SPACE COOPERATION

Agreement between the
UNITED STATES OF AMERICA
and INDIA

Signed at Cape Canaveral February 1, 2008

NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966 (80 Stat. 271; 1 U.S.C. 113)—

". . .the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof."

INDIA

Space Cooperation

Agreement signed at Cape Canaveral
February 1, 2008;
Entered into force February 1, 2008.

FRAMEWORK AGREEMENT

BETWEEN

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

AND

THE INDIAN SPACE RESEARCH ORGANISATION

FOR COOPERATION

IN THE EXPLORATION AND USE OF OUTER SPACE

FOR PEACEFUL PURPOSES

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The United States National Aeronautics and Space Administration (hereinafter referred to as "NASA") and the Indian Space Research Organisation (hereinafter referred to as "ISRO") (hereinafter collectively referred to as "the Parties"),

RECOGNIZING their mutual interest in the exploration and use of outer space for peaceful purposes;

RECALLING their long and fruitful cooperation in the exploration and peaceful use of outer space, through the successful implementation of cooperative activities in a broad range of space science and applications areas;

TAKING NOTE of the Joint Statements made by the President of the United States of America and the Prime Minister of India on November 9, 2001, July 18, 2005, and March 2, 2006, encouraging the enhancement of civil space cooperation;

DESIRING to build upon the advances attained through the Memorandum of Understanding Between the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration of the United States of America and the Department of Space and the Department of Science and Technology of the Government of the Republic of India for Scientific Cooperation in the Areas of Earth and Atmospheric Sciences, signed on December 16, 1997, and amended on December 17, 2002;

WISHING to expand the scope of cooperation between the Parties in earth and space science, exploration, human space flight, and other activities for peaceful purposes; and

DESIRING to establish an overall legal framework to facilitate the signing of Implementing Arrangements for cooperation between the Parties;

HAVE agreed as follows:

ARTICLE 1 – PURPOSE

This Framework Agreement, hereinafter referred to as the "Agreement," sets forth the obligations, terms, and conditions for the cooperation between NASA and ISRO in the exploration and use of outer space for peaceful purposes in areas of common interest and on the basis of equality and mutual benefit.

ARTICLE 2 – DEFINITIONS

For the purposes of this Agreement,

1. The term "Damage" means:

   (i) bodily injury to, or other impairment of health of, or death of, any person;

   (ii) damage to, loss of, or loss of use of any property;

   (iii) loss of revenue or profits; or

   (iv) other direct, indirect, or consequential damage;

2. The term "Launch Vehicle" means an object, or any part thereof, intended for launch, launched from Earth into air space or outer space, or returning to Earth, which carries Payloads or persons, or both;

3. The term "Payload" means all property to be flown or used on or in a Launch Vehicle;

4. The term "Protected Space Operations" means all activities conducted pursuant to this Agreement, or any Implementing Arrangement concluded hereunder, including Launch Vehicle activities, and Payload activities on Earth, in outer space, or in transit between Earth and air space or outer space, in implementation of this Agreement. Protected Space Operations begins on the date of entry into force of this Agreement and ends when all activities done in implementation of this Agreement are completed. The term "Protected Space Operations" includes, but is not limited to:

   (i) research, design, development, test, manufacture, assembly, integration, operation, or use of Launch or Transfer Vehicles, Payload, or instruments, as well as related support equipment and facilities and services; and

   (ii) all activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services;

   The term "Protected Space Operations" excludes activities on Earth that are conducted on return from space to develop further a Payload's product or process for use other than for activities in implementation of this Agreement.

5. The term "Related Entity" means:

   (i) a contractor or subcontractor of a Party, at any tier;

   (ii) a user or customer of a Party, at any tier; or

   (iii) a contractor or subcontractor of a user or customer of a Party, at any tier.

The terms "contractor" and "subcontractor" include suppliers of any kind.

The term "Related Entity" may apply to a State, an international organization, or an agency, department, or institution of a State, having the same relationship to a Party as described in subparagraphs (i) to (iii) above, or otherwise engaged in the implementation of Protected Space Operations as defined in paragraph 4 above.

6. The term "Transfer Vehicle" means: any vehicle that operates in space and transfers a Payload or person or both between two different space objects, between two different places on the same space object, or between a space object and the surface of a celestial body.

ARTICLE 3 – SCOPE OF COOPERATION

1. The Parties shall identify areas of mutual interest and seek to develop cooperative programs or projects, hereinafter referred to as "Programs," in the exploration and peaceful uses of outer space and shall work closely together to this end.

2. These Programs may be undertaken, as mutually agreed, and subject to the provisions of this Agreement and the specific terms and conditions of any Implementing Arrangements concluded pursuant to Article 4, in the following areas:

    a) Earth science, observation, and monitoring;

    b) Space science;

    c) Exploration systems;

    d) Space operations; and

    e) Other relevant areas of mutual interest.

3. These Programs may be implemented using the following:

    a) Spacecraft and space research platforms;

    b) Scientific instruments onboard spacecraft and space research platforms;

    c) Space operations missions;

    d) Sounding rocket and scientific balloon flights and campaigns;

    e) Aircraft flights and campaigns;

    f) Space communications, including ground-based antennas, for tracking, telemetry, and data acquisition;

    g) Ground-based research facilities;

    h) Exchanges of scientific personnel;

    i) Exchanges of scientific data;

    j) Participation in joint workshops and meetings;

k) Terrestrial analogs;

l) Earth and space applications;

m) Education and public outreach activities; and

n) Other mechanisms of mutual interest jointly decided in writing by the Parties.

4. All activities under this Agreement shall be conducted in a manner consistent with the applicable national laws and regulations of the Parties.

5. These Programs may take place on the surface of the Earth, in air space, or in outer space.

ARTICLE 4 – IMPLEMENTING ARRANGEMENTS

The specific terms and conditions for Programs, and the specific roles and commitments of the Parties shall be set forth in Implementing Arrangements mutually agreed and signed by the Parties, hereinafter referred to as "Implementing Arrangements." Implementing Arrangements under this Agreement shall include, as appropriate, provisions related to the nature and scope of the Programs and the individual and joint responsibilities of the Parties, consistent with this Agreement. Such Implementing Arrangements shall incorporate by reference and be subject to this Agreement, unless the Parties expressly agree otherwise through specific terms set forth in the Implementing Arrangements.

ARTICLE 5 – FINANCIAL ARRANGEMENTS

1. NASA and ISRO each shall bear the costs of discharging its respective responsibilities under Implementing Arrangements concluded pursuant to this Agreement, including travel and subsistence of personnel and transportation of all equipment and other items for which it is responsible. Further, it is understood that the ability of each Party to carry out its obligations is subject to the availability of appropriated or allocated funds. Should either Party encounter budgetary problems that may affect the activities to be carried out under this Agreement, the Party encountering the problems shall notify and consult with the other Party as soon as possible.

2. This Agreement shall not prejudice the ability of the Parties to conclude other agreements or arrangements regarding matters outside or within the scope of this Agreement, as mutually agreed.

3. All activities under or pursuant to this Agreement are subject to the availability of appropriated or allocated funds and each Party's respective funding procedures.

ARTICLE 6 – CUSTOMS, DUTIES, AND TAXES

Each Party shall facilitate free customs clearance and waiver of all applicable customs duties and taxes for goods necessary for the implementation of this Agreement subject to its national laws and regulations. In the event that any customs duties or taxes of any kind are nonetheless levied on such equipment and related goods, such customs duties or taxes shall be borne by the Party of the country levying such customs duties or taxes.

ARTICLE 7 – ENTRY AND EXIT OF PERSONNEL

On a reciprocal basis, each of the Parties shall use reasonable efforts to facilitate, in accordance with its laws and regulations, the entry to and exit from its territory of personnel engaged in joint activities pursuant to this Agreement.

ARTICLE 8 – OVERFLIGHT

Each Party shall facilitate, upon request from the other Party, the provision of aircraft and balloon overflight clearances, as necessary, in order to carry out activities under Implementing Arrangements established under this Agreement. Detailed information regarding the purpose of the overflight, the proposed type of equipment to be used, and the researchers involved shall be addressed, as appropriate, in the Implementing Arrangements.

ARTICLE 9 – INTELLECTUAL PROPERTY RIGHTS

1. Nothing in this Agreement shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions or works of a Party or its Related Entities made prior to the entry into force of, or outside the scope of, this Agreement, including any patents (or similar forms of protection in any country) corresponding to such inventions or any copyrights corresponding to such works.

2. Any rights to, or interest in, any invention or work made in the performance of this Agreement solely by one Party or any of its Related Entities, including any patents (or similar forms of protection in any country) corresponding to such invention or any copyright corresponding to such work, shall be owned by such Party or Related Entity. Allocation of rights to, or interest in, such invention or work between such Party and its Related Entities shall be determined by applicable laws, rules, regulations, and contractual obligations.

3. It is not anticipated that there will be any joint inventions made in the performance of this Agreement. Nevertheless, in the event that an invention is jointly made by the Parties in the

performance of this Agreement, the Parties shall, in good faith, consult and agree within 30 calendar days as to:

a. the allocation of rights to, or interest in, such joint invention, including any patents (or similar forms of protection in any country) corresponding to such joint invention;

b. the responsibilities, costs, and actions to be taken to establish and maintain patents (or similar forms of protection in any country) for each such joint invention; and

c. the terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.

4. For any work jointly authored by the Parties, should the Parties decide to register the copyright in such work, they shall, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyright protection (in any country).

5. Subject to the provisions of Article 10 (Publication of Public Information and Results) and Article 11 (Transfer of Goods and Technical Data), each Party shall have an irrevocable royalty free right, for its own purposes, to reproduce, prepare derivative works, distribute, and present publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this Agreement, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party.

ARTICLE 10 – PUBLICATION OF PUBLIC INFORMATION AND RESULTS

1. The Parties retain the right to release public information regarding their own activities under this Agreement. The Parties shall coordinate with each other in advance concerning releasing to the public information that relates to the other Party's responsibilities or performance under this Agreement.

2. (a) The Parties shall make the final results obtained from joint activities available to the general scientific community through publication in appropriate journals or by presentations at scientific conferences as soon as possible and in a manner consistent with good scientific practices.

   (b) The Parties shall include provisions for the sharing of science data in the implementing arrangements.

3. The Parties acknowledge that the following data or information does not constitute public information and that such data or information shall not be included in any publication or presentation by a Party under this Article without the other Party's prior written permission: 1) data furnished by the other Party in accordance with Article 11 (concerning Transfer of Goods and Technical Data) of this Agreement that is export-controlled or proprietary; or 2) information about an invention of the other Party before a patent application has been filed covering the same, or a decision not to file has been made.

ARTICLE 11 – TRANSFER OF GOODS AND TECHNICAL DATA

1. The Parties are obligated to transfer only those goods and technical data (including software) necessary to fulfill their respective responsibilities under this Agreement, in accordance with the following provisions:

   (a) All activities of the Parties shall be carried out in accordance with applicable laws, rules, and regulations, including those pertaining to export control and the control of classified information.

   (b) The transfer of goods and technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety shall normally be made without restriction, except as provided in paragraph (a) above.

   (c) All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions. In the event a Party or its Related Entity finds it necessary to transfer goods or to transfer proprietary or export-controlled technical data, for which protection is to be maintained, such goods shall be specifically identified and such proprietary or export-controlled technical data shall be marked. The identification of goods and the marking on proprietary or export-controlled technical data will indicate that the goods and proprietary or export-controlled technical data shall be used by the receiving Party or its Related Entities only for the purposes of fulfilling the receiving Party's or Related Entity's responsibilities under this Agreement, and that the identified goods and marked proprietary technical data or marked export-controlled technical data shall not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party or its Related Entity. The receiving Party or its Related Entity shall abide by the terms of the notice and protect any such identified goods and marked proprietary technical data or marked export-controlled technical data from unauthorized use and disclosure. The Parties to this Agreement will cause their Related Entities to be bound by the provisions of this Article related to use, disclosure, and retransfer of identified goods and marked technical data through contractual mechanisms or equivalent measures.

2. All goods and marked proprietary or export-controlled technical data exchanged in the performance of this Agreement shall be used by the receiving Party or its Related Entity exclusively for the purposes of the Agreement. Upon completion of the activities under this Agreement, the receiving Party or its Related Entity shall return or, at the request of the furnishing Party or its Related Entity, otherwise dispose of all goods and marked proprietary or export-controlled technical data provided under this Agreement, as directed by the furnishing Party or its Related Entity.

ARTICLE 12 – CROSS-WAIVER OF LIABILITY

1. With respect to activities performed under this Agreement, the Parties agree that a comprehensive cross-waiver of liability will further cooperation in the exploration and use of outer space. This cross-waiver of liability, as set out below, shall be broadly construed to achieve this objective. Provided that the waiver of claims is reciprocal, the Parties may tailor the scope of the cross-waiver clause in an Implementing Arrangement to address the specific circumstances of a particular cooperation.

2. (a) Each Party agrees to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed in sub-paragraphs 2(a)(i) through 2(a)(iii) below based on Damage arising out of Protected Space Operations. This cross-waiver shall apply only if the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. The cross-waiver shall apply to any claims for Damage, whatever the legal basis for such claims, against:

   (i) the other Party;

   (ii) a Related Entity of the other Party;

   (iii) the employees of the other Party or of a Related Entity of the other Party.

   (b) In addition, each Party shall extend the cross-waiver of liability as set forth in Article 12.2(a) to its Related Entities by requiring them, by contract or otherwise, to agree to:

   (i) waive all claims against the entities or persons identified in Article 12.2(a)(i) through Article 12.2(a)(iii); and

   (ii) require that their Related Entities waive all claims against the entities or persons identified in Article 12.2(a)(i) through Article 12.2(a)(iii) above.

   (c) For avoidance of doubt, this cross-waiver of liability shall be applicable to claims arising under the *Convention on International Liability for Damage Caused by Space Objects*, done on March 29, 1972 (the "Liability Convention"), where the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations.

   (d) Notwithstanding the other provisions of this Article, this cross-waiver of liability shall not be applicable to:

   (i) claims between a Party and its own Related Entity or between a Party's own Related Entities;

(ii) claims made by a natural person, his/her estate, survivors, or subrogees (except when a subrogee is a Party to this Agreement or is otherwise bound by the terms of this cross-waiver) for bodily injury to, other impairment of health of, or death of such natural person;

(iii) claims for Damage caused by willful misconduct;

(iv) intellectual property claims;

(v) claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities, pursuant to Article 12.2.(b); or

(vi) claims by a Party arising out of or relating to the other Party's failure to perform its obligations under this Agreement or any Implementing Arrangement concluded hereunder.

(e) Nothing in this Article shall be construed to create the basis for a claim or suit where none would otherwise exist.

(f) In the event of third-party claims for which the Parties may be liable, the Parties shall consult promptly to determine an appropriate and equitable apportionment of any potential liability and on the defense of any such claims.

ARTICLE 13 – REGISTRATION OF SPACE OBJECTS

For Implementing Arrangements involving a launch, the Parties shall decide as to which Party will request its Government to register the spacecraft as a space object in accordance with the *Convention on the Registration of Objects Launched into Outer Space*, done on January 14, 1975. Registration pursuant to this Article shall not affect the rights or obligations of either Party under the *Liability Convention*.

ARTICLE 14 – CONSULTATIONS AND SETTLEMENT OF DISPUTES

1. The Parties shall consult, as appropriate, to review the implementation of activities undertaken pursuant to this Agreement, and to exchange views on potential areas of future cooperation.

2. In the event questions arise regarding the implementation of activities under this Agreement or regarding the interpretation or application of this Agreement, the Program managers of the Parties shall endeavor to resolve the questions. If the Program managers are unable to reach an

agreement, then the matter will be referred to a more senior level of the Parties for joint resolution.

ARTICLE 15 – EFFECT ON OTHER AGREEMENTS

This Agreement shall not affect the rights and obligations of the Parties under other international agreements to which they are party.

ARTICLE 16 – AMENDMENTS

The Parties may amend this Agreement by mutual written agreement.

ARTICLE 17 – ENTRY INTO FORCE AND DURATION

This Agreement shall enter into force upon signature by the Parties. It shall remain in force for ten (10) years unless terminated in accordance with the provisions of Article 18. Thereafter, subject to the provisions of Article 18, it shall be extended automatically for additional periods of five years.

ARTICLE 18 – TERMINATION

1. Either Party may terminate this Agreement at any time by providing at least six months written notice to the other Party.

2. Termination of this Agreement shall not affect Implementing Arrangements that are in effect at the time of termination of this Agreement.

3. Notwithstanding termination of this Agreement, the obligations of the Parties set forth in Articles 9, 11, and 12 of this Agreement, concerning Intellectual Property Rights, Transfer of Goods and Technical Data, and Cross-Waiver of Liability shall continue to apply after termination of this Agreement.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Agreement.

DONE at the John F. Kennedy Space Center, Florida, USA, this 1st day of February, 2008.

FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION OF THE UNITED STATES OF AMERICA:

Michael Griffin
Administrator

FOR THE INDIAN SPACE RESEARCH ORGANISATION OF THE REPUBLIC OF INDIA:

G. Madhavan Nair
Chairman