NOAA — NATIONAL OCEAN SURVEY

TIDAL INFORMATION

Place	Mean High Water	Mean Tide Level	Mean Low Water	Extreme Low Water
	Height referred to datum of soundings (MLW)			
	feet	feet	feet	feet
Cape Charles: 37°16'.7N 75°59'	2.7	1.3	0.0	−0.5
Windmill Point, Back River: 37°08'.3N 76°18'	3.3	1.6	0.0	−0.8
Old Point Comfort: 37°00'.3N 76°19'	2.5	1.2	0.0	−0.5
Hampton Roads: 36°58' 76°20'	2.5	1.2	0.0	−0.5
Craney Island Light: 36°54'.3N 76°20'	2.6	1.3	0.0	−0.5
Lynnhaven Inlet: 36°54' 76°00'	2.0	1.0	0.0	−1.0
Cape Henry: 36°56'.3N 76°00'	2.8	1.4	0.0	−2.5

(1275)

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on nautical miles run and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in knots. Example: with 4.0 miles run in 15 minutes, the speed is 16.0 knots.

Nautical Miles — Yards

For Symbols and Abbreviations see Chart No. 1

HEIGHTS
Heights in feet above Mean High Water
Contour interval 20 feet. Relief is shown only where of importance to radar interpretation.

AUTHORITIES
Hydrography and topography by the National Ocean Survey (formerly the Coast and Geodetic Survey) with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard and Defense Mapping Agency.

UNITED STATES – EAST COAST
VIRGINIA
CHESAPEAKE BAY
CAPE CHARLES TO NORFOLK HARBOR

1st Ed., Mar. 1964

Mercator Projection
Scale 1:40,000 at Lat. 37°00'

SOUNDINGS IN FEET
AT MEAN LOW WATER

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in fish trap areas. Such structures are not charted unless known to be permanent.
Regulations to assure clear passage to and through dredged and natural channels and to established landings are prescribed by the Corps of Engineers in the Code of Federal Regulations.
Definite limits of fish trap areas have been established in some areas and fishing stakes are shown thus:
Other areas have not been prescribed the location of fishing structures is restricted only by the regulations.

PLANE COORDINATE GRID
The Virginia State plane coordinate grid (South Zone) is indicated on this chart at 20,000 foot intervals thus: —|—
The last three digits are omitted.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

Nautical Chart Catalog No. 1, Panel D

12222 (formerly C&GS 562)

SOUNDINGS IN FEET

NEW CHART NUMBERING SYSTEM
The National Ocean Survey, in cooperation with the Defense Mapping Agency Hydrographic Center, is in the process of adopting a new national chart numbering system. See Notice to Mariners No. 19, May 11, 1974, or Nautical Chart Catalog for cross references of old and new chart numbers.

Chart Number New System	Old System
12222	562
12223	562-SC
12224	564
12252	450
12253	452
12254	481

NOTE F
YORK SPIT CHANNEL*
Depths entering from seaward
Surveys of July 1975
Left outside quarter ..... 43.1 ft.
Left inside quarter ..... 41.6 ft.
Right inside quarter ..... 43.6 ft.
Right outside quarter ..... 40.0 ft.
*The use of this channel shall be restricted to vessels and other watercraft passing up or down the channel. No vessel or barge or other watercraft shall cross the channel or enter it at any point other than at its ends and in the direction of its axis. Any vessel having entered the channel shall follow the course thereof for its entire length.

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Hydrographic Center Publication No. 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ⊙(Approximate location)

NOTE H
CAUTION
This Chesapeake Bay Bridge Tunnel complex has on several occasions suffered damage from vessels due to adverse weather conditions. Currents in excess of three knots can be expected in the area. Mariners transiting this area are urged to be cautious, very alert in regards to the weather situation. The Coast Guard broadcasts a special marine four weather broadcasting on 162.55 MHz. The Local Marine operator also transmits weather information at 0700, 0750, 1800 and 1900 local time on 2538 and 2450 kHz. Transmitting schedules are subject to change see Notice to Mariners. Maneuvering in close proximity of the bridge-tunnel complex is prohibited.

NOTE I
CAUTION
Construction equipment may be stationed within the area indicated by purple tint. Mariners are advised to proceed with caution.

ANCHORAGE AREAS
110.168 (see note A)
Limits and designation of anchorage areas are shown in color. See charts 12245, 12253 for additional areas not shown on this chart.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3 or weekly Notice to Mariners which include new or revised regulations. Information concerning the regulations may be obtained at the Office of the District Engineer, Corps of Engineers in Norfolk, Va.
Anchorage regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Va.
Refer to section numbers shown with area designation.

NOTE B
HAMPTON ROADS TUNNEL
APPROACH SPANS
HOR CL 45 FT. SOUTH
VERT CL 16 FT

NOTE D
CHESAPEAKE BAY BRIDGE & TUNNEL
(Privately maintained lights)
Trestles A and B – In each trestle section the fixed bridge opening for small craft consists of a group of 3 spans. A fixed green light marks the centerline of each span and fixed red lights mark outer most bridge support piling on each side of the openings.
North Channel & Fisherman Inlet Bridges – A fixed green light marks each mid-channel with fixed red lights marking channel limits.
Fixed red obstruction lights mark each pier in Trestles C and D.

VHF WEATHER BROADCASTS FOR MARINERS
FM Stations with frequency of 162.55 megahertz and range approximately 40 miles, is in continuous operation 24 hours daily broadcasting weather warnings, forecasts and reports from the NATIONAL WEATHER SERVICE Office as follows:
KHB-57 Norfolk, Va.

NORFOLK HARBOR BRIDGE CLEARANCES
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS REPORTED TO FEB. 1970 AND SUPPLIED TO DEC. 1975

NAME OF CHANNEL	CONTROLLING SETTING FROM SUMMER PL 1 FEET	LEFT HORIZ CLEARANCE FEET	RIGHT HORIZ CLEARANCE FEET	PROJECT SURVEYED DEPTH OF SURVEY	PROJECT SURVEYING LENGTH OF SURVEY	LENGTH DEPTH OF SURVEY
HORSESHOE CHANNEL, A	45.0	45.0	45.0	12-14.0-16	1200	9.0 40
NORFOLK-PORTSMOUTH CHANNEL	45.0	45.0	51.0	30.0	1500	9.0 40
SOUTH REACH CHANNEL	37.5	28.3	30.1	32.0	4500	9.0 32
SOUTHERN BRANCH CHANNEL						
(CATHEDRAL REACH)	45.0	45.0	45.0	12.0	1500	9.0 40
NORFOLK HARBOR REACH	45.0	45.0	45.0	7.0-9.0	6-7-14.0-16	1500-800 9.0 45
PORTSMOUTH HARBOR REACH	45.0	45.0	45.0	7.0-9.0	14.0-16	700 9.0 45
LIBERTY REACH	45.0	45.0	45.0	9.0	11-12.0	900 9.0 45
PORT NORFOLK REACH	45.0	45.0	45.0	9.0	11-12.0	750 9.0 45
SCOTTS CREEK CHANNEL	45.0	45.0	45.0	9.0	11-12.0	750 9.0 45
HAMPTON:						
HAMPTON CHANNEL	12.0	12.0	12.0	11.0	5-7-8-10	200 11.0 12
HAMPTON REACH	12.0	12.0	12.0	11.0	7	200 11.0 12
SAWYER CREEK						
CHANNEL, A	12.0	12.0	12.0	12.0	9-10.7	100 9.0 12
WEST REACH	12.0	12.0	12.0	12.0	9-10.7	100 9.0 12
HAGUE CHANNEL	12.0	11.8	11.8	11.0	8-10	150 8.7 12

* ALL TWO CHANNEL (S) RESTRICTED TO EXCLUDE VESSELS OF TOW OPENING LESS THAN 50 FEET. THERE ARE NO RESTRICTIONS TO PASSENGER SHIPS.
A. CLEARY FOR A DEPTH OF 30.0 FEET APPROX. 25 FEET TWELVE CHANNEL EDGE. 175 FIRES DEPARTS AT BUOY 17. NOTE CONSULTING THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION.
* VALUES BY COMPUTER REGISTER METHOD

NOTE C
DANGER AREA
Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any other similar type of operation because of residual danger from mines on the bottom.

NOTE E
CAUTION
Numerous duck blinds, stakes, piles, and pipes exist in the waterways of Lynnhaven Bay, Long Creek, Broad Bay and Linkhorn Bay. Some are not shown at all or are charted. Submerged piles which have been located are charted but additional submerged piles may exist.

NOTE G
TRAFFIC SEPARATION SCHEME
The RECOMMENDED route for entering and departing from Chesapeake Bay is marked by a tinted purple line centered on a line of fairways buoys which separates the courses of inbound and outbound vessels. Vessels should leave all buoys which their port hand. The pilotage area is marked by a tinted purple band. The traffic separation scheme has been designed to aid in the prevention of collisions at the approaches to Chesapeake Bay but is not intended in any way to supersede or alter the applicable Rules of the Road.

CAUTION
This chart has been corrected from the Notice to Mariners published weekly by the Defense Mapping Agency Hydrographic Center and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the print date shown in the lower left hand corner.

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

SOUNDINGS IN FEET

(Cape Charles to Norfolk Harbor)
SOUNDINGS IN FEET – SCALE 1:40,000

12222 (formerly C&GS 562)

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