series; Trigonometry

19960001066 California Inst. of Tech., Irvine, CA, USA
Sines and cosines. Part 1 of 3
Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1992; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 28 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–67472; No Copyright; Avail: CASI;

B02, Videotape-Beta; V02, Videotape-VHS

Applying the concept of similarities, the mathematical principles of circular motion and sine and cosine waves are presented utilizing both film footage and computer animation in this 'Project Mathematics' series video. Concepts presented include: the symmetry of sine waves; the cosine (complementary sine) and cosine waves; the use of sines and cosines on coordinate systems; the relationship they have to each other; the definitions and uses of periodic waves, square waves, sawtooth waves; the Gibbs phenomena; the use of sines and cosines as ratios; and the terminology related to sines and cosines (frequency, overtone, octave, intensity, and amplitude).

Author

Coordinates; Cosine Series; Sawtooth Waveforms; Similarity Theorem; Sine Series; Sine Waves; Square Waves; Symmetry; Terminology

19960001067 California Inst. of Tech., Irvine, CA, USA

Similarity

Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1990; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 26 min. 55 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67473; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics! series, sponsored by the California Institute for Technology (CalTech), the mathematical concept of similarity is presented. he history of and real life applications are discussed using actual film footage and computer animation. Terms used and various concepts of size, shape, ratio, area, and volume are demonstrated. The similarity of polygons, solids, congruent triangles, internal ratios, perimeters, and line segments using the previous mentioned concepts are shown.

Author

Polygons; Shapes; Similarity Theorem; Solids; Triangles

19960001068 California Inst. of Tech., Irvine, CA, USA

Polynomials

Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 11, 1991; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 27 min. 40 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67474; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics! series, sponsored by California Institute for Technology (CalTech), the mathematical concept of polynomials in rectangular coordinate (x, y) systems are explored. sing film footage of real life applications and computer animation sequences, the history of, the application of, and the different linear coordinate systems for quadratic, cubic, intersecting, and higher degree of polynomials are discussed.

Author

Cartesian Coordinates; Computer Animation; Linear Systems; Polynomials

19960001069 California Inst. of Tech., Irvine, CA, USA

Discovering the Theorem of Pythagorus

Lattanzio, Robert, editor, California Inst. of Tech., USA; Jan 1, 1988; In English; Sponsored by NASA, Washington, Association for Computing Machinery's Special Interest Group on Computer Graphics, and the Educational Foundation of America Its Project Mathematics Series; 26 min. 20 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67475; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this 'Project Mathematics! series, sponsored by the California Institute of Technology, Pythagorus' theorem a(exp 2) + b(exp 2) = c(exp 2) is discussed and the history behind this theorem is explained. hrough live film footage and computer animation, applications in real life are presented and the significance of and uses for this theorem are put into practice.

Author

Applications of Mathematics; Computer Animation; Theorems

19960001070 California Inst. of Tech., Irvine, CA, USA

The tunnels of Samos

Apostol, Tom M., editor, California Inst. of Tech., USA; Jan 1, 1995; In English; Sponsored by NASA, Washington and NSF Its Project Mathematics Series; 29 min. 30 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–67476; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This 'Project Mathematics' series video from CalTech presents the tunnel of Samos, a famous underground aquaduct tunnel located near the capital of Pithagorion (named after the famed Greek mathematician, Pythagorus, who lived there), on one of the Greek islands. This tunnel was constructed around 600 BC by King Samos and was built under a nearby mountain. Through film footage and computer animation, the mathematical principles and concepts of why and how this aquaduct tunnel was built are explained.

Author

Applications of Mathematics; Geological Surveys; Greece; Histories; Hydrology; Islands; Waterways

66
SYSTEMS ANALYSIS AND OPERATIONS RESEARCH

Includes mathematical modeling of systems; network analysis; mathematical programming; decision theory; and game theory.

20000027708 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA

FIDO – Video File

Apr. 27, 1999; In English; Videotape: 10 min. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–2000033900; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Field Integrated Design and Operations (FIDO) rover is a prototype of the Mars Sample Return rovers that will carry the integrated Athena Science Payload to Mars in 2003 and 2005. The purpose of FIDO is to simulate, using Mars analog settings, the complex surface operations that will be necessary to find, characterize, obtain, cache, and return samples to the ascent vehicles on the landers. This videotape shows tests of the FIDO in the Mojave Desert. These tests include drilling through rock and movement of the rover. Also included in this tape are interviews with Dr Raymond Arvidson, the test director for FIDO, and Dr. Eric Baumgartner, Robotics Engineer at the Jet Propulsion Laboratory.

CASI

Mars Sample Return Missions; Prototypes; Roving Vehicles; Robotics; Research Vehicles; Mars (Planet); Mars Exploration; Mars Surface

70
PHYSICS (GENERAL)

Includes general research topics related to mechanics, kinetics, magnetism, and electrodynamics. For specific areas of physics see categories 71 through 77. For related instrumentation see 35 Instrumentation and Photography; for geophysics, astrophysics or solar physics see 46 Geophysics, 90 Astrophysics, or 92 Solar Physics.

19940010760 NASA Marshall Space Flight Center, Huntsville, AL, USA

Automated directional solidification furnace

Aug 1, 1989; In English; 1 min. 42 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–93–190460; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation addresses space research supporting the development of longer lasting, lighter weight, and more powerful magnets.

CASI

Directional Solidification (Crystals); Furnaces; Magnets

19950016853 NASA Lyndon B. Johnson Space Center, Houston, TX, USA

Newton in space

Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Mar 4, 1992; In English; Its Liftoff to Learning Series; 12 min. 35 sec. playing time, in color, with sound

Report No.(s): NONP–NASA–VT–95–43938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

In this 'Liftoff to Learning' series video, astronauts (Charles Veach, Gregory Harbaugh, Donald McMonagle, Michael Coats, L. Blaine Hammond, Guion Bluford, Richard Hieb) from the STS-39 Mission use physical experiments and computer animation to explain how weightlessness and gravity affects everything and everyone onboard the Space Shuttle. The physics behind the differences between weight and mass, and the concepts of 'free fall', are

demonstrated along with explanations and experiments of Sir Issac Newton's three laws of motion.
CASI
Computer Animation; Earth Gravitation; Gravitational Effects; Microgravity; Newton; Space Shuttle Missions; Space Transportation System Flights; Spaceborne Experiments; Weightlessness

71
ACOUSTICS

Includes sound generation, transmission, and attenuation. For noise pollution see 45 Environment Pollution. For aircraft noise see also 02 Aerodynamics and 07 Aircraft Propulsion Propulsion and Power.

19940029073 NASA Lewis Research Center, Cleveland, OH, USA
Flying on the ground
Jan 1, 1991; In English; 11 min. 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12953; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details research being conducted at LeRC on aircraft acoustics and the impact of aircraft noise on communities and passengers. The video describes LeRC researchers utilization of a laser Doppler velocimeter to study aircraft and the development of the Advanced Ducted Propeller.
CASI
Aeroacoustics; Aircraft Noise; Noise Pollution; Shrouded Propellers

74
OPTICS

Includes light phenomena and the theory of optical devices. For lasers see 36 Lasers and Masers.

19940029214 NASA Marshall Space Flight Center, Huntsville, AL, USA
Rotating unbalanced mass proof–of–concept
Jan 1, 1993; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12942; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The video describes the Rotating Unbalanced Mass. The Rotating Unbalanced Mass is a device for scanning ground-based, balloon-borne, and space-based gimbaled payloads, as well as free-flying spacecraft. This device offers advantages over other methods of scanning--especially large payload scanning at high frequencies--such as reduced system power and mass, improved system stability and reliability, and better scan accuracy.
CASI
Control Moment Gyroscopes; Payloads; Pointing Control Systems; Rotating Bodies; Scanners; Torque Motors

80
SOCIAL AND INFORMATION SCIENCES (GENERAL)

Includes general research topics related to sociology; educational programs and curricula.

19940009146 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Taecannautics: Sharing the dream
Apr 1, 1989; In English; 13 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185328; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A week-long teacher workshop is described. Highlights include underwater simulation training, model rocket building and launching, map reading, and survival training.
Author (revised)
Environment Simulation; Instructors

19940010757 NASA Marshall Space Flight Center, Huntsville, AL, USA
SHARP
Jan 1, 1989; In English; 7 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190457; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video tape describes the benefits of NASA's Summer High School Apprenticeship Research Program to participating students.
CASI
Education; NASA Programs

19940010759 NASA Marshall Space Flight Center, Huntsville, AL, USA
Space classroom
Nov 1, 1990; In English; 2 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190459; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation provides information on the first classroom taught from space to encourage student interest in astronomy and space exploration.
CASI
Education; NASA Programs

19940010775 NASA, Washington, DC, USA
Enhancing sight
Feb 1, 1990; In English; 3 min. 54 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190435; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes a new reading program for people with limited sight.
CASI
Blindness; Optometry; Reading; Vision; Visual Perception; Visual Tasks

19940010867 NASA, Washington, DC, USA
Student researchers
Jul 1, 1990; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190238; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The videotape shows students and their NASA-related research at LeRC.
CASI
Research and Development; Students

19940010899 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Short walk to everywhere
Jul 1, 1988; In English; 17 min. 43 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190338; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video details the activities of the Space, Earth, Ocean Center (SEOC), an environmental residential camp held in the summer for elementary school children. Students are shown participating in hands on activities designed to encourage environmental awareness and interests in the environmental sciences.
CASI
Aerospace Sciences; Children; Earth Sciences; Education; Facilities; Oceanography

19940010945 NASA Lewis Research Center, Cleveland, OH, USA
CORE/TRC
Feb 1, 1990; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190231; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video looks at the Central Operations for Educators in Ohio, and the LeRC Teacher Resource Center.
CASI
Education; Facilities; NASA Programs

19940010947 NASA Lewis Research Center, Cleveland, OH, USA
Spacework 16
Jan 1, 1988; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190233; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video consists of the Simulated Space Shuttle Program for schools and also has clips on wind tunnel research and on JPL's 'Miranda the Movie'.
CASI
Education; Flight Simulation; Miranda; Space Shuttles; Wind Tunnel Tests; Wind Tunnels

19940011031 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center
Nov 1, 1989; In English; 8 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190229; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video explains the objectives of the Challenger Center for Space Education and how it got started.
CASI
Aerospace Sciences; Education; Facilities

19940011032 NASA Lewis Research Center, Cleveland, OH, USA
Challenger Center: Orientation
Jul 1, 1989; In English; 7 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190230; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This is a video orientation to the Challenger Center for Space Science Education in Prince Georges County, Maryland.
CASI
Aerospace Sciences; Education; Facilities; NASA Programs; Orientation

19940014509 NASA Marshall Space Flight Center, Huntsville, AL, USA
National Boy Scout Jamboree
Aug 1, 1989; In English; 1 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198214; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video looks at a NASA sponsored exhibit at the National Boy Scout Jamboree in Fredricksburg, VA. Boy Scouts are shown interacting with NASA researchers and astronauts and touring mockups of Space Station Freedom and Apollo 11. NASA's program to encourage the researchers of tomorrow is detailed.
CASI
Astronauts; NASA Programs; Students

19940027300 NASA Lewis Research Center, Cleveland, OH, USA
Marsville: The cosmic village
May 1, 1993; In English; 7 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9952; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes an educational student activity sponsored by the Challenger Center for Space Science Education and the Educational Information and Resource Center, which was held at the Lewis Research Center. Marsville was held in May 1992, involving students from schools in three counties around Cleveland. In commemoration of the International Space Year, students worked together to plan a simulated colony on Mars, which culminated in the erection of a balloon tent 'city' at the Lewis Research Center.
CASI
Education; Mars (Planet); NASA Programs; Space Colonies

19940027301 NASA Lewis Research Center, Cleveland, OH, USA
Space acceleration measurement system
May 1, 1993; In English; 23 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9954; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This training video, presented by the Lewis Research Center's Space Experiments Division, gives a background and detailed instructions for preparing the space acceleration measurement system (SAMS) for use. The SAMS measures, conditions, and records forces of low gravity accelerations, and is used to determine the effect of these forces on various experiments performed in microgravity. Inertial sensors are used to measure positive and negative acceleration over a specified frequency range. The video documents the SAMS' uses in different configurations during shuttle missions.
CASI
Acceleration (Physics); Accelerometers; Microgravity; Spaceborne Experiments; Spacecraft Instruments

19940027309 NASA Lewis Research Center, Cleveland, OH, USA
Welcome to the Ohio Aerospace Institute
Nov 1, 1992; In English; 10 min. 22 sec. playing time, in color with souind
Report No.(s): NONP–NASA–VT–94–9956; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The mission and various programs administered by the Ohio Aerospace Institute, a consortium made up of 9 Ohio Universities, LeRC, and members of the Aerospace Industry are described. The video highlights the following: programs to bring aerospace research to K-12 classrooms; programs to allow graduate students access to laboratory equipment at LeRC; the creation of a statewide television network to link researchers in industry and academia; and focus groups to encourage collaboration between companies in aerospace research.
CASI
Aerospace Engineering; Aerospace Industry; Communication Networks; NASA Programs; Television Systems; University Program

19940027311 NASA Lewis Research Center, Cleveland, OH, USA
NASA report to education, volume 9
Mar 1, 1991; In English; 26 min. 44 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9960; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This is an edition of 'NASA Report to Education' covering NASA's Educational Workshop, Lewis Research Center's T-34 and the Space Exploration Initiative. The first segment shows NASA Education Workshop program (NEWEST - NASA Educational Workshops for Elementary School Teachers). Highlights of the 14 days of intense training, lectures, fieldtrips and simple projects that the educators went through to teach the program are included. Participants are shown working on various projects such as the electromagnetic spectrum, living in Space Station Freedom, experience in T-34, tour of tower at the Federal Aviation Administrative Facilities, conducting an egg survival system and an interactive video conference with astronaut Stori Musgrave. Participants share impressions of the workshop. The second segment tells how Lewis Research Center's T-34 aircraft is used to promote aerospace education in several Cleveland schools and excite students.
CASI
Education; Space Exploration; Spacecraft Survivability; Survival

19940027381 NASA Lewis Research Center, Cleveland, OH, USA
The sky is your classroom
Jan 1, 1982; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9959; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
An overview of NASA's 11th annual Aerospace Education Workshop Program is presented. A portion of activities that are performed during the workshop sessions, which are used to familiarize teachers with up-to-date information are shown. An overview of aerospace concepts and terms is provided. Activities shown include: how model rockets are used to teach about the principles of rocketry; how eggs are packaged to represent an astronaut landing on another planet; a trip to the Cleveland Museum of Natural History was used to introduce a telescope and planetarium; and a visit to LeRC. How lectures and discussion material are presented on such topics as the history of aircraft and the space shuttle is demonstrated.
CASI
Aerospace Sciences; Education; NASA Programs

19940029069 NASA Lewis Research Center, Cleveland, OH, USA
Indianapolis CIP review
Dec 1, 1988; In English; 14 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12949; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents the community involvement program at the Indianapolis Children's Museum and Indianapolis Art League.
CASI
Museums; NASA Programs

19950004110 NASA Lewis Research Center, Cleveland, OH, USA
NEWEST 1990 no. 4007
Aug 1, 1990; In English; 15 min. 35 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23173; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Twenty-two teachers go through the NASA Educational Workshops for Elementary School Teachers Program at the Lewis Research Center.
LeRC
Aerospace Sciences; Education; Instructors

19950004111 NASA Lewis Research Center, Cleveland, OH, USA
Anton Grdina Primary Achievement Program
Nov 1, 1993; In English; 29 min. 20 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23159; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The Anton project presents a partnership between NASA Lewis, CMHA, and the Cleveland Public Schools. The intent of this project is to empower parents to work with their children in science and math activities.
LeRC
Education; Mathematics; Science

19950004152 NASA Lewis Research Center, Cleveland, OH, USA
\SHARP no. 4010, version 1 and no. 4011, version 2
Dec 1, 1990; In English; 10 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23167; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Version 1 explains the Summer High School Apprenticeship (SHARP) Program. Version 2 is a tool to interest students in applying for the program.
LeRC
Education; NASA Programs; Transfer of Training

19950023802 NASA Marshall Space Flight Center, Huntsville, AL, USA
International Space University
Kassler, Maggie, editor, NASA Marshall Space Flight Center, USA; Aug 9, 1993; In English; 16 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–57868; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The International Space University (ISU) is described in this video, hosted by Marina Sirtis from the 'Star Trek' television show's Starship Enterprise. A complete explanation of what ISU is, how the university functions, and the benefits that the university provides are described. Included are brief comments from former ISU graduates.
CASI
Space Programs; Universities; University Program

19960001486 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Shaping tomorrow
Jan 1, 1970; In English; 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–65627; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The development, history, and opportunities for employment available at the Johnson Space Center (JSC) in Houston, Texas are presented in this video, with special emphasis placed on minorities in the aeronautical engineering fields and at JSC. There are several interviews with black, Hispanic and female engineering and aeronautics professionals and the various projects they work on.
Author
Houston (TX); Minorities; NASA Space Programs; Research Projects

19980040284 NASA Lewis Research Center, Cleveland, OH USA
Fastener Design Course
Barrett, Richard T., NASA Lewis Research Center, USA; Jun. 1997; 284p; In English; Set of 9 Videotapes: 7 hrs., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998118421; No Copyright; Avail: CASI; A13, Hardcopy; A03, Microfiche; B07, Videotape-Beta; V07, Videotape-VHS; Accompanying hardcopy; Accompanying hardcopy; Accompanying hardcopy; Accompanying hardcopy
Richard T. Barrett, Senior Aerospace Engineer of NASA Lewis Research Center presents a comprehensive course on fastener design. A recognized expert in the field of fastener technology Mr. Barrett combines lecture, charts, illustrations with real-world experiences. Topics covered include: materials, plantings and coatings, locking methods threads, joint stiffness, rivets, inserts, nut plates, thread lubricants, design criteria, etc. A workbook accompanies the videotape.
Author
Lectures; Fasteners; Design Analysis

81
ADMINISTRATION AND MANAGEMENT

Includes management planning and research.

19940009156 NASA Goddard Space Flight Center, Greenbelt, MD, USA
NASA experiences in the Goddard MMS
Jan 1, 1989; In English; 33 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185305; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
The GSFC connection in the multi-mission spacecraft management field is explored.
Author (revised)
Multimission Modular Spacecraft; NASA Programs

19940010761 NASA Marshall Space Flight Center, Huntsville, AL, USA
Return to flight 1
Sep 1, 1987; In English; 17 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190461; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video tape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.
CASI
NASA Programs; Research and Development

19940010820 NASA Goddard Space Flight Center, Greenbelt, MD, USA
PET team
Mar 1, 1989; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190397; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape shows the Productivity Enhancement Team's (PET) presentation to management regarding ways to make the workforce more responsive to overall corporate goals.
CASI
Organizations; Personnel Development; Productivity

19940010846 NASA Marshall Space Flight Center, Huntsville, AL, USA
Return to flight 3, the journey continues
Feb 1, 1989; In English; 15 min. 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190449; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape presents a dynamic overview of the hard work and tireless efforts of NASA employees and contractors.
CASI
NASA Programs; Personnel

19940010894 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Cohen program management briefing
Dec 1, 1989; In English; 55 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190333; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Dr. Aaron Cohen, Director of NASA Johnson Space Center, discusses management issues as they have appeared in the manned space flight programs.
CASI
Manned Space Flight; NASA Programs; Project Management

19940029075 NASA Lewis Research Center, Cleveland, OH, USA
The second giant leap
Jan 1, 1991; In English; 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12955; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the purpose and activities of the Office of Space Commercialization at LeRC. The office promotes interactions between industry and NASA researchers, and promotes the benefits of microgravity research. Examples of knowledge transfer in the production of airplanes and farm equipment are shown.
CASI
Government/Industry Relations; Microgravity; Space Commercialization

19950020782 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Standards for excellence
Jan 1, 1992; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49096; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A history of the development of standard units and regulations of measurement are discussed in this educational video. John Aston narrates the historical background, from colonial times to the present, of the need for measurement standardization and discusses the conception of the National Bureau of Standards (1901), of the USA Department of Commerce. Historical photography and film footage is included.
CASI
Histories; Metrication; Metrology; Regulations; Standardization; Units of Measurement

19950020785 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Quest for excellence 5
Jan 1, 1992; In English; 18 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49099; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The highlights of the 1992 Malcolm Baldrige National Quality Award winners - AT and T Network Systems Group, Transmission Systems Business Unit; Texas Instrument Defense Systems and Electronics Group; AT and T Universal Card Services; The Ritz Hotel CO; and The Granite Rock Company are presented, along with brief information about the company and their beliefs and business and production strategies for quality manufacturing and products.
Author (revised)
Awards; Government/Industry Relations; Industries; Quality Control; Reliability

19950020786 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Getting it right, making it better
Jan 1, 1992; In English; 15 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49118; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The research into the advancement of software error compensation techniques is discussed in this video. Although these techniques were originally designed for coordinate measuring machines, they are now used for machine tools as well.
Author (revised)
Error Analysis; Mechanical Engineering; Metrology; Software Development Tools; Software Engineering; Units of Measurement

19950020787 National Inst. of Standards and Technology, Gaithersburg, MD, USA
Malcolm Baldrige National Quality Award winners 1989
Jan 1, 1990; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49119; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The 1989 Malcolm Baldrige award winners - Milliken and Company; and Xerox Business Products and Services are highlighted in this video. Their strategies for producing quality products are discussed, along with their applications and importance in today's competitive workplace.
CASI
Awards; Government/Industry Relations; Quality Control; Reliability; Strategy

19950020789 National Inst. of Standards and Technology, Gaithersburg, MD, USA
STEP: A futurevision, today
Jan 1, 1994; In English; 9 min. 50 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49121; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

STEP (STandard for the Exchange of Product Model Data) is an innovative software tool that allows the exchange of data between different programming systems to occur and helps speed up the designing in various process industries. This exchange occurs easily between those companies that have STEP, and many industries and government agencies are requiring that their vendors utilize STEP in their computer aided design projects, such as in the areas of mechanical, aeronautical, and electrical engineering. STEP allows the process of concurrent engineering to occur and increases the quality of the design product. One example of the STEP program is the Boeing 777, the first paperless airplane.
CASI
Computer Aided Design; Computer Programming; Computer Programs; Concurrent Engineering; Data Processing; Data Transfer (Computers); Government/Industry Relations; Process Control (Industry); Quality Control

19950022749 NASA, Washington, DC, USA
NASA: The state of the agency
Oct 7, 1992; In English; 19 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45998; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

NASA's challenges, accomplishments, and goals are described in this video. Historical footage of man's first lunar walk are shown and there are brief descriptions covering several of NASA's major projects, such as: Skylab; Viking Voyager; Coby; and the 1990 Hubble Space Telescope.
CASI
Histories; NASA Programs; Research Projects; Technology Assessment

19950022750 NASA, Washington, DC, USA
An announcement by Dan Goldin
Oct 15, 1992; In English; 15 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–45999; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Daniel S. Goldin (NASA Administrator) announces the reconstruction of several NASA programs and management structural changes. The upcoming developments for Space Station Freedom, the Office of Space Science Applications (OSSA), and the field of Aeronautics are discussed.
CASI
Aerospace Industry; Management Planning; NASA Programs; Personnel Management; Technological Forecasting; Trends

20000066583 NASA Kennedy Space Center, Cocoa Beach, FL USA
A/C 67 Investigation Board Final Report
May 11, 1987; In English; Videotape: 27 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000078606; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

On March 26, 1987, after the launch of an Atlas/Centaur rocket with a payload of a Navy Communications Satellite, a problem developed and the rocket was lost. John Busse chaired the Accident Investigation Board that was convened to investigate the incident. This videotape is a press conference with Mr Busse, who reviews the findings of the investigation concerning the loss of the Atlas/Centaur-67 launch vehicle. The loss is primarily attributed to a hardover engine yaw command that was caused by an erroneous signal from the digital computer unit. The generation of the erroneous signal is blamed on unfavorable weather conditions which created a lightning hazard. Mr. Busse, also, reviews the investigation's recommendations for avoiding similar

occurrences. The press then asks questions about the findings and recommendations.
CASI
Accident Investigation; Atlas Centaur Launch Vehicle; Lightning; Weather; Spacecraft Launching; Flight Hazards; Meteorological Parameters

82
DOCUMENTATION AND INFORMATION SCIENCE

Includes information management; information storage and retrieval technology; technical writing; graphic arts; and micrography. For computer documentation see 61 Computer Programming and Software.

19940010758 NASA Marshall Space Flight Center, Huntsville, AL, USA
University Joint Venture: JOVE
Mar 1, 1989; In English; 2 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190458; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation explains how NASA shares its several trillion bits of raw science and engineering data with universities who help NASA analyze and distribute that data.
CASI
NASA Programs; University Program

19940010778 NASA, Washington, DC, USA
Monitoring history
Jun 1, 1987; In English; 3 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190438; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Deep space technology is applied to help monitor the aging process of the treasured documents in the National Archives.
CASI
Aerospace Technology Transfer; Aging (Materials); Documents; Records; Records Management; Technology Utilization

19940010827 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Text and graphics systems
Mar 1, 1989; In English; 1 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190368; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
This video shows Text and Graphics Systems (TAGS) in action and describes how the system will be used on Space Shuttle missions.
CASI
Computer Graphics; Space Shuttle Missions

19940011047 NASA, Washington, DC, USA
Medical imaging
Jun 1, 1986; In English; 3 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190473; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video shows how satellite data processing techniques (multispectral scanning) can improve disease detection and treatment.
CASI
Diagnosis; Diseases; Imaging Techniques; Medical Equipment; Multispectral Band Scanners; Scanning; Technology Transfer

19940011050 NASA John C. Stennis Space Center, Bay Saint Louis, MS, USA
Coast encounters: A space age adventure in science literacy
Apr 1, 1989; In English; 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190475; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video recaps the NASA Community Involvement Program for education held on the Mississippi Gulf Coast, April 1989.
CASI
Aerospace Sciences; Education; NASA Programs

19950004161 NASA Lewis Research Center, Cleveland, OH, USA
STI: Managing a universe of information
Jan 1, 1992; In English; 7 min. playing time
Report No.(s): NONP–NASA–VT–94–23626; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video highlights the NASA STI Program, its mission and key elements and how the program manages the ever growing universe of scientific and technical information. The mission of the program is to provide world-wide access to aerospace-related scientific and technical information. A key element of the program is a massive online database of more than three million citations to technical reports and journal literature, acquired, processed and disseminated by the NASA STI Program.
LeRC
Data Bases; Information Management

19950020788 National Inst. of Standards and Technology, Gaithersburg, MD, USA
NIST: Information management in the AMRF
Callaghan, George, editor, National Inst. of Standards and Technology, USA; Nov 1, 1991; In English; 12 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–49120; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The information management strategies developed for the NIST Automated Manufacturing Research Facility (AMRF) - a prototype small batch manufacturing facility used for integration and measurement related standards research are outlined in this video. The five major manufacturing functions - design, process planning, off-line programming, shop floor control, and materials processing are explained and their applications demonstrated.
Author (revised)
Automatic Control; Computer Aided Design; Concurrent Engineering; Control Equipment; Control Systems Design; Government/Industry Relations; Information Management; Mechanical Engineering; Process Control (Industry); Prototypes; Research Facilities

19980005607 Commerce Energy NASA NLM Defense Information Cataloging Committee, Washington, DC USA
The future of bibliographic standards in a networked information environment
Apr. 16, 1997; In English; CENDI Workshop, 16 Apr. 1997, Bethesda, MD, USA; Videotape: 5 hrs. 51 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1998000466; No Copyright; Avail: CASI; V06, Videotape-VHS; B06, Videotape-Beta; V06, Videotape-VHS
The main mission of the CENDI Cataloging Working Group is to provide guidelines for cataloging practices that support the sharing of database records among the CENDI agencies, and that incorporate principles based on cost effectiveness and efficiency. Recent efforts include the extension of COSATI Guidelines for the Cataloging of Technical Reports to include non-print materials, and the mapping of each agency's export file structure to USMARC. Of primary importance is the impact of electronic documents and the distributed nature of the networked information environment. Topics discussed during the workshop include the following: Trade-offs in Cataloging and Indexing Internet Information; The Impact on Current and Future Standards; A Look at WWW Metadata Initiatives; Standards for Electronic Journals; The Present and Future Search Engines; The Roles for Text Analysis Software; Advanced Search Engine Meets Metathesaurus; Locator Schemes for Internet Resources; Identifying and Cataloging Web Document Types; In Search of a New Bibliographic Record. The videos in this set include viewgraphs of charts and related materials of the workshop.
CASI
Catalogs (Publications); Bibliographies; Cost Effectiveness; Data Management; Data Bases; Indexes (Documentation); Internets; Texts

85
TECHNOLOGY UTILIZATION AND SURFACE TRANSPORTATION

Includes aerospace technology transfer; urban technology; surface and mass transportation. For related information see 03 Air Transportation and Safety, 16 Space Transportation and Safety, and 44 Energy Production and Conversion. For specific technology transfer applications see also the category where the subject is treated.

19940010776 NASA, Washington, DC, USA
From space to Earth
Jun 1, 1987; In English; 3 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190436; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents a few NASA spinoffs, including Statue of Liberty paint, Unistick, an ocular screening device, and running shoes.
CASI
Aerospace Technology Transfer; Industries; NASA Programs; Technology Transfer; Technology Utilization

19940010864 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 7
Mar 1, 1988; In English; 27 min. 49 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190235; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape shows how space derived technology is being used to benefit people on Earth.
CASI
Aerospace Engineering; Aerospace Technology Transfer; NASA Programs; Technology Utilization

19940010866 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 16
May 1, 1988; In English; 28 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190237; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The videotape describes NASA technology that is in everyday use.
CASI
NASA Programs; Technology Utilization

19940029063 NASA, Washington, DC, USA
Refocusing space technology
May 1, 1994; In English; 7 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12961; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents two examples of NASA Technology Transfer. The first is a Downhole Video Logger, which uses remote sensing technology to help in mining. The second example is the use of satellite image processing technology to enhance ultrasound images taken during pregnancy.
CASI
Aerospace Technology Transfer; Imaging Techniques; Remote Sensing; Satellite Imagery; Technology Utilization; Ultrasonics

19950004149 NASA, Washington, DC, USA
Advanced microsensors
Aug 1, 1991; In English; 2 min. 59 sec. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23145; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video looks at a spinoff application of the technology from advanced microsensors -- those that monitor and determine conditions of spacecraft like the Space Shuttle. The application featured is concerned with the monitoring of the health of premature babies.
CASI
Aerospace Technology Transfer; Bioinstrumentation; Sensors

19990116990 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Theodore von Karman Lecture Series: ”Technologies of the Future—Today”
May 20, 1999; In English; Videotape: 1 hr. 1 min. 56 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206898; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

As speaker of this lecture series Michael Sander, Director of Technology and Application at the Jet Propulsion Laboratory (JPL), addresses three questions that scientists and engineers at JPL and NASA face daily. These questions are: How did the universe evolve, how did life start, and are we alone? The video focuses on the technological developments, improvements, and applications in society. Slides include several still pictures (infrared, x-ray, radio, and visible) of the universe, pictures of Venus through the use of radar instruments, and the visible and infrared pictures of the Orion nebula. Also included are the first images of Mars taken by the Mariner 4 spacecraft, color images from the Viking Lander spacecraft, and high resolution maps taken by the Mars Global Surveyor. Radar images of Los Angeles (Pasadena), San Francisco and San Juan are also shown. Some of the technological developments include the active pixel sensor camera, infrared cameras, CCD cameras, QWIP (Quantum Well Infrared Photodetector) cameras, a 3 inch diameter chip to analyze the amino acid and chemical compounds of the Martian soil, and sensors with the ability to crawl. The lecture also includes the planning of future missions.
CASI
Technology Utilization; NASA Programs; Research and Development

88
SPACE SCIENCES (GENERAL)

Includes general research topics related to the natural space sciences. For specific topics in Space Sciences see categories 89 through 93.

19950017776 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Space basic
Herbert, Dexter, editor, NASA Lyndon B. Johnson Space Center, USA; Jan 2, 1991; In English; Its Liftoff to Learning Series; 20 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–43943; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

In this education video series, ’Liftoff to Learning’, astronauts (Bruce Melnick, Thomas Akers, William Shepherd, Robert Cabana, and Richard Richards) describe the historical beginnings of space exploration from the time of Robert H. Goddard (considered the Father of Rocketry), who, in 1929, invented the first propellant rocket, the prototype of modern liquid propellant rockets, up to the modern Space Shuttles. The questions - where is space, what is space, and how do astronauts get to, stay in, and come back from space are answered through historical footage, computer graphics, and animation. The space environment effects, temperature effects, and gravitational effects on the launching, orbiting, and descent of the Shuttles are discussed. Included is historical still photos and film footage of past space programs and space vehicles.
CASI
Aerospace Environments; Descent; Histories; Photographic Film; Prototypes; Space Exploration; Space Programs; Space Shuttles; Spacecraft; Spacecraft Launching; Spacecraft Orbits; Uncontrolled Reentry (Spacecraft)

89
ASTRONOMY

Includes observations of celestial bodies, astronomical instruments and techniques; radio, gamma-ray, x–ray, ultraviolet, and infrared astronomy; and astrometry.

19940009132 NASA, Washington, DC, USA
The four great observatories
Dec 1, 1986; In English; 5 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185318; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation introduces the Hubble Space Telescope, Gamma

Ray Observatory, Advanced X-ray Astrophysics Facility (AXAF), and the Shuttle Infrared Telescope Facility (SIRTF).
Author
Astronomical Observatories; Gamma Ray Observatory; Hubble Space Telescope; Space Infrared Telescope Facility; Spaceborne Telescopes; X Ray Astrophysics Facility

19940010838 NASA, Washington, DC, USA
Lunar ranging
Aug 1, 1985; In English; 4 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190401; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape describes the work at the Lure observatory (Hawaii) in the area of Lunar rangefinding. This work uses laser technology to range the moon with an accuracy of one inch.
CASI
Laser Applications; Laser Range Finders; Lunar Rangefinding; Observatories

19940010949 NASA Goddard Space Flight Center, Greenbelt, MD, USA
NASA's Hubble Space Telescope: The challenge and complexity of operations
Jun 1, 1989; In English; 16 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190375; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presentation touches on the truly fast complexity of the first of NASA's great observatories, the Hubble Space Telescope.
CASI
Hubble Space Telescope; NASA Space Programs

19940014599 NASA, Washington, DC, USA
Hubble Space Telescope
Feb 1, 1990; In English; 2 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198206; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

An overview of the mission of the Hubble Space Telescope, a joint project between NASA and the European Space Agency which will be used to study deep space, as well as our solar system is presented. The video contains animations depicting the Hubble Space Telescope in orbit, as well as footage of scientists at the Space Telescope Science Institute making real time observations. The images Hubble acquires will be downloaded into a database that contains images of over 19,000,0000 celestial objects called the Star Catalog.
CASI
Hubble Space Telescope; Space Observations (From Earth)

19950004133 NASA Goddard Space Flight Center, Greenbelt, MD, USA
BBXRT clip: The Broad Band X–ray Telescope
May 1, 1990; In English; 18 min. playing time
Report No.(s): NONP–NASA–VT–94–23137; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video recording explains the science mission of the Broad Band X ray Telescope on board the Space Shuttle Columbia, December 1990. This tape was produced before launch.
GSFC
Broadband; Space Shuttle Missions; X Ray Telescopes

19950022751 Tokyo Univ., Inst. for Space and Astronautical Science., Japan
Yohkoh Soft X–ray Telescope
Apr 21, 1992; In English; Sponsored by NASA, Washington; 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46000; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video describes the Soft X-Ray Telescope (SXT), Yohkoh. This is a cooperative program between NASA and the Institute for Space and Astronautical Science of Japan. Images of the Suns rotation were obtained with the SXT.
CASI
International Cooperation; Japanese Space Program; NASA Space Programs; Universities; X Ray Astronomy; X Ray Telescopes

19950023896 NASA, Washington, DC, USA
Space astronomy update
Jun 6, 1995; In English; 38 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56622; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A discussion of the images obtained by NASA's Hubble Space Telescope (HST) is featured on this video. The discussion panel consists of Dr. Jeff Hester (Arizona State Univ.), Dr. Jon Morse (Space Telescope Science Inst.), Dr. Chris Burrows (European Space Agency), Dr. Bruce Margon (Univ. of Washington), and host Don Savage (Goddard Space Flight Center). A variety of graphics and explanations are provided for the images of star formations and other astronomical features that were viewed by the HST.
Author
Astronomical Photography; Celestial Bodies; Hubble Space Telescope; Spaceborne Astronomy; Star Formation; Ultraviolet Astronomy; Ultraviolet Spectra

19950024678 Interface, Inc., Fort Collins, CO, USA
NASA space astronomy update 6
Oct 1, 1992; In English; 6 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46007; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Professor Stu Bowyer (University of California at Berkeley) explains the Extreme Ultraviolet Explorer and its telescope in this video. Both instrument and satellite are kept in perfect working condition. The satellite picks up extra galactic objects outside our galaxy.
CASI
Extreme Ultraviolet Explorer Satellite; NASA Space Programs; Spaceborne Astronomy; Ultraviolet Astronomy; Ultraviolet Telescopes

19970036208 NASA Johnson Space Center, Houston, TX USA
Best of Hubble Space Telescope
Feb. 18, 1997; In English; Videotape: 90 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997077165; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video presents a chronological account of the Hubble Space Telescope. Using animation, movies, and stills it documents the design, development, launch, and repair mission to correct its optics. The second part of this video concentrates on the successes of Hubble. Included are the study of Galaxy Clusters, Black Holes, Jupiter animation, and Nebulas.
CASI
Hubble Space Telescope; Galactic Clusters; Nebulae; Jupiter (Planet); Star Clusters; Spaceborne Astronomy

19970036313 NASA Johnson Space Center, Houston, TX USA
Hubble Images from 1996
Jan. 28, 1997; In English; Videotape: 14 min. 33 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1997082306; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Primarily composed of animation, movies, and stills, this video is divided into 12 segments or slugs as the video refers to them. They are: Global Map of Pluto, Images of Pluto, Surface Map of Pluto, Helix Nebula- NGC 7293, Gaseous Knots, Animation of the Formation of the Helix Nebula, Crab Nebula, Jupiter Aurora Movie, Birth of a Quasar, Merging Galaxies, and Spiral Galaxies.
CASI
Hubble Space Telescope; Crab Nebula; Spiral Galaxies; Quasars; Space Exploration

20000000441 NASA Kennedy Space Center, Cocoa Beach, FL USA
Ulysses News Conference
Oct. 26, 1995; In English; Videotape: 48 min. 10 sec playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206989; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The focus of this lecture is to discuss the purpose of the Ulysses mission. The mission objective is to study magnetic fields, cosmic rays and the solar winds from both the equator and the (North and South) poles of the Sun. The moderator of this lecture is Dr. Steve Maran, NASA/Goddard Space Flight Center, and panel members include Dr. Richard Marsden, ESA (European Space Agency) Project

Scientist, Dr. Edward J. Smith, JPL/NASA Project Scientist, Dr. Antoinette Galvin, University of Maryland College Park, Dr. Randy Jokipii, University of Arizona, and Dr. John Phillips, Los Alamos National Laboratory. Each panel member contributes to the informative nature of this live video coverage. Topics discussed are the direction of the magnetic fields, solar winds, and cosmic rays. Visual aids of this lecture consist of various slides and computerized simulations.
CASI
Ulysses Mission; Solar Probes; Cosmic Rays; Magnetic Fields; Solar Wind

20000004507 NASA Kennedy Space Center, Cocoa Beach, FL USA
HST Briefing: HST Science Overview
Jan. 13, 1994; In English; Videotape: 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206993; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Hubble Space Telescope upgrades are discussed during this overview. Among those discussed are the Space Telescope Imaging Spectograph, the New Infrared Camera, upgrading of instruments with 90's technology, new CCD detectors, corrective optics, reconfiguration of mirrors, reduction in overall exposure time. A question and answer period with Johnson Spaceflight Center, Goddard Spaceflight Center and the press focuses primarily on these upgrades to the Hubble Space Telescope.
CASI
Hubble Space Telescope; Infrared Instruments; Imaging Techniques; Charge Coupled Devices; Cameras

20000004912 NASA Kennedy Space Center, Cocoa Beach, FL USA
Hubble Space Telescope Spacecraft Overview Briefing
Jan. 13, 1994; In English; Videotape: 46 min., 18 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206987; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This Kennedy Space Center video release presents the third part of a press conference held at Goddard Space Flight Center on Jan. 13, 1994. The session is moderated by Randee Exler (News Chief, GSFC) and includes presentations by Ken Ledbetter (HST Program Manager, NASA Headquarters), Frank Cepollina (HST Project Manager for Flight Systems and Servicing, GSFC) and Joe Rothenberg (Director, HST Flight Projects, GSFC) that discuss pre-flight testing and training, on-orbit servicing, highlights, and the status of the Hubble Space Telescope (HST). A question and answer period follows the presentations, after which three short highlight videos are presented that include actual footage of on-orbit servicing, galactic images taken by the HST, and pre-flight preparation and construction.
CASI
Hubble Space Telescope; Space Maintenance

20000013497 NASA Kennedy Space Center, Cocoa Beach, FL USA
Hubble Space Telescope Briefing: HST Science Overview
Jan. 13, 1994; In English; Videotape: 1 hr. 2 min. 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206991; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center video release presents a broad overview of the science that is now possible as a result of the servicing of the Hubble Space Telescope (HST). Dr. Ed Weiler (HST Program Scientist, NASA Headquarters), Dr. Dave Leckrone (HST, Senior Project Scientist, Goddard Space Flight Center (GSFC)), Dr. John Trauger (Wide Field Planetary Camera 2 (WFPC2) Principal Investigator, Jet Propulsion Lab. (JPL)), Dr. Chris Burrows (WFPC2 Co-Investigator, Space Telescope Science Inst.(STSci)-European Space Agency (ESA), Jim Crocker ((Corrective Optics Space Telescope Axial Replacement) COSTAR Team Leader, STSci), Dr. Holland Ford (COSTAR Project Scientist, Johns Hopkins Univ., STSci), and Dr. Duccio Machetto (European Space Agency (ESA)) give brief presentations, which feature images of stars and galaxies taken from the ground, from WFPC1 (prior to the servicing mission), and from WFPC2 (after the servicing mission). The main theme of the discussions center around the spherical aberration that was found in the images prior to servicing and the corrected images seen without the aberration following servicing. A question and answer period rounds out the press conference, with questions posed from scientific journalists at GSFC and other NASA centers.
CASI
Hubble Space Telescope; Aberration; Spaceborne Telescopes; Spaceborne Astronomy; Satellite-Borne Photography

20000013498 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Searching for Planets Around other Stars
Jan. 28, 1998; In English; Videotape: 1 hr. 19 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206897; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

In this colloquim presentation, Professor of Astronomy, Geoffrey Marcy discusses the discovery of planets orbiting other stars. Using the Doppler shift caused by stellar wobble that is caused by nearby planetary mass, astronomers have been able to infer the existence of Jupiter-sized planets around other stars. Using a special spectrometer at Lick Observatory, the wobble of several stars have been traced over the years required to generate an accurate pattern required to infer the stellar wobble. Professor Marcy, discusses the findings of planets around 47 Ursae Majoris, 16 Cygni B, 51 Pegasus, and 56 Rho 1 Cne. In the case of 56 Rho 1 Cne the planet appears to be close to the star, within 1.5 astronomical units. The observations from the smaller Lick Observatory will be augmented by new observations from the larger telescope at the Kek observatory. This move will allow observations of smaller planets, as opposed to the massive planets thus far discovered. The astronomers also hope to observe smaller stars with the Kek data. Future spaceborne observations will allow the discovery of even smaller planets. A spaceborne interferometer is in the planning stages, and an even larger observatory, called the Terrestrial Planet Finder, is hoped for. Professor Marcy shows artists' renderings of two of the planets thus far discovered. He also briefly discusses planetary formation and shows slides of both observations from the Orion Nebula and models of stellar system formation.
CASI
Planetary Evolution; Planetary Mass; Stellar Evolution; Celestial Bodies; Extrasolar Planets; Gas Giant Planets; Planetary Systems; Hypothetical Planets; Stellar Orbits

20010021608 Space Telescope Science Inst., Baltimore, MD USA
Hubble Spies Huge Cluster of Stars Formed by Ancient Encounter
Mar. 01, 2001; In English; Videotape: 6 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001030025; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This release marks the beginning of a new outlet for the Space Telescope Science Institute, the 'Hubble Minute'. Hubble Minute is an edited vignette suitable for use in newscasts, magazine shows, and as an interstitial program. The Minute explains how scientists are determining when M82 and M81 collided, and how dating the crash may result in a better understanding of how our own galaxy formed.
Author
Crashes; Galaxies; Star Clusters; Time Measurement

20010036664 Space Telescope Science Inst., Baltimore, MD USA
Farthest Supernova Bolsters Proof for a Mysterious Form of Energy Pervading the Universe
[2001]; In English; Videotape: 16 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001047824; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Computerized animations show the following: (1) the acceleration and deceleration of the universe; (2) an image subtraction of the 1995 and 1997 images of the Hubble Deep Field to reveal a supernova in the 1997 image; (3) a pie-chart of the mass composition of the universe; (4) the universe's expansion after the Big Bang; (5) a supernova detonating; and (6) the lightbulb test (to determine distance by comparing light intensity). Zoom shots show the Hubble Deep Field (from ground-based observations to the Hubble Space Telescope (HST) image) and the Hubble Deep Field with a supernova (from an artist's conception animation to a ground-based view). Dr. Ron Gilliland explains that he looked for a supernova in the Hubble Deep Field and how supernova are useful as standard candles. Dr. Adam Riess describes how astronomers used

supernovae to discover that the universe is expanding and why it might be expanding.
CASI
Luminous Intensity; Supernovae; Expansion; Cosmology

20010059304 NASA Goddard Space Flight Center, Greenbelt, MD USA
Microlensing: Globular Cluster M22 Video File
[2001]; In English; Videotape: 6 min. 55 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001092796; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation begins outside a globular cluster similar to M22, with the center of the Milky Way in the distance. The camera flies through the center of the cluster and rests with a dark object in the distance. This object, a suspected brown star, passes in front of a star in the galactic bulge, bending its light gravitationally. This bending, or lensing, causes a momentary brightening of the background star. Another sequence begins with a ground-based view of the center of our galaxy in the upper right. We zoom in to reveal a ground-based view of the region surrounding the cluster and continue zooming to reveal the Hubble Space Telescope view of M22. In an interview with Kailash Sahu, Astronomer, he describes the Hubble results, explains why the objects in M22 can't be planets, and explains Hubble's role in the observations of M22. The last image was taken with Hubble's Wide Field and Planetary Camera 2 and pierces the heart of a globular cluster with its needle-sharp vision and uncovers tantalizing clues to what could potentially be a strange and unexpected population of wandering, planet-sized objects.
Author
Globular Clusters; Gravitational Lenses; Milky Way Galaxy

20010067427 Space Telescope Science Inst., Baltimore, MD USA
Hubble's Panoramic Portrait of a Vast Star–Forming Region
Jul. 26, 2001; In English; Videotape: 4 min. 13 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001110130; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation zooms into the 30 Doradus region. Dr. Nolan Walborn explains how the Hubble images of 30 Doradus and its central cluster are changing our understanding of similar star forming regions and what is happening in the gas pillars.
Derived from text
Magellanic Clouds; Nebulae

20020087571 NASA, Washington, DC USA
Crab Pulsar
Oct. 02, 2002; In English; 1 hr., 48 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2002135371; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Two of NASA's greatest observatories, the Chandra X-Ray Observatory and the Hubble Space Telescope have produced this new action movie of the Crab Pulsar. The Crab Pulsar was first observed by Chinese astronomers in 1050 A.D. and has since become one of the most studied objects in the sky. by combining the power of both Chandra and Hubble, the movie, made from multiple observations from several months, reveals features never seen in still images. By understanding the Crab Pulsar, astronomers hope to unlock the secrets of how similar objects across the universe are powered.
CASI
Pulsars; X Ray Astrophysics Facility; Hubble Space Telescope

90
ASTROPHYSICS

Includes cosmology; celestial mechanics; space plasmas; and interstellar and interplanetary gases and dust.

19940011022 NASA Ames Research Center, Moffett Field, CA, USA
Pioneer–Venus press clip
May 1, 1988; In English; 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190222; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video shows, with high quality animation, the formation of the Solar System: comets, Jupiter, Europa, Saturn, Titan, Mars, the Sun, and early Earth. The focus is on life elsewhere in the Solar System. The recording was prepared for a news conference.
CASI
Extraterrestrial Life; Pioneer Venus Spacecraft; Planetary Evolution; Solar System Evolution

19940029056 NASA, Washington, DC, USA
Comet impact 1994 animation reel
Apr 1, 1994; In English; 6 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12938; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video contains computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. The simulations display the event from a number of vantage points including earth view, views from orbit, and views from the surface of Jupiter's moons.
CASI
Cometary Collisions; Hypervelocity Impact; Jupiter (Planet); Scientific Visualization; Shoemaker-Levy 9 Comet

19940029095 NASA, Washington, DC, USA
Aeronautics and Space Reports number 267: Comet impacts Jupiter
Jun 1, 1994; In English; 15 min. 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13198; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video contains three different segments of computer generated simulations of the impact of comet Shoemaker-Levy 9 with Jupiter that will take place in July 1994. It includes interviews with Shoemaker and Levy, discussing pictures taken at Mt. Kalamar Observatory, the comets approach to Jupiter, fragment size, and the affects of the comets impact on Jupiter and its atmosphere. The impact will be viewed by the Galileo Spacecraft.
CASI
Cometary Collisions; Computerized Simulation; Jupiter (Planet); Shoemaker-Levy 9 Comet

19990116393 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Asteroids and Comets Outreach Compilation
Sep. 17, 1999; In English; Videotape: 55 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999202511; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Contents include various different animations in the area of Asteroids and Comets. Titles of the short animated clips are: STARDUST Mission; Asteroid Castallia Impact Simulation; Castallia, Toutatis and the Earth; Simulation Asteroid Encounter with Earth; Nanorover Technology Task; Near Earth Asteroid Tracking; Champollian Anchor Tests; Early Views of Comets; Exploration of Small Bodies; Ulysses Resource Material from ESA; Ulysses Cometary Plasma Tail Animation; and various discussions on the Hale-Bopp Comet. Animation of the following are seen: the Stardust aerogel collector grid collecting cometary dust particles, comet and interstellar dust analyzer, Wiper-shield and dust flux monitor, a navigation camera, and the return of the sample to Earth; a comparison of the rotation of the Earth to the Castallia and Tautatis Asteroids; an animated land on Tautatis and the view of the motion of the sky from its surface; an Asteroid collision with the Earth; the USAF Station in Hawaii; close-up views of asteroids; automatic drilling of the Moon; exploding Cosmic Particles; and the dropping off of the plasma tail of a comet as it travels near the sun.
CASI
Asteroids; Hale-Bopp Comet; Oort Cloud; Comet Tails; Wild 2 Comet; Cometary Atmospheres

19990117114 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Colliding Galaxies: Hubble Space Telescope
Oct. 21, 1997; In English; Videotape: 6 min., 13 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–1999206858; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

NASA's Hubble Space Telescope looks deep within the violent center where the two Antennae Galaxies were merging. The Hubble's high resolution and sensitivity reveals the birth of young star clusters formed in the collision.

New Hubble images of young star clusters help investigators put the evolutionary sequence into the right order. The Hubble Space Telescope images are: (1) zoom into the antennae galaxies; (2) galaxy merger evolution sequence; (3) the formation of the antennae pair; and (4) artist's conception of the collision of Milky-Way Galaxy with the Andromeda.
CASI
Hubble Space Telescope; Collisions; Star Clusters; Stellar Evolution; Images; Galaxies

20000000443 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Asteroid Composite Tape
Jul. 07, 1998; In English; Videotape: 19 min. 50 sec., in color, with sound
Report No.(s): NONP–NASA–VT–1999206860; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This is a composite tape showing 10 short segments primarily about asteroids. The segments have short introductory slides, which include brief descriptions about the shots. The segments are: (1) Radar movie of asteroid 1620 Geographos; (2) Animation of the trajectories of Toutatis and Earth (3) Animation of a landing on Toutatis; (4) Simulated encounter of an asteroid with Earth, includes a simulated impact trajectory; (5) An animated overview of the Manrover vehicle; (6) The Near Earth Asteroid Tracking project, includes a photograph of USAF Station in Hawaii, and animation of Earth approaching 4179 Toutatis and the asteroid Gaspara; (7) live video of the anchor tests of the Champoleon anchoring apparatus; (8) a second live video of the Champoleon anchor tests showing anchoring spikes, and collision rings; (9) An animated segment with narration about the Stardust mission with sound, which describes the mission to fly close to a comet, and capture cometary material for return to Earth; (10) live video of the drop test of a Stardust replica from a hot air balloon; this includes sound but is not narrated.
CASI
Asteroids; Stardust Mission; Trajectories; Asteroid Collisions; Asteroid Missions

20000004922 NASA Kennedy Space Center, Cocoa Beach, FL USA
Comet Shoemaker–Levy Impact: Briefing, Pt. 2
May 18, 1994; In English; Videotape: 36 min., 51 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001072; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A panel discussion held on May 18, 1994, about the impact of the P/Shoemaker-Levy 9 (SL9) comet with Jupiter and its observable effects on Jupiter's atmosphere, rings, satellites, and magnetosphere, is presented. Before the panel discussion animations show the first nuclei impact, collision with Jupiter's night side (5 of the 22 known fragments of P/Shoemaker-Levy 9; N, P2, P1, Q2, and Q1), and simulated views of the Shoemaker-Levy 9 comet impact with Jupiter (from Earth and Galileo spacecraft) were presented. The panelists are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology). Topics discussed include: interactions of cometary material with Jupiter's atmosphere, dynamical parameters of Jupiter's troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter's Atmosphere.The panel answered some of the audience's questions at the end of the discussion. This video, Part 2 (of 2), is a continuation of Part 1. It presents the second part of the question and answer session and a replay of the animations.
CASI
Shoemaker-Levy 9 Comet; Cometary Collisions; Jupiter (Planet); Astronomical Observatories; Hypervelocity Impact

20000004923 NASA Kennedy Space Center, Cocoa Beach, FL USA
Comet Shoemaker–Levy Impact: Briefing, Pt. 1
May 18, 1994; In English; Videotape: 62 min., 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001071; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A panel discussion held on May 18, 1994, about the impact of the P/Shoemaker-Levy 9 (SL9) comet with Jupiter and its observable effects on Jupiter's atmosphere, rings, satellites, and magnetosphere, is presented. Before the panel discussion animations show the first nuclei impact, collision with Jupiter's night side (5 of the 22 known fragments of P/Shoemaker-Levy 9; N, P2, P1, Q2, and Q1), and simulated views of the Shoemaker-Levy 9 comet impact with Jupiter (from Earth and Galileo spacecraft) were presented. The panelists are: Dr. Eugene Shoemaker (from Lowell Observatory and US Geological Survey), the moderator and Shoemaker-Levy co-discoverer; Dr. Hal Weaver (from Space Telescope Science Institute); Dr. Lucy McFadden (from University of California-San Diego and the University of Maryland); Dr Melissa McGrath (from Space Telescope Science Institute); and Dr. Heidi Hammel (from Massachusetts Institute of Technology). Topics discussed include: interactions of cometary material with Jupiter's atmosphere, dynamical parameters of Jupiter's troposphere and stratosphere, and Hubble Space Telescope (HST) Observations of the SL9 Impacts on Jupiter's Atmosphere.The panel answered some of the audience's questions at the end of the discussion. This video, Part 1 (of 2), presents the panel discussion and part of the question and answer session.
CASI
Jupiter (Planet); Shoemaker-Levy 9 Comet; Cometary Collisions; Hypervelocity Impact; Astronomical Observatories; Fragments

20010019528 Space Telescope Science Inst., USA
Black Holes Shed Light on Galaxy Formation
[2000]; In English; Videotape: 13 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026551; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape is comprised of several segments of animations on black holes and galaxy formation, and several segments of an interview with Dr. John Kormendy. The animation segments are: (1) a super massive black hole, (2) Centarus A active black hole found in a collision, (3) galaxy NGC-4261 (active black hole and jet model), (4) galaxy M-32 (orbits of stars are effected by the gravity of the black hole), (5) galaxy M-37 (motion of stars increases as mass of black hole increases), (6) Birth of active galactic nuclei, (7) the collision of two galaxy leads to merger of the black holes, (8) Centarus A and simulation of the collision of 2 galaxies. There are also several segments of an interview with John Kormendy. In these segments he discusses the two most important aspects of his recent black hole work: (1) the correlations between galaxies speed and the mass of the black holes, and (2) the existence of black holes and galactic formation. He also discusses the importance of the Hubble Space Telescope and the Space Telescope Imaging Spectrograph to the study of black holes. He also shows the methodology of processing images from the spectrograph in his office.
CASI
Hubble Space Telescope; Black Holes (Astronomy); Collisions; Galaxies; Simulation; Galactic Structure

20010019529 Space Telescope Science Inst., USA
Hubble Identifies Source of Ultraviolet Light in an Old Galaxy
[2000]; In English; Videotape : 3 min. 47 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001026548; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape is comprised of four segments: (1) a Video zoom in on galaxy M32 using ground images, (2) Hubble images of galaxy M32, (3) Ground base color image of galaxies M31 and M32, and (4) Black and white ground based images of galaxy M32.
Author
Ultraviolet Radiation; Andromeda Galaxy; Elliptical Galaxies

20010019695 Space Telescope Science Inst., Baltimore, MD USA
Orion Nebula Movie
Feb. 01, 2001; In English; Videotape: 5 min. 11 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001026555; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows the following simulations derived from Hubble Space

Telescope images: (1) the tiling of the Orion mosaic; (2) Orion mosaic fly-through; and (3) a close-up of the Orion mosaic.
CASI
Orion Nebula; Simulation

20010019696 Space Telescope Science Inst., Baltimore, MD USA
The Secret Lives of Galaxies
Feb. 01, 2001; In English; Videotape: 3 min. 53 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001026546; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The ground-based image in visible light locates the hub imaged with the Hubble Space Telescope. This barred galaxy feeds material into its hub, igniting star birth. The Hubble NICMOS instrument penetrates beneath the dust to reveal clusters of young stars. Footage shows ground-based, WFPC2, and NICMOS images of NGS 1365. An animation of a large spiral galaxy zooms from the edge to the galactic bulge.
Author (revised)
Barred Galaxies; Galactic Bulge; Spiral Galaxies; Star Clusters

20010019697 Space Telescope Science Inst., Baltimore, MD USA
Giant Star Clusters Near Galactic Core
Feb. 01, 2001; In English; Videotape: 4 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026545; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A video sequence of still images goes deep into the Milky Way galaxy to the Arches Cluster. Hubble, penetrating through dust and clouds, peers into the core where two giant clusters shine more brightly than any other clusters in the galaxy. Footage shows the following still images: (1) wide view of Sagittarius constellation; (2) the Palomar Observatory's 2 micron all-sky survey; and (3) an image of the Arches Cluster taken with the Hubble Space Telescope NICMOS instrument. Dr. Don Figer of the Space Telescope Science Institute discusses the significance of the observations and relates his first reaction to the images.
Author (revised)
Galactic Nuclei; Star Clusters; Giant Stars; Sagittarius Constellation

20010019896 Space Telescope Science Inst., USA
Astronomers Ponder Lack of Planets in Globular Cluster
[2000]; In English; Videotape: 7 min. 58 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026553; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape has seven segments, discussing and showing the evidence for the proposition that the galactic clusters do not have many planets. Specifically the segments show: (1) Dr. Ron Gilliland discussing the process of looking for "Hot Jupiters" (i.e., planets about the size of Jupiter, which are hotter than Jupiter) in the globular clusters, (2) a zoom into 47 Tucanae globular cluster, (3) an animation of a planet passing between the host star and the earth with a brightness graph, (4) the same animation as before without the graph, (5) Ron Gilliland of the Space Telescope Science Institute (STScI) discussing possible interpretations of his findings in the 47 Tucanae globular cluster, (6) Ron Gilliland examining the images of 47 Tucanae, and (7) images of 47 Tucanae watching for variations in brightness.
CASI
Galactic Clusters; Star Clusters; Extrasolar Planets; Gas Giant Planets

20010036751 Space Telescope Science Inst., Baltimore, MD USA
Quasar Host Galaxies/Neptune Rotation/Galaxy Building Blocks/Hubble Deep Field/Saturn Storm
[2001]; In English; Videotape: 13 min. 57 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001026556; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computerized animations simulate a quasar erupting in the core of a normal spiral galaxy, the collision of two interacting galaxies, and the evolution of the universe. Hubble Space Telescope (HST) images show six quasars' host galaxies (including spirals, ellipticals, and colliding galaxies) and six clumps of galaxies approximately 11 billion light years away. A false color time lapse movie of Neptune displays the planet's 16-hour rotation, and the evolution of a storm on Saturn is seen though a video of the planet's rotation. A zoom sequence starts with a ground-based image of the constellation Ursa major and ends with the Hubble Deep Field through progressively narrower and deeper views.
CASI
Computerized Simulation; Galactic Evolution; Galaxies; Interacting Galaxies; Neptune (Planet); Quasars; Saturn (Planet)

20010036752 Space Telescope Science Inst., Baltimore, MD USA
Spinning Stardust into Planets
[2001]; In English; Videotape: 6 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A computerized animation simulates the formation of a stellar disk and planets. Ten images from the Hubble Space Telescope (HST) show young stellar disks (taken with the Near-Infrared Camera Multi-Object Spectrometer (NICMOS)) and stellar disks around young stars (taken with the Wide-Field Planetary Camera 2 (WFPC2)). Dr. Deborah Padgett describes what astronomers see in the images of young stellar disks and Dr. Karl Stapelfeldt explains HST's role in helping astronomers to examine young stars in order to understand how solar systems like our own may form.
CASI
Planetary Evolution; Planets; Stellar Models; Computerized Simulation; Protoplanetary Disks

20010036753 Space Telescope Science Inst., Baltimore, MD USA
The Trifid Nebula: Stellar Sibling Rivalry
[2001]; In English; Videotape: 3 min. 55 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2001026552; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

A zoom into the Trifid Nebula starts with ground-based observations and ends with a Hubble Space Telescope (HST) image. Another HST image shows star formation in the nebula and the video concludes with a ground-based image of the Trifid Nebula.
CASI
Nebulae; Star Formation

20010067455 Space Telescope Science Inst., Baltimore, MD USA
Galaxy Group Stephan's Quintet Video File HubbleMinute: Battle Royale in Stephan's Quintet
Jul. 19, 2001; In English; Videotape: 12 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001107899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Hubble Space Telescope's closeup view of Stephan's Quintet, a group of five galaxies, reveals a string of brighter star clusters that separate like a diamond necklace. Astronomers studying the compact galaxy group Stephan's Quintet have seen creative destruction in the many collisions taking place among its galaxies. This HubbleMinute discusses what astronomers are learning and hope to learn from exploring the quintet.
Derived from text
Galactic Clusters; Galaxies; Collisions

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LUNAR AND PLANETARY SCIENCE AND EXPLORATION

Includes planetology; selenology; meteorites; comets; and manned and unmanned planetary and lunar flights. For spacecraft design or space stations see 18 Spacecraft Design, Testing and Performance.

19940009140 NASA, Washington, DC, USA
Exploring Mars
Mar 1, 1987; In English; 5 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185324; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This presentation shows what researchers are designing (solar balloon and rover) to better explore Mars geography before sending a manned mission.
Author (revised)
Mars Probes; Planetary Geology; Roving Vehicles; Spacecraft Design

19940009153 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 11
Apr 1, 1988; In English; 27 min. 6 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185303; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

A look at unmanned spacecraft to explore planets is presented. The topics covered include Pioneer 10 and 11, Pioneer-Venus, Voyager, IUE, and HEAO.
Author (revised)
HEAO; IUE; Pioneer Project; Space Exploration; Unmanned Spacecraft; Voyager Project

19940010766 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager encounter highlights
Jun 28, 1989; In English; 30 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190217; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The following are presented: computer animation of trajectories for both Voyagers 1 and 2; view of Jupiter during one orbit of Ganymede; computer animation of Voyager 2's encounter with Jupiter and its satellites; time lapse of the planet's rotation and its satellites; stroboscopic sequence of selected frames; cloud motion; Jupiter's Great Red Spot (4/25 - 5/24, 1979) through a violet filter; and the Great Red Spot through a blue filter by Voyager 1. The dynamics of Jupiter's clouds are shown - the whole planet is shown first, then two closer looks are repeated several times. Also included are pans of stills of Jupiter's satellites and a computer simulation tour of Saturn system from POV just behind Voyager, made of 116 images of Saturn through a green filter and of 516 images taken by Voyager 1 (9/12 - 9/14, 1980). Frames are enhanced to show the motion of features in Saturn's rings. Pans of stills of Saturn's satellites are shown. There is computer animation of the planet's system, rings, and Sigma Sagittari. Images on January 14, 1986 are through an orange filter. Uranus's satellites are shown as is computer animation of an August 1989 encounter.
CASI
Jupiter (Planet); Jupiter Red Spot; Jupiter Satellites; Saturn Rings; Voyager 1 Spacecraft; Voyager 2 Spacecraft

19940010767 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Neptune encounter highlights
Nov 28, 1989; In English; 32 min. 38 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190218; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Voyager encounter data are presented in computer animation (CA) and real (R) animation. The highlights include a view of 2 full rotations of Neptune. It shows spacecraft trajectory 'diving' over Neptune and intercepting Triton's orbit, depicting radiation and occulation zones. Also shown are a renegade orbit of Triton and Voyager's encounter with Neptune's Magnetopause. A model of the spacecraft's complex maneuvers during close encounters of Neptune and Triton is presented. A view from Earth of Neptune's occulation experiment is is shown as well as a recreation of Voyager's final pass. There is detail of Voyager's Image Compensation technique which produces Voyager images. Eighteen images were produced on June 22 - 23, 1989, from 57 million miles away. A 68 day sequence which provides a stroboscopic view - colorization approximates what is seen by the human eye. Real time images recorded live from Voyager on 8/24/89 are presented. Photoclinometry produced the topography of Triton. Three images are used to create a sequence of Neptune's rings. The globe of Neptune and 2 views of the south pole are shown as well as Neptune rotating. The rotation of a scooter is frozen in images showing differential motion. There is a view of rotation of the Great Dark Spot about its own axis. Photoclinometry provides a 3-dimensional perspective using a color mosaic of Triton images. The globe is used to indicate the orientation of Neptune's crescent. The east and west plumes on Triton are shown.
CASI
Neptune (Planet); Planetary Rotation; Spacecraft Trajectories; Triton; Voyager 2 Spacecraft

19940010821 NASA, Washington, DC, USA
Lunar base concepts
Apr 1, 1985; In English; 3 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190405; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This videotape discusses NASA's plans for a lunar base. Additionally, the videotape features interviews with George Keyworth, James Beggs, and Harrison Schmidt.
CASI
Lunar Bases; NASA Space Programs

19940010869 NASA, Washington, DC, USA
The 1979 highlights
Dec 1, 1979; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190240; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape includes footage of the following: Voyagers to Jupiter, Pioneer to Saturn, High Energy Astronomy Observatory, space telescope, space shuttle, astronauts Young and Crippen, 10th anniversary of Apollo 11, Skylab reentry, LANDSAT, satellite freeze warning, Fire Fighting Module, SAGE, wind generators, Solar Energy Project, electric car research, XV-15, HiMAT, and crash worthiness tests.
CASI
Energy Technology; HEAO; Highly Maneuverable Aircraft; Hubble Space Telescope; LANDSAT Satellites; Space Shuttles; XV-15 Aircraft

19940010875 NASA, Washington, DC, USA
Voyager encounters Uranus
Jun 1, 1986; In English; 3 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190417; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Early results from Voyager's pass of Uranus and its moon, Miranda, are shown.
CASI
Miranda; Uranus (Planet); Voyager 2 Spacecraft

19940010946 NASA Lewis Research Center, Cleveland, OH, USA
NASA report to education, volume 7
Dec 1, 1989; In English; 26 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190232; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Segments of this video include the STS-34 Mission, Pegesus tests, and Voyager's Neptune.
CASI
Education; Neptune (Planet); Pegasus Air-Launched Booster; Space Shuttle Missions; Voyager Project

19940010959 NASA Ames Research Center, Moffett Field, CA, USA
Galileo probe ready to go
Feb 1, 1989; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190446; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presents close cloud views of Jupiter, probe deployment, descent, chute opening, trajectories, and views of assembly at Hughes.
CASI
Deployment; Descent Trajectories; Galileo Probe; Jupiter Atmosphere; Parachute Descent; Parachutes; Spacecraft Components

19940011018 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager 2: Neptune encounter
Aug 8, 1989; In English; 11 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190220; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computer graphics, actual images, and stock footage of the Voyager 2's Neptune encounter are narrated with music.
CASI
Neptune (Planet); Voyager 2 Spacecraft

19940011038 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 12
Apr 1, 1988; In English; 28 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190214; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Voyager's encounters with Jupiter, Saturn, Uranus, and pre-Neptune are reviewed.
CASI
Images; Saturn (Planet); Uranus (Planet); Voyager Project

19940011039 NASA Lewis Research Center, Cleveland, OH, USA
NASA images 13
Apr 1, 1988; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190215; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Clips on Voyager 2 at Uranus and Venus are presented.
CASI
Images; Uranus (Planet); Venus (Planet)

19940011040 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Life and the solar system: The CRAF and Cassini missions
Mar 21, 1993; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190219; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
Animation and interviews describe the proposed missions to study comets and Saturn.
CASI
Cassini Mission; Comet Rendezvous Asteroid Flyby Mission; Comets; Saturn (Planet)

19940011597 NASA Ames Research Center, Moffett Field, CA, USA
Galileo probe spacecraft mission to Jupiter
Oct 1, 1989; In English; 9 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190444; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video contains Galileo probe animation, mission diagrams, and testing and manufacturing footage.
CASI
Checkout; Computer Animation; Galileo Probe; Galileo Project; Manufacturing; Prelaunch Summaries; Space Vehicle Checkout Program

19940014484 NASA, Washington, DC, USA
Voyager's last encounter
Nov 1, 1989; In English; 3 min. 16 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198208; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes Voyager 2's encounter with Neptune. Computer animation and actual data convey Voyager's discoveries such as turbulent storms and dark spots in Neptune's atmosphere, six new moons, Neptune's three rings, and the presence of frozen methane on Triton, as researchers at NASA's Jet Propulsion Laboratory describe Voyager's achievements.
CASI
Neptune (Planet); Neptune Atmosphere; Neptune Satellites; Planetary Rings; Voyager 2 Spacecraft

19940014485 NASA, Washington, DC, USA
Magellan, Galileo, and Ulysses
Jan 1, 1991; In English; 4 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198209; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A combination of sophisticated computer animation and shuttle footage describe the missions of Ulysses, Galileo, and Magellan satellites to the solar system. Ulysses, launched in October 1990 by the European Space Agency, will study the sun. Galileo, launched in October 1989, will probe the Jovian system by releasing a probe that will descend into Jupiter's atmosphere and by using 12 instruments which will study Jupiter's 16 moons, its atmosphere, and its radiation and magnetic fields. Magellan, released from Space Shuttle Atlantis in May 1989, uses a synthetic aperture radar to probe through Venus' dense atmosphere to map its planetary surface. A computer animation simulates flying over the surface of Venus.
CASI
Galileo Project; Galileo Spacecraft; Magellan Project (NASA); Magellan Spacecraft (NASA); Planetary Geology; Space Exploration; Ulysses Mission

19940014486 NASA, Washington, DC, USA
Future energy source
Oct 1, 1990; In English; 3 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198210; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video describes the efforts of the Center for the Commercial Development of Space in Wisconsin to develop a strategy for mining Helium-3, an efficient, environmentally safe alternative to fossil fuels that exists on the moon. Animated sequences depict the equipment that could mine the lunar surface, boil away Helium-3 to be transported back to earth, and return the soil to the moon without destroying the lunar surface.
CASI
Helium Isotopes; Lunar Excavation Equipment; Lunar Mining; Lunar Resources; Space Commercialization

19940014493 NASA Lewis Research Center, Cleveland, OH, USA
Spacework 17: O'Leary's Mars
May 1, 1988; In English; 28 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198221; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Brian O'Leary gives his ideas on reaching and exploring Mars.
CASI
Mars (Planet); Space Exploration

19940027299 NASA Lewis Research Center, Cleveland, OH, USA
Mars: Five views on what is known
Feb 1, 1993; In English; 29 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9951; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video gives a historical survey of philosophy and scientific study of the nature of the surface of Mars and discussion of whether life existed or exists on Mars. Several Lewis researchers recount early telescope observations of Mars including the identification of 'channels' or possible ancient waterways on the surface. An overview of the accomplishments of the Mariner spacecraft in mapping the surface of Mars as well as a detailed description of the Viking missions to Mars are presented. The results of the Viking Biology Experiment, conducted by the Viking Lander, are highlighted. There is also a discussion of the possible presence of monuments and a huge 'face' on the Martian surface. The video includes several computer simulations of flight over the Martian surface.
CASI
Extraterrestrial Life; General Overviews; Histories; Mars (Planet); Mars Probes; Mars Surface; Planetary Mapping

19940029081 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
And then there was Voyager
Sep 25, 1990; In English; 30 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–9945; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
NASA's legendary grand tour of the outer solar system from the mission conception in the early 1970's is described. The search for the heliopause is discussed. This presentation is told in the words of the key members of the Voyager team.
CASI
Grand Tours; Milky Way Galaxy; Voyager Project

19940029586 NASA Ames Research Center, Moffett Field, CA, USA
Exobiology and solar system exploration
Aug 1, 1988; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13713; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The exploration of the solar system through video animation is shown. Actual footage of the Earth's water and land surface is included.
ARC
Exobiology; Space Exploration

19940030998 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Galileo: The Jovian laboratory
Oct 1, 1989; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15912; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation gives a pre-launch description of the Galileo Mission.
CASI
Galileo Project; Space Exploration

19940030999 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager: National Air and Space Museum
Oct 1, 1989; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15913; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
A recap of the travels of the Voyager spacecraft to the outer planets is presented. (This video was originally made for a talk at the National Air and Space Museum.
CASI
Space Exploration; Voyager Project

19940031000 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager last picture show
Sep 1, 1989; In English; 5 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15914; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presentation blends animation, actual photos, and data of the Voyager-Neptune encounter.
CASI
Neptune (Planet); Space Exploration; Voyager Project

19940031001 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Atmosphere of Venus
Nov 1, 1990; In English; 2 min. 18 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15915; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents preliminary results as seen through the violet filter of the Galileo Solid State Imaging System.
CASI
Venus (Planet); Venus Atmosphere

19940031002 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Galileo Earth/Moon 1 encounter
Dec 1, 1990; In English; 3 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15916; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents sequences of Galileo images showing the dynamics of the Earth-Moon system.
CASI
Earth-Moon System; Galileo Spacecraft

19940031003 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Magellan collection of radar calibration results
Nov 1, 1990; In English; 8 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15917; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents three sequences acquired by Magellan, Aug.-Oct 1990 and includes the globe of Venus in black and white, the Golubkina crater, and 12 short scenes of different pan moves.
CASI
Planetary Craters; Radar Imagery; Venus (Planet)

19940031007 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Voyager science summary tape
Jun 1, 1990; In English; 28 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–15921; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A summary of Voyager science is presented by Dr. Edward Stone (originally part of a press conference on June 6, 1990).
CASI
Space Exploration; Voyager Project

19950004096 NASA, Washington, DC, USA
Comet impact tape 1
Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23150; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 16 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004097 NASA, Washington, DC, USA
Comet impact tape 2
Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23151; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 16 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004098 NASA, Washington, DC, USA
Comet impact tape 4
Jul 1, 1994; In English; 1 hr. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23153; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 18 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004099 NASA, Washington, DC, USA
Comet impact tape 5
Jul 1, 1994; In English; 1 hr. 14 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23154; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 19 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004100 NASA, Washington, DC, USA
Comet impact tape 6
Jul 1, 1994; In English; 1 hr. 12 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23155; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 20 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004101 NASA, Washington, DC, USA
Comet impact tape 7
Jul 1, 1994; In English; 1 hr. 32 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23156; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 21 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004102 NASA, Washington, DC, USA
Comet impact tape 8
Jul 1, 1994; In English; 1 hr. 30 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23157; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 22 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004103 NASA, Washington, DC, USA
Comet impact tape 9
Jul 1, 1994; In English; 1 hr. 21 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23158; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 23 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004145 NASA, Washington, DC, USA
Comet impact tape 3
Jul 1, 1994; In English; 1 hr. 22 min. playing time, with sound
Report No.(s): NONP–NASA–VT–94–23152; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Continued press coverage of the comet Shoemaker-Levy 9 impact on the surface of Jupiter is presented. This tape covers 17 Jul. 1994.
CASI
Cometary Collisions; Jupiter (Planet); Shoemaker-Levy 9 Comet

19950004571 NASA, Washington, DC, USA
Mars Pathfinder B–roll
Jan 1, 1994; In English; 9 min. 6 sec. playing time
Report No.(s): NONP–NASA–VT–94–25774; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video uses computer graphic models of the heat shield, lander, and parachute to present an artist's concept of the Mars Pathfinder descent. Viking image mosaics are used to create a rotating globe of Mars. A separate segment presents a simulated flight over the Mars Pathfinder landing site.
CASI
Mars Landing; Parachute Descent; Spacecraft Landing; Spacecraft Maneuvers

19950010421 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 16: Nothing so hidden
Jan 1, 1972; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–33955; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This film shows the landing and the three lunar traverses in the highland region of the moon, near the crater descartes. It includes an astronaut's eye view from the rover, lunar grand prix, discovery of the house-sized rock, lunar lift-off and eva 173,000 miles above the earth. Microphones and cameras in mission control record the emergency problem solving during the prelanding crisis and the reactions of scientists on earth as the astronauts explore the moon.
JSC
Apollo 16 Flight; Lunar Craters; Lunar Exploration; Lunar Landing; Lunar Launch; Lunar Photography; Lunar Rocks; Lunar Trajectories; Moon

19950010422 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 17: On the shoulders of giants
Jan 1, 1973; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–33956; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
A documentary view of the Apollo 17 journey to Taurus-Littrow, the final lunar landing mission in the Apollo program is discussed. The film depicts the highlights of the mission and relates the Apollo program to Skylab, the Apollo-Soyuz linkup and the Space Shuttle.
Author
Apollo Soyuz Test Project; Apollo 17 Flight; Lunar Landing; Space Shuttles

19950010423 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
New look at the old Moon
Jan 1, 1980; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–33957; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The decade of 1969-1979 is seen as the time when lunar science emerged from the dark ages as a result of the geophysical and sample investigations made possible by the Apollo flights to the moon. After a brief summary of the Apollo missions and laboratory investigative techniques, the film treats the major epochs in lunar history uncovered by the investigations. Finally, the moon is depicted as having a practical role in the future of science and technology, as well as serving as the pattern for the future exploration of space.
JSC
Apollo Flights; Lunar Evolution; Lunar Exploration; Lunar Programs; Moon; Space Exploration

19950010527 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 15: In the mountains of the Moon
Jan 1, 1971; In English; 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–34903; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video features the following: (1) extra vehicle activity (EVA); (2) the three traversed of the lunar surface; (3) film taken from the Lunar Rover; (4) hammer and feather tests of Galileo's theory on falling objects in gravity fields; (5) Worden's EVA; (6) subsatellite launching; (7) X-ray pulsar observations; and (8) splash down with one parachute collapsed.
JSC
Apollo 15 Flight; Extravehicular Activity; Lunar Exploration System For Apollo

19950012630 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Mercury: Exploration of a planet
Jan 1, 1976; In English; 22 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–39134; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The flight of the Mariner 10 spacecraft to Venus and Mercury is detailed in animation and photography. Views of Mercury are featured. Also included is animation on the origin of the solar system. Dr. Bruce C. Murray, director of the Jet Propulsion Laboratory, comments on the mission.
JSC
Mariner 10 Space Probe; Mercury (Planet); Solar System Evolution; Venus (Planet)

19950014779 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Moon: Old and new
Jan 1, 1970; In English; 25 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–42155; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This video presents the moon as studied by man for more than 20 centuries. It reviews the history of lunar studies before the first moon landing, the major things learned since Apollo II, and closes with a resumes of lunar investigations scientists would like to undertake in the future.
Author
Apollo Spacecraft; Lunar Exploration; Moon

19950018252 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Mars observer mission: Mapping the Martian world
Jan 1, 1992; In English; 7 min. 14 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–47244; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The 1992 Mars Observer Mission is highlighted in this video overview of the mission objectives and planning. Using previous photography and computer graphics and simulation, the main objectives of the 687 day (one Martian year)

consecutive orbit by the Mars Observer Satellite around Mars are explained. Dr. Arden Albee, the project scientist, speaks about the pole-to-pole mapping of the Martian surface topography, the planned relief maps, the chemical and mineral composition analysis, the gravity fields analysis, and the proposed search for any Mars magnetic fields.
CASI
Gravitational Fields; Mars (Planet); Mars Exploration; Mars Observer; Mars Satellites; Mars Surface; Mission Planning; Planetary Magnetic Fields; Planetary Mapping; Satellite-Borne Photography; Topography

19950022757 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA, USA
Collection of Magellan Venus radar mapping results
Mar 8, 1991; In English; 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–46003; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Through computer animation several geological features of Venus are presented in this video. The Sif Mons, a 1.2 mile high volcano and the Gula Mons, a 1.8 mile high volcano are shown. Also, radar images of a rift valley, several impact craters, and a corona can be seen. The video ends with a northeast view of Eistla Regio.
CASI
Computer Aided Mapping; Planetary Geology; Planetary Mapping; Radar Imagery; Radar Maps; Venus (Planet); Venus Surface

19950023543 Interface Video Systems, Inc., Washington, DC, USA
Rover story
Jul 9, 1990; In English; Sponsored by NASA, Washington; 6 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56825; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Future Mars exploration missions and operations are discussed using computer animation along with proposed vehicles and equipment, for example, a Mars surface land rover. There is a Presidential Address by President George Bush where he discusses future goals for space exploration. This video also outlines the Outreach Program, which offers the public the chance to suggest new ideas for space research and exploration.
Author
Mars Exploration; Mars Sample Return Missions; Mars Surface; Technological Forecasting

19950023828 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Lunar/Mars exploration for synthesis group
Aug 12, 1992; In English; 10 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–57873; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Computer animation of future expeditions, research projects, and equipment (satellites, telescopes, etc.,) are contained on this video. President George Bush, in a Presidential Address, speaks on future plans for NASA emphasizing Space Station Freedom and a manned mission to Mars.
CASI
Lunar Exploration; Lunar Programs; Manned Mars Missions; Mars Exploration; Space Station Freedom

19950023897 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 14: Shepard hitting golf ball on Moon
Jan 1, 1970; In English; 3 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–56871; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of astronaut Alan Shepard hitting a golf ball on the Moon is featured on this video.
Author
Apollo 14 Flight; Astronauts; Lunar Exploration; Lunar Surface; Moon; Weightlessness

19960003227 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo 14 mission to Fra Mauro
Beasley, Brian D., editor, NASA Lyndon B. Johnson Space Center, USA; Apr 11, 1991; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–1995005615; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

The 1971 Apollo 14 Mission to Fra Mauro, a lunar highland area, is highlighted in this video. The mission's primary goal was the collection of lunar rocks and soil samples and lunar exploration. The soil and rock sampling was for the geochronological determination of the Moon's evolution and its comparison with that of Earth. A remote data collection station was assembled on the Moon and left for continuous data collection and surface monitoring experiments. The Apollo 14 astronauts were Alan B. Shepard, Edgar D. Mitchell, and Stuart A. Rossa. Astronauts Shepard and Mitchell landed on the Moon (February 5, 1971) and performed the sampling, the EVA, and deployment of the lunar experiments. There is film-footage of the lunar surface, of the command module's approach to both the Moon and the Earth, Moon and Earth spacecraft launching and landing, in-orbit command- and lunar-module docking, and of Mission Control.
CASI
Apollo 14 Flight; Astronauts; Geochronology; Highlands; Lunar Exploration; Lunar Exploration System For Apollo; Lunar Rocks; Lunar Soil; Lunar Surface; Manned Spacecraft; Soil Sampling

19990116267 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Voyager Outreach Compilation
Sep. 17, 1998; In English; Videotape: 1 hr., 11 min., 29 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999202577; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video presents a collection of the best videos that have been published of the Voyager mission. Computer animation/simulations comprise the largest portion of the video and include outer planetary magnetic fields, outer planetary lunar surfaces, and the Voyager spacecraft trajectory. Voyager visited the four outer planets: Jupiter, Saturn, Uranus, and Neptune. The video contains some live shots of Jupiter (actual), the Earth's moon (from orbit), Saturn (actual), Neptune (actual) and Uranus (actual), but is mainly comprised of computer animations of these planets and their moons. Some of the individual short videos that are compiled are entitled: The Solar System; Voyage to the Outer Planets; A Tour of the Solar System; and the Neptune Encounter. Computerized simulations of Viewing Neptune from Triton, Diving over Neptune to Meet Triton, and Catching Triton in its Retrograde Orbit are included. Several animations of Neptune's atmosphere, rotation and weather features as well as significant discussion of the planet's natural satellites are also presented.
CASI
Voyager Project; Space Probes; Space Missions; Neptune (Planet); Unmanned Spacecraft; Voyager 1 Spacecraft; Voyager 2 Spacecraft; Computer Animation

19990116396 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo Outreach Compilation
Sep. 17, 1998; In English; Videotape: 1 hr. 23 min. 4 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206758; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA JPL (Jet Propulsion Laboratory) video production is a compilation of the best short movies and computer simulation/animations of the Galileo spacecraft's journey to Jupiter. A limited number of actual shots are presented of Jupiter and its natural satellites. Most of the video is comprised of computer animations of the spacecraft's trajectory, encounters with the Galilean satellites Io, Europa and Ganymede, as well as their atmospheric and surface structures. Computer animations of plasma wave observations of Ganymede's magnetosphere, a surface gravity map of Io, the Galileo/Io flyby, the Galileo space probe orbit insertion around Jupiter, and actual shots of Jupiter's Great Red Spot are presented. Panoramic views of our Earth (from orbit) and moon (from orbit) as seen from Galileo as well as actual footage of the Space Shuttle/Galileo liftoff and Galileo's space probe separation are also included.
CASI
Galileo Spacecraft; Unmanned Spacecraft; Jupiter (Planet); Galileo Project; Galileo Probe; Galilean Satellites; Flyby Missions

19990116545 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Pathfinder and Mars Global Surveyor Outreach Compilation
Sep. 17, 1999; In English; Videotape: 51 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206757; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This videotape is a compilation of the best NASA JPL (Jet Propulsion Laboratory) videos of the Mars Pathfinder and Mars Global Surveyor missions. The mission is described using animation and narration as well as some actual footage of the entire sequence of mission events. Included within these animations are the spacecraft orbit insertion; descent to the Mars surface; deployment of the airbags and instruments; and exploration by Sojourner, the Mars rover. JPL activities at spacecraft control during significant mission events are also included at the end. The spacecraft cameras pan the surrounding Mars terrain and film Sojourner traversing the surface and inspecting rocks. A single, brief, processed image of the Cydonia region (Mars face) at an oblique angle from the Mars Global Surveyor is presented. A description of the Mars Pathfinder mission, instruments, landing and deployment process, Mars approach, spacecraft orbit insertion, rover operation are all described using computer animation. Actual color footage of Sojourner as well as a 360 deg pan of the Mars terrain surrounding the spacecraft is provided. Lower quality black and white photography depicting Sojourner traversing the Mars surface and inspecting Martian rocks also is included.
CASI
Mars Pathfinder; Mars Global Surveyor; Mars Landing; Mars Surface; Roving Vehicles; Computer Animation

19990116711 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo Science Summary October, 1997
Oct. 29, 1997; In English; Videotape: 17 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206861; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video is a compilation of visualizations, animation and some actual shots from the Galileo mission. It shows the trajectories of the mission around Jupiter that took the mission to Jupiter, and the various orbits of the spacecraft around the planet, that allowed for the views of several of Jupiter's moons from which the visualizations of this video are taken. It mainly shows the visualizations of the Galileo's view of Jupiter's atmosphere, Io, Ganymede, and Europa. There is no spoken presentation, the views are announced with slides prior to the presentation. Orchestrated selections from Vivaldi's Four Season's serves as background.
NASA
Galileo Project; Galileo Spacecraft; Ganymede; Io; Jupiter (Planet); Jupiter Atmosphere; Europa

19990116991 NASA Kennedy Space Center, Cocoa Beach, FL USA
Shoemaker–Levy Comet Impact with Jupiter Press Briefing
Jul. 18, 1994; In English; Videotape: 46 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206982; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

A press briefing about the impact of the G fragment of Comet Shoemaker-Levy on the planet Jupiter is presented. The briefing occurred on July 18, 1994 just hours after the impact. Still black and white pictures taken from the Hubble Space Telescope are presented. Eugene Shoemaker, co-discoverer of the Comet, and Heidi Hammel, Principal Investigator for the Hubble Imaging team at MIT present preliminary results of the study of images and answer questions about the impact and the results of the impact on Jupiter.
CASI
Shoemaker-Levy 9 Comet; Jupiter (Planet); Cometary Collisions; Craters; Hypervelocity Impact

19990117115 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Probe: Spacecraft Mission to Jupiter Press Release
Sep. 1989; In English; Videotape: 9 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–1999207897; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video is a compilation of three short videos related to the Galileo mission. The first section shows animation of the descent of the Galileo probe into the atmosphere of Jupiter. It includes cutaway views of the atmosphere showing the different layers. This descent will represent the first entry into the atmosphere of an outer planet in our solar system. A second section shows some live shots of the development and drop chute tests of the Galileo spacecraft. A third section is an animation that shows the Probe mission. It shows visualizations from the launch, including the Venus flyby, the separation of the probe and the orbiter, and the trajectory of the planetary arrival. It also shows the descent of the probe into the atmosphere.
CASI
Galileo Spacecraft; Galileo Project; Jupiter (Planet)

19990117249 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Earth/Moon 2 Press Conference Live from JPL
Dec. 22, 1992; In English; Videotape: 11 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206983; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The end of a press conference and short views of the Earth from the two Earth-Moon flybys of the Galileo spacecraft are presented. An audio playback of the Plasma Wave Instrument is also presented. The views of the Earth are from December 11, 1990, December 8, 1992 and December 22, 1992. The views from December 11, 1990 show panoramic views of the Earth as seen from space, the views from December 8, 1992 show close-up views of the Earth, and the views from December 22, 1992 include some simulations from the views taken on December 8, 1992.
CASI
Earth (Planet); Galileo Project

20000000248 NASA Kennedy Space Center, Cocoa Beach, FL USA
Comet Shoemaker–Levy 9 Impact Press Conference
Jul. 20, 1994; In English; Videotape: 1 hr. 2 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999208079; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A Press conference held on July 20, 1994 is presented. Leading off the press conference was an announcement about a major discovery that was made possible from the study of the impact. The participants in the panel were: (1) Roger Yelle from the University of Arizona, (2) Renee Prange of the Institute Astrophysique Spatiale, (3) Lucy McFadden of the University of California, and the University of Maryland, (4) David Levy, the co-discoverer of the Shoemaker-Levy comet. The moderator for this conference was Steven Maran of the Goddard Space Flight Center. Roger Yelle, who had been working on analyzing spectrographic evidence, made the announcement that sulfur in the form of S2 had been discovered. There was also discussion about the interactions of the atmosphere with the fragments. This interaction had caused a shift in the aurora of Jupiter. The observations of the impact sites made by amatuers were discussed. A summary of the observations from different observatories was also given. Included in these observations were reports from the airborne Kuiper Observatory Telescope and the McDonald observatory.
CASI
Auroras; Cometary Collisions; Fragments; Shoemaker-Levy 9 Comet; Sulfur; Jupiter (Planet); Jupiter Atmosphere

20000000254 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Earth Moon Flyby
Dec. 08, 1992; In English; Videotape: 45 min. 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999207899; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This video has five sections. The first is a live discussion of the information that scientists hope to gain by the Galileo flyby of the Moon. This section has no introduction. There is a great deal of the discussion about the lunar craters and lunar volcanism. There is also some discussion of the composition of the far side of the moon. The second section is a short animation that shows the final step to Jupiter with particular emphasis on the gravitational assisted velocity boost, which was planned to give the spacecraft the requisite velocity to make the trip to Jupiter. The next section is an update of the status of the flyby of the Moon, and the Earth, with an explanation of the trajectory around the earth, and the moon. A photograph of the tracking station in Canberra, Australia is included. The next section is a tour of a full-scale model of the spacecraft. The last section is a discussion with the person charged with the procurement of the instrumentation aboard the spacecraft; the importance of the lunar flyby to assist in the calibration of the instruments is discussed.
CASI
Galileo Spacecraft; Moon; Galileo Probe; Galileo Project; Interplanetary Trajectories; Swingby Technique; Gravitational Effects

20000000440 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Voyager II Encounter with Neptune: Voyager/Neptune Briefing
Aug. 07, 1989; In English; Videotape: 1 hr. 57 min. 39 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206990; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The main focus of this lecture is to discuss the relative size of the planets, the formation of the solar system, details of atmospheric motion (atmospheric dynamics), the aspects of the magnetic fields, different ring systems, and the Triton satellite. The study evolves around the planets of Jupiter, Saturn, Uranus, and Neptune. Their temperature and absorption properties of the ice are discussed. Two of the chemicals being absorbed by the ice are ammonia and methane. Also discussed are the belt and zonal circulation models, jet streams, plumes and clouds, magnetic fields, planetary rings, the pressure on Triton, the atmosphere of Titan, Callisto, Aria, Ganymede, Ariel, Miranda, Io, Europa, Amalthea, Rhea, Dione, Tethys, Enceladus, Mimas, Hyperion, Oberon, Titania, and Umbriel. The lecture also contained some computerized simulation and various images from Voyager.
CASI
Solar System; Flyby Missions; Voyager 2 Spacecraft; Saturn Satellites; Saturn (Planet); Uranus Satellites; Uranus (Planet); Jupiter Satellites; Jupiter (Planet); Neptune Satellites; Neptune (Planet)

20000000442 NASA Kennedy Space Center, Cocoa Beach, FL USA
Shoemaker–Levy 9 Comet Impact Briefing
Jul. 21, 1994; In English; Videotape: 1 hr. 2 min. 37 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206979; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A press conference held on July 21, 1994, about the impact of some of the fragments from Comet Shoemaker Levy is presented. The press conference opened with a still of Jupiter, showing the impact site of several fragments. The following people were on the panel: (1) Hal Weaver, from the Space Telescope Science Institute, (2) Rita Beebe from New Mexico State University, (3) Lucy McFadden from the University of California and the University of Maryland, (4) David Levy, the co-discoverer of the Shoemaker-Levy comet. The moderator was Eugene Shoemaker. The discussion was about the impact of the fragments on Jupiter. There were 21 pieces that were counted from earlier observations. There was some discussion about the further fragmentation of Q into two pieces. There was also some discussion about the impact on the planet of several fragments. These were due to hit ten hours apart on about the same spot. There were reports from the observatories around the world, including a tape from the Lowell Observatory, a summary of the views from the Galileo orbiter, a video of the impacts from the G fragment, and views of the results from the impact of the C and G fragments as viewed from Australia.
CASI
Cometary Collisions; Fragmentation; Shoemaker-Levy 9 Comet; Jupiter (Planet); Jupiter Atmosphere

20000004676 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Writers' Briefing, Part 3
Aug. 20, 1989; In English; Videotape: 1 hr., 2 min., 17 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001070; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy video production presents Part 3 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project's mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 3 of the 3 part video series centers on the Galileo science goals, which are to explore not only Jupiter but the entire Jovian system, and the individual instruments that will make these objectives possible. Dr. Torrence V. Johnson (Project Scientist) introduces Dr. Richard Young (Probe Scientist (AMES)) and Dr. Clayne M. Yeates (Acting Science Mission Design Manager) who discuss the six main instruments included on the Probe and the Orbiter experiments and instrumentation, respectively. The video is rounded out by a period in which the Science Writer's are given an opportunity to ask questions of the seven member panel.
CASI
Galileo Project; Galileo Spacecraft; Spacecraft Instruments; Space Exploration

20000004677 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Writers' Briefing, Part 2
Aug. 20, 1989; In English; Videotape: 55 min., 48 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001069; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy video production presents Part 2 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project's mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 2 of the 3 part video series begins with Richard J. Spehalski's (Galileo Project Manager) description of the spacecraft and mission operations. E. Cherniack gives a slide presentation of a Galileo spacecraft model and some design features unique to the spacecraft. John Givens (Probe System Design Manager) then presents a brief overview of the mission and subsystems surrounding the Galileo Space Probe. Neal E. Ausman, Jr. (Mission Director) ends the video with a discussion of mission operations including slides of the Galileo launch scenario and a trajectory correction maneuver.
CASI
Galileo Project; Galileo Spacecraft; Galileo Probe

20000004678 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Writers' Briefing, Part 1
Aug. 20, 1989; In English; Videotape: 41 min., 15 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001068; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA Kennedy video production presents Part 1 of a press conference held at JPL on August 8, 1989. The briefing in its entirety covers the Galileo Project's mission design from launch to completion in 1997 and is moderated by JPL Public Information Mgr. Robert Macmillan. Part 1 of the 3 part video series includes presentations by Richard J. Spehalski (Galileo Project Manager) and Clayne M. Yeates (Acting Science Mission Design Manager). Mr. Spehalski's presentation includes actual footage of spacecraft preparations at Kennedy Space Center and slides of mission timelines. Dr. Yeates discusses the Galileo mission in chronological order and includes slides of the interplanetary trajectory, encounter geometry, propellant margins vs. launch date, and planned earth images.
CASI
Galileo Spacecraft; Galileo Project; Mission Planning; Flyby Missions

20000010589 NASA Kennedy Space Center, Cocoa Beach, FL USA
Voyager Briefing: Expectations of the Neptune Encounter
Aug. 04, 1989; In English; Videotape: 52 min., 25 sec., running time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206981; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

This NASA KSC video release presents a news briefing held Aug. 4, 1989 at NASA Headquarters three weeks after Voyager 2's official "encounter" with Neptune began. The video is comprised of two slide presentations followed by a short question and answer period. The press conference is moderated by Charles Redmond, (NASA Public Affairs), includes an introduction by Dr. Geoffrey A Briggs (Dir., Solar System Exploration Div.), and features Norman R. Haynes (Voyager Project Manager, JPL) and Dr. Edward C. Stone (Voyager Project Scientist, Cal Tech). Mr. Haynes' presentation centers on Voyager's history, engineering changes, and spacecraft trajectories while Dr. Stone presents the scientific aspects of Voyager, including the 11 scientific investigations planned for the mission, instruments used, and imaging techniques.
CASI
Voyager Project; Neptune (Planet); Voyager 2 Spacecraft; Flyby Missions

20000012485 NASA Kennedy Space Center, Cocoa Beach, FL USA
Shoemaker–Levy Comet Impact on Jupiter Briefing From JPL
Jul. 17, 1999; In English; Videotape: 1 hr., 62 min., 22 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206995; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

A panel discussion held on July 17, 1994, about the impact of the P/Shoemaker-Levy 9 (SL9) comet with Jupiter and its observable effects on

Jupiter's atmosphere, rings, satellites, and magnetosphere, is presented. The panelists were Dr. Eugene and Carolyn Shoemaker (from Lowell Observatory and US Geological Survey), the Shoemaker-Levy comet co-discoverers; David Levy, also the co-discoverer of the Shoemaker-Levy comet; and Dr. Heidi Hammel (from Massachusetts Institute of Technology). On this second day of impact, the discussion was focused on the impact of the fragments A, B, C, and D. Dr. Hammel, who is also a Principal Investigator for the Hubble Imaging Team at MIT, presents preliminary results of the study of images taken by the Hubble Space Telescope (HST). A summary of the observations from different observatories was also given. Included in these observations were reports from the W.M. Keck Observatory, and Infrared Telescope Facility (IRTF) at Mauna Kea Observatory.
CASI
Cometary Collisions; Shoemaker-Levy 9 Comet; Hypervelocity Impact; Jupiter (Planet); Astronomical Observatories

20000012857 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Earth/Moon News Conference, Part 2
Dec. 01, 1992; In English; Videotape: 16 min., 20 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001078; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release (Part 2 of 2) is a continuation of a press conference held at the Jet Propulsion Laboratory on Dec. 1, 1992, 7 days prior to the Galileo Earth-2 flyby. The video begins following presentations given by William J. O'Neil (Galileo Project Manager), Torrence Johnson (Galileo Project Scientist), Dr. Joseph Veverka (Galileo Imaging Team, Cornell University) and during a question and answer period given for the benefit of scientific journalists. Subjects include overall Galileo spacecraft health, verification of the Gaspra images timeframe, and the condition of certain scientific spacecraft instruments. Part 1 of this video can be retrieved by using Report No. NONP-NASA-VT-2000001077.
CASI
Galileo Spacecraft; Galileo Project; Flyby Missions

20000012858 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Earth/Moon News Conference, Part 1
Dec. 01, 1992; In English; Videotape: 1 hr., 2 min., 20 sec., playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001077; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release (Part 1 of 2) begins with a presentation given by William J. O'Neil (Galileo Project Manager) describing the status and position of the Galileo spacecraft 7 days prior to the Galileo Earth-2 flyby. Slides are presented including diagrams of the Galileo spacecraft trajectory, trajectory correction maneuvers, and the Venus and asteroid flybys. Torrence Johnson (Galileo Project Scientist) follows Mr. O'Neil with an explanation of the Earth/Moon science activities that will be undertaken during the second Galileo/Earth encounter. These activities include remote sensing, magnetospheric and plasma measurements, and images taken directly from Galileo of the Earth and Moon. Dr. Joseph Veverka (Galileo Imaging Team, Cornell University) then gives a brief presentation of the data collected by the first Galileo/Gaspra asteroid flyby. Images sampled from the 57 photographs taken of Gaspra are presented along with discussions of Gaspra's morphology, shape and size, and surface features. These presentations are followed by a question and answer period given for the benefit of scientific journalists whose subjects include overall Galileo spacecraft health, verification of the Gaspra images timeframe, and the condition of certain scientific spacecraft instruments. Part 2 of this video can be retrieved by using Report No. NONP-NASA-VT-2000001078.
CASI
Galileo Spacecraft; Flyby Missions; Galileo Project

20000013597 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Mission Science Briefing
Jul. 21, 1989; In English; Videotape: 1 hr. 1 min. 32 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–1999206978; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

The first of two tapes of the Galileo Mission Science press briefing is presented. The panel is moderated by George Diller from the Kennedy Space Center (KSC) Public Affairs Office. The participants are John Conway, the director of Payload and operations at Kennedy; Donald E. Williams, Commander of STS-43, the shuttle mission which will launch the Galileo mission; John Casani, the Deputy Assistant Director of Flight Projects at the Jet Propulsion Lab (JPL); Dick Spehalski, Galileo Project Manager at JPL; and Terrence Johnson, Galileo Project Scientist at JPL. The briefing begins with an announcement of the arrival of the Galileo Orbiter at KSC. The required steps prior to the launch are discussed. The mission trajectory and gravity assists from planetary and solar flybys are reviewed. Detailed designs of the orbiter are shown. The distance that Galileo will travel from the sun precludes the use of solar energy for heat. Therefore Radioisotope heater units are used to keep the equipment at operational temperature. A video of the arrival of the spacecraft at KSC and final tests and preparations is shown. Some of the many science goals of the mission are reviewed. Another video showing an overview of the Galileo mission is presented. During the question and answer period, the issue of the use of plutonium on the mission is broached, which engenders a review of the testing methods used to ensure the safety of the capsules containing the hazardous substance. This video has actual shots of the orbiter, as it is undergoing the final preparations and tests for the mission.
CASI
Galileo Project; Galileo Spacecraft; Trajectories; Jupiter Atmosphere; Galilean Satellites; Interplanetary Trajectories; Space Flight; Jupiter (Planet); Planetary Ionospheres; Space Navigation; Flight Mechanics; Galileo Probe

20000014366 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Update: Observing Changes on Europa and in Jupiter's System
Aug. 13, 1996; In English; Videotape: 1 hr. 9 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008134; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents a news briefing from the Jet Propulsion Laboratory (JPL) featuring video presentations by Dr. Alfred McEwen (Univ. of Arizona, Lunar and Planetary Lab.), Dr. Ronald Greeley (Arizona St. Univ.), Dr. Andrew Ingersoll (California Inst. of Tech.,), and Dr. Diana Blaney (Jet Propulsion Lab.). Discussions center on the atmospheric and surface features of Jupiter and two of its moons, Europa and Io. Possible energy mechanisms that create atmospheric features of Jupiter, such as the Great Red Spot, as well as possible thunderstorm and lightning activity associated with these features are included. Discussions of the craters and fractures on the icy surface of Europa, surface features of Io, two of which are named Loki and Pele, believed to be of volcanic origin, as well infrared observations of volcanism on Io are presented. The individual presentations are followed by a question and answer period with questions posed by scientific journalists from JPL and other NASA centers. The video ends with computer animations, as well as actual footage, of features on Jupiter and its satellites taken from the Galileo spacecraft. Some of these images were seen previously in the individual presentations.
CASI
Galileo Spacecraft; Jupiter (Planet); Jupiter Satellites

20000015386 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Space Probe News Conference, Part 3
Jan. 22, 1996; In English; Videotape: 25 min., 52 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001075; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 3 of a press conference from Ames Research Center (ARC) regarding the successful entry of the Galileo Space Probe into Jupiter's atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversee the Galileo mission. The press conference question and answer period is continued from Part 2. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. The question and answer period is followed by a presentation in which all of the visuals that are shown during the press conference are reviewed. The video ends with several animations depicting the entry of the

probe, descent, and the first measurements of the Jovian atmosphere, historical footage of the building of the probe, and a short interview with Dr. Richard Young (Galileo Probe Scientist, ARC). Parts 1 and 2 of the press conference can be found in document numbers NONP-NASA-VT-2000001073, and NONP-NASA-VT-2000001074.
CASI
Galileo Project; Galileo Probe; Jupiter Atmosphere

20000015387 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Space Probe News Conference, Part 2
Jan. 22, 1996; In English; Videotape: 1 hr., 4 min., 41 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001074; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 2 of a press conference regarding the successful entry of the Galileo Space Probe into Jupiter's atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversee the Galileo mission. The press conference question and answer period is continued from Part 1. Atmospheric thermal structure, water abundances, wind profiles, and electricity are among the topics discussed. The question and answer period is followed by a 3 minute presentation in which all of the visuals that are shown during the press conference are reviewed. Parts 1 and 3 of the press conference can be found in document numbers NONP-NASA-VT-2000001073, and NONP-NASA-VT-2000001075.
CASI
Galileo Project; Galileo Probe; Jupiter Atmosphere

20000015388 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Space Probe News Conference, Part 1
Jan. 22, 1996; In English; Videotape: 1 hr., 2 min., 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000001073; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This NASA Kennedy Space Center (KSC) video release presents Part 1 of a press conference regarding the successful entry of the Galileo Space Probe into Jupiter's atmosphere. The press conference panel is comprised of twelve principal investigators and project scientists that oversee the Galileo mission. Among these panelists, William J. O'Neil (Jet Propulsion Lab.) begins the video praising all of the scientists that worked on the orbiter mission. He then presents a visual overview of Galileo's overall mission trajectory and schedule. Marcie Smith (NASA Ames Research Center) then describes the Galileo Probe mission and the overall engineering and data acquisition aspects of the Probe's Jupiter atmospheric entry. Dr. Richard Young (NASA Ames Research Center) follows with a brief scientific overview, describing the measurements of the atmospheric composition as well as the instruments that were used to gather the data. Atmospheric pressure, temperature, density, and radiation levels of Jupiter were among the most important parameters measured. It is explained that these measurements would be helpful in determining among other things, the overall dynamic meteorology of Jupiter. A question and answer period follows the individual presentations. Atmospheric thermal structure, water abundances, wind profiles, radiation, cloud structure, chemical composition, and electricity are among the topics discussed. Parts 2 and 3 of the press conference can be found in document numbers NONP-NASA-VT-2000001074, and NONP-NASA-VT-2000001075.
CASI
Galileo Project; Galileo Probe; Atmospheric Entry

20000020950 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo Update: The Search for Water in Jupiter's Atmosphere
Jun. 05, 1997; In English; Videotape: 1 hr. 12 min. 8 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008140; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This videotape presents a panel discussion press conference about the attempts to discover if there is moisture in the atmosphere of Jupiter. David Seidel, of the Jet Propulsion Laboratory (JPL) moderates the discussion. The panel consists of Andrew Ingersoll, California Institute of Technology, Tobias Owen, of the University of Hawaii, Glenn Orton, Robert Carlson of JPL, and Ashwin Vasavada, a graduate student at Cal Tech. Each of the panelists discusses evidence for moisture in Jupiter's atmosphere. They show video tapes of either animation or shots from the Galileo mission or diagrams of the atmosphere of Jupiter. The videos clips that are shown, include a brief summary of the Galileo mission. A diagram showing the layers of Jupiter's atmosphere is discussed. One panelist discusses and shows shots from the nightside of Jupiter. Another video clip shows evidence for convergence downdrafts around dry spots. Evidence for thunderstorms and updrafts is also reviewed. Shots of the giant red spot on Jupiter are shown, and explanations are given as to what it may be.
CASI
Galileo Project; Jupiter Atmosphere; Moisture; Jupiter (Planet); Vertical Air Currents; Atmospheric Circulation

20000021095 NASA Kennedy Space Center, Cocoa Beach, FL USA
Galileo Science Update
Dec. 16, 1997; In English; Videotape: 1 hr. 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000008139; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows Jane Platt, JPL Public Information Office, introducing the moderator of the panel discussion. The moderator introduces the panel members include Bill O'Neil, Project Manager Galileo Primary Mission, Dr. Torrence V. Johnson Galileo Project Scientist, Prof. Ronald Greeley from Arizona State University Galileo Imaging Team, Bob Mitchell Project Manager Galileo Europa Mission, and Dr. Karen Buxbaum Galileo Science Planning Manager. The panelists give the audience information about the Galileo Mission and answers questions from the audience and from Kennedy Space Center. An animation of the Galileo Spacecraft approaching and passing Europa is presented. The panelists mentions High Resolution Images, Detail Gravity studies, Spectral Maps of non-ice materials, Jupiter studies, Callisto studies, Europa studies, and Io studies.
CASI
Galileo Spacecraft; Flyby Missions; Galileo Project; Europa; Io; Callisto; Jupiter (Planet)

20000027670 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
MGS images of Mars
Jun. 23, 1999; In English; Videotape: 4 min. 21 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000033901; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The Mars Global Surveyor (MGS) camera captured images of a pit formed when a straight-walled trough collapsed. The heart shaped pit is about 2.3 kilometers (1.4 miles) wide. It is located on the east flank of the Alba Patera volcano in northern Tharsis.
CASI
Mars Global Surveyor; Mars Photographs; Mars Surface; Troughs

20000027707 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Global Surveyor MOC Images
Jul. 09, 1999; In English; Videotape: 3 min. 10 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000033902; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Images of several dust devils were captured by the Mars Orbiter Camera (MOC) during its global geodesy campaign. The images shown were taken two days apart, May 13, 1999 and May 15, 1999. Dust devils are columnar vortices of wind that move across the landscape and pick up dust. They look like mini tornadoes.
CASI
Images; Mars Global Surveyor; Dust

20000027711 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Global Surveyor Images
Jun. 29, 1999; In English; Videotape: 2 min. 26 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000033899; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

High resolution images that help scientists fine tune the landing site for

NASA's Mars Surveyor lander mission are shown. These images reveal a smooth surface in the southern cratered highlands near the Nepenthes Mensae.
CASI
Mars Global Surveyor; Images

20000027712 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Mars Images MOC2–106 through 109
Apr. 07, 1999; In English; Videotape: 3 min. 12 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000033898; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Mars Global Surveyor images of the following are shown: Margin of lava flow in Daedalia Planum; Ripples in cratered terrain north of Hesperia Planum; Martian variety exhibited by the Olympica Fossae; and East Tithonium chasma wall, Valles Marineris.
CASI
Mars Global Surveyor; Images; Mars Surface; Craters; Mars (Planet)

20000031610 NASA Kennedy Space Center, Cocoa Beach, FL USA
Magellan Press Conference (2 of 2)
Oct. 29, 1991; In English; Videotape: 23 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036566; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Live footage shows the speakers participating in the Magellan Press Conference question and answer session. Speakers include Huntress, Spear, Ledbetter, Johnson, McCarthy, and Saunders. The speakers are shown answering questions from various NASA Centers, and participating audience members from many different industries. They discuss the start and stop date for the mapping. Also shown are animation and radar images of Venus and Artemis. This is tape 2 of 2; tape 1 has a report number NONP-NASA-VT-2000036552.
CASI
Conferences; Magellan Project (NASA); Space Exploration; Venus Surface

20000031611 NASA Kennedy Space Center, Cocoa Beach, FL USA
Magellan Press Conference (1 of 2)
Aug. 09, 1990; In English; Videotape: 1 hr. 2 min. 31 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036552; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Live footage shows several speakers participating in the Magellan Press Conference. Speakers include the Director of Solar System Exploration Division West Huntress, Magellan Project Manager Tony Spear, Spacecraft Team Chief W. Ledbetter, Radar System Chief Engineer T. Johnson, and Magellan Project Manager from Hughes Aircraft Co. T. McCarthy. The speakers discuss the Venus Orbiting Insertion (VOI), radar system components, spacecraft development, mission objectives, and the flight plans. This is tape 1 of 2; tape 2 has a report number NONP-NASA-VT-2000036566.
CASI
Conferences; Magellan Project (NASA); Magellan Spacecraft (NASA); Venus Orbiting Imaging Radar (Spacecraft); Space Exploration; Venus (Planet)

20000031622 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo – Ganymede Family Night
Jun. 26, 1996; In English; Videotape: 1 hr. 30 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036029; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

When the Galileo spacecraft flew by Ganymede, Jupiter's and the solar system's largest satellite, on June 26, 1996, the project scientists and engineers gather with their friends and family to view the photos as they are received and to celebrate the mission. This videotape presents that meeting. Representatives from the various instrument science teams discuss many of the instruments aboard Galileo and show videos and pictures of what they have seen so far. This video is continued on Videotape number NONP-NASA-VT-2000036028.
CASI
Galileo Spacecraft; Ganymede; Jupiter (Planet); Galilean Satellites; Jupiter Red Spot; Jupiter Satellites

20000031623 Jet Propulsion Lab., California Inst. of Tech., Pasadena, CA USA
Galileo – Ganymede Family Night
Jun. 26, 1996; In English; Videotape: 27 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036028; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape is a continuation of tape number NONP-NASA-VT-2000036029. When the Galileo spacecraft flew by Ganymede, Jupiter's and the solar system's largest satellite, the project scientist and engineers gather together with their friends and family to view the photos as they are received. This videotape presents the last part of that meeting, which culminates in the announcement of the confirmation of the fly-by, and a review of the current trajectory status.
CASI
Galileo Spacecraft; Ganymede; Jupiter (Planet)

20000038056 NASA Kennedy Space Center, Cocoa Beach, FL USA
Magellan Science Briefing from NASA Headquarters
Oct. 29, 1991; In English; Videotape: 62 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000036563; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

This video presents a Magellan Science update on the most recent findings from the Magellan Mission to Venus. Brian Dunbar, NASA Public Affairs, introduces Dr. Wes Huntress, Division Director Solar System and Exploration Division. Dr. Huntress explains the Magellan Mission to Venus, which tested the temperature and emissivity of Venus, and collected high resolution radar imagery of 92% of the surface of the planet. Dr. Steve Saunders, Magellan Project Scientist, Jet Propulsion Lab, presents a visual global view of the North Pole of Venus. He also presents planet wide patterns of fracture on Venus. Dr. Saunders showed a video presentation of radio mapping results from Artemis. Dr. Wood, Radar Investigator, Smithsonian Astrophysical Observatory explains Mat Mons, which is the second highest mountain on Venus. Dr. John Wood also presents a video presentation of his findings. Dr. Gordon Pettengill, Principle Investigator, Massachusetts Institute of Technology, presents a video on the Topography of the Magellan Mission, which is able to give resolution ten times finer and further into the South and into the North than was possible earlier. The video of the Magellan Science update ends with a question and answer period.
CASI
Magellan Project (NASA); Topography; Venus (Planet); Space Exploration; Venus Surface

20000060842 NASA Kennedy Space Center, Cocoa Beach, FL USA
Titan III Mars Explorer Transfer Orbital Stage Delivery to the PHSF
Jan. 10, 1992; In English; videotape: 6 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081541; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This NASA Kennedy Space Center video presents live footage of the delivery of the Titan III Mars Explorer Transfer Orbital Stage (TOS) to the Payload Hazardous Servicing Facility (PHSF). The TOS is a single-stage, solid propellant upper stage vehicle used to propel a spacecraft from low Earth orbit toward it's ultimate destination. The TOS is delivered to the PHSF where it is designed to accommodate a variety of NASA and NASA customer payloads and can be used as a payload processing facility (PPF) or a hazardous processing facility (HPF).
CASI
Titan 3 Launch Vehicle; Mars Exploration; Interplanetary Transfer Orbits; Delivery; Upper Stage Rocket Engines; Payloads

20000061490 NASA Kennedy Space Center, Cocoa Beach, FL USA
Titan III Mars Observer Arrival and Uncrating at PHSF
Jul. 09, 1992; In English; Videotape: 8 min. 25 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081540; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the uncrating and the arrival of the Titan III Mars Observer to the Payload Hazardous Servicing Facility (PHSF) is presented. The Mars Observer's mission is to study the surface, atmosphere, interior and magnetic field of Mars from Martian orbit. At the PHSF, fueling of the spacecraft with its orbit insertion and attitude control propellants will occur. This will be followed

by mating to the Transfer Orbit Stage (TOS). This is the upper stage that will provide the final thrust to propel the spacecraft on its 11-month journey to Mars.
CASI
Mars (Planet); Mars Missions; Mars Observer; Payloads; Titan 3 Launch Vehicle

20000062727 NASA Kennedy Space Center, Cocoa Beach, FL USA
TITAN III Launch Replays
Sep. 25, 1992; In English; Videotape: 9 min. playing time, in color, without sound
Report No.(s): NONP–NASA–VT–2000081549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows several views of the launching of the Mars Observer Titan III satellite. Scenes include different angle and camera views of the launch. Also shown are panoramic views of the launch vehicle on the launch pad.
CASI
Titan; Launch Vehicles; Titan Project; Mars Observer; Launching

20000063384 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Press Conference JPL
Aug. 24, 1993; In English; Videotape: 55 min. 1 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–200081550; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a press briefing, held after the spacecraft had not responded to attempts to communicate with it, to explain to the press the problems and the steps that were being taken to re-establish communication with the spacecraft. The communications had been shutdown prior to the orbital insertion burn to protect the instruments. At the time of the press conference, the communications system was still not operational, and attempts were being made to re-establish communication. Bob McMillan of the Public Affairs Office at JPL gives the initial announcement of the continuing communication problem with the spacecraft. Mr. McMillan introduces William Piotrowski, acting director of solar system exploration, who reiterates that there is indeed no communication with the Observer spacecraft. He is followed by Glenn Cunningham, the Project Manager of the Mars Observer who speaks about the attempts to re-establish contact. Mr. Cunningham is followed by Satenios Dallas, the Mission Manager for the Mars Observer Project, who speaks about the sequence of events leading up to the communication failure, and shows an animated video presenting the orbital insertion maneuvers. The briefing was then opened up for questions from the assembled press, both at JPL and at the other NASA Centers. The questions are about the possible reasons for the communication failure, and the attempts to restore communications with the spacecraft. Dr. Arden L. Albee, chief scientist for the Mars Observer Mission, joins the other panel members to answer questions. At the end of the press briefing the animation of the Mars orbital insertion is shown again.
CASI
Failure; Orbit Insertion; Mars Probes; Mars Missions

20000063385 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Lecture: Mars Orbit Insertion
Dodd, Suzanne R., Personal Name; Aug. 17, 1993; In English; Videotape: 45 min. 45 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081538; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

The Mars Observer mission spacecraft was primarily designed for exploring Mars and the Martian environment. The Mars Observer was launched on September 25, 1992. The spacecraft was lost in the vicinity of Mars on August 21, 1993 when the spacecraft began its maneuvering sequence for Martian orbital insertion. This videotape shows a lecture by Suzanne R. Dodd, the Mission Planning Team Chief for the Mars Observer Project. Ms Dodd begins with a brief overview of the mission and the timeline from the launch to orbital insertion. Ms Dodd then reviews slides showing the trajectory of the spacecraft on its trip to Mars. Slides of the spacecraft being constructed are also shown. She then discusses the Mars orbit insertion and the events that will occur to move the spacecraft from the capture orbit into a mapping orbit. During the trip to Mars, scientists at JPL had devised a new strategy, called Power In that would allow for an earlier insertion into the mapping orbit. The talk summarizes this strategy, showing on a slide the planned transition orbits. There are shots of the Martian moon, Phobos, taken from the Viking spacecraft, as Ms Dodd explains that the trajectory will allow the orbiter to make new observations of that moon. She also explains the required steps to prepare for mapping after the spacecraft has achieved the mapping orbit around Mars. The lecture ends with a picture of Mars from the Observer on its approach to the planet.
CASI
Orbit Insertion; Spacecraft Orbits; Mars Probes; Earth-Mars Trajectories; Transfer Orbits; Spacecraft Maneuvers; Orbital Maneuvers

20000064716 NASA Kennedy Space Center, Cocoa Beach, FL USA
Titan III Mars Observer Press Showing at the PHSF
Aug. 13, 1992; In English; Videotape: 2 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–2000081554; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Live footage of the Titan 3 Mars Observer is shown at the Payload Hazardous Servicing Facility (PHSF). The Mars Observer is a NASA mission to study the surface, atmosphere, interior and magnetic field of Mars from Martian orbit.
CASI
Mars Observer; Payloads; Titan 3 Launch Vehicle

20000065630 NASA Kennedy Space Center, Cocoa Beach, FL USA
Mars Observer Press Conference
Aug. 25, 1993; In English; Videotape: 18 min. 5 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081551; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Footage shows Bob MacMillin, NASA's Public Information Office, as he introduces the Mars Observer Project Manager, Glen Cunningham. Glen is shown addressing the current status of the Mars Observer communication system, the inability of NASA to establish contact, and the action that is currently being taken to establish contact with the spacecraft. Glen is also seen answering questions from both the audience as well as other NASA Centers.
CASI
Conferences; Mars Observer

20000065631 NASA Kennedy Space Center, Cocoa Beach, FL USA
TITAN III/Mars Observer Flow Tape for Playback
Aug. 11, 1992; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000081553; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Footage shows components for the Mars Observer Spacecraft during checkout. Arrival of the navigation system is also shown.
CASI
Titan 3 Launch Vehicle; Mars Observer

20000070461 NASA Kennedy Space Center, Cocoa Beach, FL USA
NASA Today – Mars Observer Segment (Part 4 of 6)
Aug. 20, 1993; In English; Viodeotape: 16 min. 20 sec. playing time, in color with sound
Report No.(s): NONP–NASA–VT–200096690; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This videotape consists of eight segments from the NASA Today News program. The first segment is an announcement that there was no date set for the launch of STS-51, which had been postponed due to mechanical problems. The second segment describes the MidDeck Dynamic Experiment Facility. The third segment is about the scheduled arrival of the Mars Observer at Mars, it shows an image of Mars as seen from the approaching Observer spacecraft, and features an animation of the approach to Mars, including the maneuvers that are planned to put the spacecraft in the desired orbit. The fourth segment describes a discovery from an infrared spectrometer that there is nitrogen ice on Pluto. The fifth segment discusses the Aerospace for Kids (ASK) program at the Goddard Space Flight Center (GSFC). The sixth segment is about the high school and college summer internship programs at GSFC. The seventh segment announces a science symposium being held at Johnson Space Center. The last segment

describes the National Air and Space Museum and NASA's cooperation with the Smithsonian Institution.
CASI
Mars Observer; Museums; Pluto Atmosphere; Pluto (Planet); Mars Missions

20000080361 NASA Kennedy Space Center, Cocoa Beach, FL USA
NASA Today: Mars Observer Segment
Aug. 20, 1993; In English; Videotape: 16 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000096696; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
The NASA news format primarily focuses on the 3 month orbit of Mars and the images obtained by the Observer spacecraft. The spacecraft orbits 310 miles from the surface and rotates once every 100 minutes. Other topics include the MODE mini-lab, Goddard student programs, and Pluto.
CASI
Mars Observer; Spacecraft Orbits; Mars (Planet)

20010021609 Space Telescope Science Inst., Baltimore, MD USA
Worlds Smaller than Saturn
Mar. 01, 2001; In English; Videotape: 64 min. 7 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001030026; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS
Computerized animations show the following: (1) an artist's conception of a Saturn-like extrasolar planet; (2) star and planet motion; and (3) young stellar disk and planet formation. Footage shows the outside of the Mauna Kea Observatories in Hawaii and Geoff Marcy and Paul Butler inside while they are processing information. Then a press conference,'Worlds Smaller than Saturn', is seen. Anne Kinney, Origins Science Director, NASA Headquarters, introduces Geoff Marcy, Paul Butler, Alan Boss, and Heidi Hammel. They discuss the discovery of the two new Saturn-sized extrasolar planets that are orbiting the stars HD46375 and 79 Seti, giving details on the search technique and size distribution. They then answer questions from the press.
CASI
Extrasolar Planets; Planetary Evolution

92
SOLAR PHYSICS

Includes solar activity, solar flares, solar radiation and sunspots. For related information see 93 Space Radiation.

19940010814 NASA, Washington, DC, USA
Unmasking the Sun
Nov 1, 1988; In English; 3 min. 42 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190393; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This videotape describes solar-related research at the Mt. Palomar Observatory.
CASI
Observatories; Solar Physics; Sun

19940011049 NASA Ames Research Center, Moffett Field, CA, USA
C 141 KAO solar eclipse mission
Apr 1, 1988; In English; 4 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190474; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video presents the C 141 Kuiper Airborne Observatory Solar Eclipse Mission.
CASI
Kuiper Airborne Observatory; Solar Eclipses

20010036754 Space Telescope Science Inst., Baltimore, MD USA
Final Blaze of Glory
[2001]; In English; Videotape: 14 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001026549; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video gives an overview of planetary nebulae through a computerized animation, images from the Hubble Space Telescope (HST), and interviews with Space Telescope Science Institute Theorist Dr. Mario Livio. A computerized animation simulates a giant star as it swallows its smaller companion. HST images display various planetary nebulae, such as M2-9 Twinjet Nebula, NGC 3568, NGC 3918, NGC 5307, NGC 6826, NGC 7009, and Hubble 5. An artists conception shows what our solar system might look like in a billion years when the Sun has burned out and cast off its outer layers in a shell of glowing gas. Dr. Livio describes the shapes of the planetary nebulae, gives three reasons to study planetary nebulae, and what the observations made by HST have meant to him. A succession of 17 HST images of planetary nebulae are accompanied by music by John Serrie.
CASI
Giant Stars; Planetary Nebulae

93
SPACE RADIATION

Includes cosmic radiation; and inner and outer Earth radiation belts. For biological effects of radiation on plants and animals see 52 Aerospace Medicine. For theory see 73 Nuclear Physics.

20000020780 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Gamma Ray Observatory
Jan. 29, 1991; In English; Videotape: 16 min. 2 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
This NASA Kennedy Space Center (KSC) video release presents footage of pre-flight activities involving the STS-37 primary payload, the Gamma Ray Observatory (GRO). The GRO is shown being removed from the transport aircraft to one of the runways at Kennedy. Other footage includes Kennedy work crews moving the GRO into position as well as discussions between the STS-37 astronauts and the work crews regarding GRO operation.
CASI
Gamma Ray Observatory; Cape Kennedy Launch Complex

20000024867 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 The Payload bay door closing at PCR Pad B
Apr. 02, 1991; In English; Videotape: 5 min. in lengthin color with background sounds
Report No.(s): NONP–NASA–VT–2000013433; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 am on April 5, 1991, onboard the space shuttle Atlantis. This videotape shows the payload bay doors being closed. Included are views of the Gamma Ray Observatory in the payload bay, and the clean room operations in the Payload Changeout Room (PCR).
CASI
Bays (Structural Units); Clean Rooms; Doors; Gamma Ray Observatory; Space Transportation System

20000030688 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37 Gamma Ray Observatory Arrival and VPF Activities
Feb. 09, 1991; In English; Videotape: 28 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013435; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
Live footage shows the STS-37 Gamma Ray Observatory, its move to the airlock, the removal of its plastic covering, and its lift to the work-stand.
CASI
Gamma Ray Observatory; Gamma Ray Telescopes; Gamma Ray Astronomy; Spaceborne Astronomy; Air Locks

20000037776 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Gamma Ray Observatory (2 of 2)
Mar. 24, 1991; In English; Videotape: 55 min. 20 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000013425; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
Live footage shows various unedited Gamma Ray Observatory (GRO)

compiled processing shots. Shots depict work being performed on the STS-37 GRO payload, and the STS-37 Shuttle Amateur Radio Experiment (SAREX).
CASI
Gamma Ray Observatory; Spaceborne Astronomy; Spaceborne Telescopes; Spaceborne Experiments

20000038193 NASA Kennedy Space Center, Cocoa Beach, FL USA
STS–37: Gamma Ray Observatory Removal from Cannister at the PHSF
Feb. 08, 1990; In English; Videotape: 10 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2000046434; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The primary objective of the STS-37 mission was to deploy the Gamma Ray Observatory. The mission was launched at 9:22:44 a.m. on April 5, 1991, onboard the space shuttle Atlantis. This video shows the Gamma Ray Observatory being moved from the cannister in the Payload Hazardous Servicing Facility (PHSF) to the work area.
Author
Gamma Ray Observatory; Space Transportation System

99
GENERAL

Includes aeronautical, astronautical, and space science related histories, biographies, and pertinent reports too broad for categorization; histories or broad overviews of NASA programs such as Apollo, Gemini, and Mercury spacecraft, Earth Resources Technology Satellite (ERTS), and Skylab; NASA appropriations hearings.

19940009139 NASA, Washington, DC, USA
Highlights, 1981
Dec 1, 1981; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–185323; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video presentation covers Shuttle flights 1 and 2, Spacelab, mobile workstation, Voyager 2 Saturn, Infrared Astronomy Satellite, Hubble Space Telescope, Kuiper Airborne Observatory, High Altitude Earth Survey, LANDSAT, aerodynamic research, electric cars, wind energy, XV-15, Quiet Shorthaul Research Aircraft, X-14 BVTOL, 40 x 80 Wind Tunnel, and turboprop research.
Author (revised)
Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development

19940009160 NASA Hugh L. Dryden Flight Research Facility, Edwards, CA, USA
Flight operations highlights, tapes 1 and 2
Apr 1, 1990; In English; 1 hr. 40 min. playing time, in color, NO sound
Report No.(s): NONP–NASA–VT–93–185308; No Copyright; Avail: CASI; B04, Videotape-Beta; V04, Videotape-VHS

Historical film footage of the X-series aircraft (including Yeager's X-1 flight), lifting bodies, and early Apollo landing tests is presented.
Author (revised)
Flight Operations; Histories

19940010768 NASA, Washington, DC, USA
The 1969 highlights
Dec 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190428; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes Mariners to Mars; Orbiting Solar Observatory; Orbiting Geophysical Observatory; sounding rockets; weather satellites - Tiros and Nimbus; applications technology; advanced research; space shuttle research; V/STOL; jet noise abatement; and Apollo 9, 10, 11, and 12 missions.
CASI
Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development; Space Missions

19940010769 NASA, Washington, DC, USA
The 1972 highlights
Jan 1, 1973; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190429; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document includes Mariners to Mars, Pioneer to Jupiter, Orbiting Astronomical Observatory, Small Astronomy Satellite, sounding rockets, earth resources, Nimbus weather watcher, communication satellites, aeronautics, wind tunnel research, STOL, noise abatement, lifting bodies, US/Soviet cooperation, preparation for Skylab, and the Apollo 16 and 17 missions.
CASI
Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development; Space Missions; Spacecraft

19940010770 NASA, Washington, DC, USA
The 1965 highlights
Dec 1, 1965; In English; 4 min. 40 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190430; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document includes Ranger to the Moon, Mariner to Mars, Tiros weather watcher, Early Bird satellite, scientific satellites, sounding rockets, aeronautical research, preparation for the moon, and manned Gemini flights.
CASI
Aerospace Engineering; NASA Programs; NASA Space Programs; Research and Development; Space Missions; Spacecraft

19940010771 NASA, Washington, DC, USA
The 1967 highlights
Dec 1, 1967; In English; 15 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190431; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document includes Surveyor, Lunar Orbiter, Apollo 4, Biosatellite, Orbiting Geophysical Observatory, Orbiting Solar Observatory, Explorers, Applications Technology satellites, operational satellites, Mariner to Venus, San Marco, sounding rockets, and aeronautical research.
CASI
Aerospace Engineering; NASA Programs; NASA Space Programs; Space Missions; Spacecraft

19940010842 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
STS–26 through STS–34, deploy activities
Dec 1, 1989; In English; 28 min. 34 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190364; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows on orbit deployments since Shuttle flights resumed in 1988. These deployments include TDRS-C and TDRS-D, and the Magellan and Galileo spacecrafts.
CASI
Deployment; Galileo Spacecraft; Magellan Spacecraft (NASA); Orbital Launching; Space Shuttle Missions; TDR Satellites

19940010849 NASA, Washington, DC, USA
NACA–NASA: 75 years of flight
Oct 1, 1990; In English; 3 min. 11 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190246; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This document presents historical footage used to recollect the last 75 years of aeronautical and space-related research.
CASI
Aeronautics; Aerospace Engineering; Histories; NASA Programs

19940010870 NASA, Washington, DC, USA
The 1966 highlights
Dec 1, 1966; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190241; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

The videotape includes footage of the following: space and aeronautic montage, Surveyor lands on the Moon, Lunar Orbiter, weather satellites,

Orbiting Geophysical Observatory, Pagoes, Pioneer, sounding rockets, solar eclipse, X-15, lifting bodies, solid rockets, nuclear powered engines, Project Gemini ends, and Apollo-Saturn.
CASI
Apollo Project; Lifting Bodies; Lunar Exploration; Lunar Orbiter; OGO; X-15 Aircraft

19940010879 NASA, Washington, DC, USA
NASA: The 25th year
Sep 1, 1983; In English; 50 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190254; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video tape chronicles NASA's research and development programs, especially regarding space travel from 1958 to 1983.
CASI
NASA Space Programs; Space Exploration

19940010893 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Apollo presentation for Astrodome
Aug 1, 1989; In English; 7 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190332; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video features a condensed look at Apollo milestones. It was created for presentation at the Houston Astrodome during Apollo 11's 20th Anniversary celebrations.
CASI
Apollo Project; Space Missions

19940010921 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
President Kennedy's speech at Rice University
Nov 1, 1988; In English; 34 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190329; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This video tape presents unedited film footage of President John F. Kennedy's speech at Rice University, Houston, Texas, September 12, 1962. The speech expresses the commitment of the USA to landing an astronaut on the Moon.
CASI
Apollo Project; Manned Space Flight

19940010926 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
ASTP 15th anniversary clip–media release
Sep 1, 1990; In English; 42 min. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–93–190331; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS
This release is comprised of 5 separate clips, including the following: CL 762 Astronauts/Cosmonauts Visit to KSC and Walt Disney World; CL 739 ASTP Joint Crew Activities; CL 748 ASTP Astronauts/Cosmonauts Horlock Ranch Visit; CL 758 T-21 ASTP Training - US/USSR; and CL 743 ASTP Joint Crew Training in the Soviet Union.
CASI
Apollo Soyuz Test Project; Astronaut Training; Astronauts; Cosmonauts; Spacecrews

19940010937 NASA, Washington, DC, USA
The 1973 highlights
Dec 1, 1973; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190422; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
These highlights include man in space, Pioneer to Jupiter, Mariner to Venus and Mercury, sounding rockets, comet Kohoutek, Earth resources, and aeronautics.
CASI
Earth Resources; Kohoutek Comet; Mariner-Mercury 1973; Sounding Rockets

19940010938 NASA, Washington, DC, USA
The 1978 highlights
Dec 1, 1978; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190423; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the space shuttle, new astronauts, Pioneers to Venus, Voyagers to Jupiter and Saturn, High Energy Astronomy Observatories Space Telescope, LANDSAT/Seasat, space applications, wind energy research, and aeronautics.
CASI
Energy Technology; HEAO; Pioneer Space Probes; Space Shuttles

19940010939 NASA, Washington, DC, USA
The 1977 highlights
Dec 1, 1977; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190424; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the Space Shuttle, the Voyagers, LANDSAT, aeronautics, Spacelab, HEAO-1, and energy research.
CASI
Energy Technology; HEAO 1; LANDSAT Satellites; Space Shuttles; Spacelab

19940010940 NASA, Washington, DC, USA
The 1968 highlights
Jan 1, 1969; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190425; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
These highlights include the end of the Surveyor Program, planetary studies, Pioneers, Orbiting Geophysical Observatory, sounding rockets, radio astronomy Explorer, Orbiting Astronomical Observatory, Nimbus, lifting bodies, X-15 Program, XB-70, V/TOL, model research, jet noise reduction, flight safety, nuclear engines, Project Apollo (testing and training), and Apollo 5,6,7, and 8.
CASI
B-70 Aircraft; Flight Safety; Jet Aircraft Noise; Lifting Bodies; Noise Reduction; OAO; OGO; Pioneer Space Probes; Sounding Rockets; Surveyor Project

19940010942 NASA, Washington, DC, USA
The 1970 highlights
Dec 1, 1970; In English; 28 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190426; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS
These highlights include the 1970 solar eclipse, Tiros, Nimbus, Intelsat, wake turbulence, the Peru earthquake, Oregon fishing grounds, Apollo 13, SI-C static firing, McDonnell/Douglas 90-day confinement test, and the moon from Galileo to 1971.
CASI
Earthquakes; Galileo Spacecraft; Intelsat Satellites; Marine Resources; Solar Eclipses; Turbulent Wakes

19940010944 NASA, Washington, DC, USA
The 1971 highlights
Dec 1, 1971; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190427; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
These highlights include Mariner orbit of Mars, Interplanetary Monitoring Platform, Orbiting Solar Observatory, small scientific satellite, sounding rockets, Stratoscope 11, earth resources, aeronautics, jet noise abatement, airport runway safety, Apollo 14 and 15, and Skylab.
CASI
Accident Prevention; Imp; Jet Aircraft Noise; Mariner Spacecraft; Noise Reduction; OSO; Runways; Small Scientific Satellites; Sounding Rockets

19940010951 NASA, Washington, DC, USA
Sights and sounds of space
Nov 1, 1989; In English; 3 min. 19 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190408; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
This video details the progress of the first musician's work, based on the STS-26 mission, in the NASA Fine Arts Program.
CASI
Music; Space Shuttle Mission 51-F

19940010961 NASA Ames Research Center, Moffett Field, CA, USA
Unitary plan wind tunnel landmark dedication and revitalization
Sep 1, 1990; In English; 21 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190447; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video shows construction scenes of unitary plan wind tunnel, aerials, and views of various models, including an MD-II in the 11 ft, an Apollo in the 8x7, Dynasoar in the 8x7, a one inch scale shuttle in the 8x7, and an artist's concept of a 12 ft test section.
CASI
Construction; Landmarks; Reconstruction; Test Chambers; Wind Tunnels

19940011035 NASA, Washington, DC, USA
The 1982 highlights
Dec 1, 1982; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190469; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes STS 3 & 4, Challenger completed, unmanned launches, the Hubble Space Telescope, Pioneers 8 & 9 encounter, Mars Pictures, LANDSAT 4, wind energy, ion-electric engines, solar powered medical system, medical image analysis, rotor systems research aircraft, XV-15, propfan research, aircraft icing studies, and Oshkosh Sirshow.
CASI
Aircraft Icing; Challenger (Orbiter); Hubble Space Telescope; LANDSAT 4; Mars 4 Spacecraft; Pioneer Space Probes; Prop-Fan Technology; Propeller Fans; Rotor Systems Research Aircraft; Space Transportation System; Space Transportation System 3 Flight; Space Transportation System 4 Flight; Windpower Utilization; XV-15 Aircraft

19940011036 NASA, Washington, DC, USA
The 1980 highlights
Dec 1, 1980; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190470; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video includes Voyager 1 to Saturn, Solar Maximum Mission, sounding rockets/balloons, Space Shuttle, GOES 4 weather satellite, Mount St. Helen's Research, wind energy, rotor systems research aircraft, quiet shorthaul aircraft, AD-1 Scissor Wing, and automated pilot advisory system.
CASI
Automated Pilot Advisory System; Balloon Sounding; GOES 4; Meteorological Satellites; Oblique Wings; Rocket Sounding; Rotor Systems Research Aircraft; Solar Maximum Mission; Space Shuttles; Voyager 1 Spacecraft

19940011596 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
History of the manned space flight program
Aug 1, 1990; In English; 13 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–93–190326; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

Astronaut Marsha Ivins tracks the history of America's space program, from Alan Shepard's Mercury flight to Space Shuttle flight STS-26.
CASI
Histories; Manned Space Flight; NASA Space Programs

19940014507 NASA, Washington, DC, USA
Langley's 50th year
Oct 1, 1967; In English; 14 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–198212; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video gives an historical overview of Langley Research Center's major achievements in aeronautics and astronautics research between the years 1917-1967. Historical footage accompanies explanation of research into wind tunnel, spin tunnel, and hydrodynamic test tanks for studying aircraft airflow, wartime research into overwater combat ditching, diving, and braking, the X series aircraft experiments with supersonic flight, helicopter and vertical Take Off and Landing (VTOL) aircraft, airport landing studies, and early prototypes for the Space Shuttle.
CASI
Histories; Hydrodynamics; Research Projects; Space Shuttles; Wind Tunnels

19940029067 NASA Lewis Research Center, Cleveland, OH, USA
NASA report to education, volume 6
Sep 1, 1989; In English; 26 min. 46 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–12946; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

Segments include NASA Spacelink, STS-28 Mission, Voyager encounters Neptune, robotics development at GSFC, and the National Boy Scout Jamboree.
CASI
Computer Networks; Education; NASA Programs; Robotics; Space Exploration; Voyager Project

19940029283 NASA Lewis Research Center, Cleveland, OH, USA
Astronauts Part 5: Astronaut Collins
Jan 11, 1989; In English; 28 min. 57 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–13532; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video is an interview with Michael Collins about his accomplishments, NASA's accomplishments, and the future.
LeRC
Apollo Project; Astronauts

19950004300 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden year in review: 1992
Jan 1, 1993; In English; 4 min. 30 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23632; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS

This video reviews the research work done at Dryden for the year 1992.
DFRC
General Overviews; NASA Programs; Research Facilities

19950004301 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
NACA/NASA history at Dryden, part 1 and 2
May 4, 1990; In English; 50 min. 30 sec. playing time, in color, no sound
Report No.(s): NONP–NASA–VT–94–23633; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Two video tapes of raw material show examples of research activity at the center from the 1950's to the 1980's.
DFRC
Histories; NASA Programs; Research Facilities

19950004338 NASA Hugh L. Dryden Flight Research Center, Edwards, CA, USA
Dryden summer 1994 update
Jul 8, 1994; In English; 17 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–94–23650; No Copyright; Avail: CASI; B02, Videotape-Beta; V02, Videotape-VHS

This video presents a complete, technically detailed report on all Dryden projects, achievements, and employee activities for 1994.
DFRC
Aeronautical Engineering; Research and Development; Research Projects

19950026963 NASA Lyndon B. Johnson Space Center, Houston, TX, USA
Twenty–five years of progress. Part 1: Birth of NASA. Part 2: The Moon–a goal
Jan 1, 1984; In English; Sponsored by NASA, Washington; 60 min. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–95–61007; No Copyright; Avail: CASI; B03, Videotape-Beta; V03, Videotape-VHS

Historical footage (1958 - 1983) concerning NASA's Space Program, is reviewed in this two-part video. Host, Lynn Bondurant describes the birth of NASA and its accomplishments through the years. Part one contains: the launch of Russian satellite Sputnik on October 4,1957; the first dog (Soviet) in space; NACA Space Research, Explorer-6; and still photographs of various Space projects. Tiros 1 experimental weather satellite, Microgravity simulators, Echo 1 passive communications satellite, and the first U.S. manned spaceflight Mercury are included in part two. The seven Mercury astronauts are: Captain Donald Slayton, Lt. Commander Alan Shepard, Lt. Commander Walter Schirra,

Captain Virgil Grissom, Lt. Col. John Glenn Jr., Captain Leroy Cooper Jr, and Lt. Malcolm Scott Carpenter. Also included are an ongoing interview (throughout the video) with NASA's first Administrator Keith Glennan, the first flight in 1961 with Enos, a chimpanzee, President Kennedy's speech in Washington about the Space Program, Project Gemini - the 2-manned space flights, and the recovery of Virgil Grissom from splash down.
CASI
Astronauts; Communication Satellites; Histories; Meteorological Satellites; NASA Space Programs; Space Flight

20010018719 NASA Kennedy Space Center, Cocoa Beach, FL USA
Beyond Earth's Boundaries
Oct. 01, 1987; In English; Videotape: 5 min. 28 sec. playing time, in color, with sound
Report No.(s): NONP–NASA–VT–2001023144; No Copyright; Avail: CASI; B01, Videotape-Beta; V01, Videotape-VHS
An overview of the Lost River System (a method of detecting dry riverbeds) is given, including details on location identification and imaging techniques.
CASI
Imaging Techniques; Rivers; River Basins; Earth Observations (From Space)

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