SOUNDINGS IN FEET

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST
VIRGINIA

CHESAPEAKE BAY

THIMBLE SHOAL CHANNEL

Mercator Projection
Scale 1:20,000 at Lat. 36° 58'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Old Point Comfort	(37°00'N/76°19'W)	2.8	2.6	0.1
Little Creek	(36°55'N/76°11'W)	2.9	2.7	0.1

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Dec 2013)

For Symbols and Abbreviations see Chart No. 1

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.530" northward and 1.214" eastward to agree with this chart.

PLANE COORDINATE GRID
(based on NAD 1927)
The Virginia State Grid (South Zone) is indicated by dashed ticks at 10,000 foot intervals.

HEIGHTS
Heights in feet above Mean High Water.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

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

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

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Additional information can be obtained at nauticalcharts.noaa.gov.

PHOEBUS AND WILLOUGHBY CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
PHOEBUS CHANNEL	12.5	12.1	11.7	6-03	150	0.7	12
WILLOUGHBY CHANNEL	2.0	2.9	9.7	7-13	A300	1.4	10

A. CHANNEL WIDTH MAINTAINED AT 200 FEET SOUTH OF 36°58'43.0"N, 76°18'38.5"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NORFOLK HARBOR AND APPROACHES
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2012

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
THIMBLE SHOAL CHANNEL (A)	47.8	50.2	49.9	47.8	8,9-12	1000	13.0	55
NORTH AUXILIARY CHANNEL (B)						450		32
SOUTH AUXILIARY CHANNEL (B)						450		32
NORFOLK HARBOR ENTRANCE REACH	50.0	52.4	52.6	51.8	7-10	1000-1440	1.4	50

A. CHANNEL IS RESTRICTED TO EXCLUDE VESSELS AND TOWS DRAWING LESS THAN 25 FEET. CHANNEL MAINTAINED TO 50 FEET.
B. PROJECT MAINTENANCE DISCONTINUED
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

NOTE C
HAMPTON ROADS TUNNEL
APPROACH SPANS
HOR CL 45 FT
VERT CL 10 FT

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Norfolk, VA KHB-37 162.550 MHz

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

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Norfolk, Virginia.
Refer to charted regulation section numbers.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

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 private buoys are not all listed in the U.S. Coast Guard Light List.

NOTE F
Vessels should use extreme caution while navigating in Little Creek Harbor due to frequent and unannounced naval diving operations.

ANCHORAGE AREAS
110.168 (see note A)
Limits and designations of anchorage areas are shown in magenta.

B C D NAVAL ANCHORAGE
E COMMERCIAL EXPLOSIVES ANCHORAGE
E-1 EXPLOSIVES HANDLING BERTH
F F-1 GENERAL ANCHORAGE

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A	1990-2010	NOS Surveys	full bottom coverage
B1	1990-1994	NOS Surveys	partial bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
f		Miscellaneous Surveys	

NOTE G
EMERGENCY RESTRICTED AREA
For the latest information regarding the regulations of any emergency restricted area, contact the Army Corps of Engineers, Norfolk District, Regulatory Branch at (757) 201-7653/7652.

NOTE H
LITTLE CREEK EXCLUSION ZONE
The Little Creek Exclusion Zone is a subset of an emergency restricted area. No vessel or persons may enter this area without permission of the Commanding Officer/Officer-in-charge of the Little Creek Amphibious Base. Vessels or persons may transit other portions of the restricted area at any time, but are subject to inspections from designated law enforcement patrols.

NOTE D
CAUTION
The 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 particularly alert in regards to the weather situation. The National Weather Service provides 24 hour weather broadcasting on 162.55 MHz. The Local Marine Operator also transmits weather information at 0100, 0700, 1300 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 discouraged.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the 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 those limits are shown thus: — — —
Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

NOTE B
Chesapeake Bay Bridge-Tunnel
(Private lights)
Trestles A & B - In each trestle section the fixed navigation 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 outermost bridge support piling on each side of the openings.

18th Ed., Jan. /14

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

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

Thimble Shoal Channel
SOUNDINGS IN FEET - SCALE 1:20,000

Last Correction: 9/25/2015. Cleared through:
LNM: 3815 (9/22/2015), NM: 4015 (10/3/2015)

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