THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST
VIRGINIA

CHESAPEAKE BAY

CAPE CHARLES TO NORFOLK HARBOR

Formerly C&GS 562, 1st Ed., Mar. 1964 KAPP 559

SOUNDINGS IN FEET

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

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

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 0.529" northward and 1.221" eastward to agree with this chart.

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).

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

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

For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972. Demarcation lines are shown thus: – – – –

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.

HEIGHTS

Heights in feet above Mean High Water.

SUPPLEMENTAL INFORMATION

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

CAUTION

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

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 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)

AIDS TO NAVIGATION

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

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.

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.

SCALE 1:40,000
Nautical Miles / Statute Miles / Yards / Meters

TIDAL INFORMATION

PLACE	(LAT/LONG)	Mean Higher High Water (feet)	Mean High Water (feet)	Mean Low Water (feet)
Fishermans Island	(37°06'N/75°59'W)	3.4	3.2	0.1
Messick Point	(37°07'N/76°19'W)	2.6	2.5	0.2
Old Point Comfort	(37°00'N/76°19'W)	2.8	2.6	0.1
Hampton Roads	(36°57'N/76°20'W)	2.8	2.5	0.1
Craney Island	(36°54'N/76°20'W)	2.9	2.7	0.1
Lynnhaven Inlet	(36°54'N/76°05'W)	2.6	2.4	0.1
Cape Henry	(36°56'N/76°00'W)	3.5	3.2	0.1

Height referred to datum of soundings (MLLW). 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.
(Jan 2015)

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.

NOTE J

Restricted area 334.275 begins at the entrance to Tide Mill Creek at 37° 03' 50" N, 76° 22' 00" W; thence along the shoreline of Langley Air Force Base 35 yards off the ordinary mean high water (MHW) mark to a point in the Northwest Branch of Back River at 37° 06' 40" N, 76° 22' 55" W.

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 G
TRAFFIC SEPARATION SCHEME

The traffic separation scheme is designed to aid in the prevention of collisions at the approaches to Chesapeake Bay and does not supersede or alter the applicable Rules of the Road.

The RECOMMENDED routes for entering and departing from Chesapeake Bay are overprinted on this chart. The Northeast Approach is marked by a tinted magenta line centered on a line of fairway buoys which separates the courses of inbound and outbound vessels. Vessels should leave all buoys on their port hand.

It is RECOMMENDED that the following ships use the Southern Approach deep-water route when bound for Chesapeake Bay from sea or to sea from Chesapeake Bay: Deep-draft ships, drafts defined as 42 feet/12.8 meters or greater in fresh water, and naval aircraft carriers. Ships drawing less than 42 feet/12.8 meters may use the deep-water route when, in their master's judgment, the effects of ship characteristics, its speed, and prevailing environmental conditions may cause the draft of the ship to equal or exceed 42 feet/12.8 meters.

It is RECOMMENDED that a ship using the deep-water route:
Announce its intention on VHF-FM channel 16 as it approaches Chesapeake Bay Southern Approach Lighted Whistle Buoy "CB" on the south end, or Chesapeake Bay Entrance Lighted Whistle Buoy "CH", on the north end of the route;
Avoid, as far as practicable, overtaking other ships operating in the deep-water route;
Keep as near to the outer limit of the route which lies on the starboard side as is safe and practicable.

All other ships approaching the Chesapeake Bay traffic separation scheme should use the appropriate inbound or outbound traffic lane of the traffic separation scheme.

Traffic within the precautionary area may consist of vessels operating between Thimble Shoal and Chesapeake Channels and one of the established traffic lanes. Mariners are advised to exercise extreme care in navigating within this area. The normal Pilot Boarding Area is outlined by a magenta band.

NOTE H
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.

HAMPTON, 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)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HAMPTON RIVER ENTRANCE CHANNEL	11.7	12.6	11.9	7-13	200	1.1	12
HAMPTON REACH	10.0	10.6	10.6	7-13	150	1.2	12
SUNSET CREEK	N/A	A7.1	N/A	7-13	100-80	0.5	12
PHOEBUS CHANNEL	12.5	12.1	11.7	6-03	150	0.7	12
WILLOUGHBY CHANNEL	2.0	2.9	9.7	7-13	B300	1.4	10

A. 80% OF PROJECT WIDTH (40%) ON EITHER SIDE OF CENTERLINE.
B. 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

NOTE F
MONITOR-MERRIMAC MEMORIAL BRIDGE-TUNNEL
APPROACH SPANS
HOR CL 70 FT
VERT CL 30 FT

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

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

ANCHORAGE AREAS
110.168 (see note A)

Limits and designations of anchorage areas are shown in magenta. See chart 12253 for additional areas not shown on this chart.

- A B C D — NAVAL ANCHORAGE
- E — COMMERCIAL EXPLOSIVES ANCHORAGE
- E-1 — EXPLOSIVES HANDLING BERTH
- G — NAVAL EXPLOSIVES ANCHORAGE
- G-1 G-2 G-3 G-4 — EXPLOSIVES HANDLING BERTH

ALL OTHER ANCHORAGES ARE FOR GENERAL USE
ALL OTHER BERTHS ARE FOR GENERAL USE

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.

NOTE B

The Newport News to Craney Island submarine pipeline contains 5 stitch points along its length that are labeled A through E. The pipeline rises to within 10 feet of the seabed at the stitch points and dives to depths of over 65 feet between stitch points C to E.
Stitch points are shown as: (A)

See Coast Pilot 3, Chapter 9, chart 12245 for additional information.

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

NOTE I

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

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	1990-2013	NOS Surveys	full bottom coverage
B1	1990-2001	NOS Surveys	partial bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre - 1900	NOS Surveys	partial bottom coverage
f		Miscellaneous Surveys	

NORFOLK HARBOR AND APPROACHES
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO FEB 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

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
NORFOLK HARBOR REACH	49.0	49.8	49.6	49.3	2-13	1550-800	3.6	50
CRANEY ISLAND REACH	48.5	50.3	49.9	46.0	2-13	800	2.3	50
LAMBERT BEND	43.0	43.0	43.0	41.6	1-10	750	0.3	45
LAMBERT BEND TO PINNER POINT	42.6	43.0	43.0	40.4	1-10	750	1.0	45
PINNER POINT TO TOWN PT REACH	37.2	40.0	40.0	39.2	1-10	750	1.0	45
NEWPORT NEWS CHANNEL	47.2	C49.3	49.7	49.4	8-11	800	4.2	55
CAPE HENRY CHANNEL	45.6	50.0	47.9	43.5	10-11	1000	4.0	50
YORK SPIT CHANNEL	39.9	49.7	50.1	44.7	2-13	1000D	18.4	50
YORK RIVER ENTRANCE CHANNEL	36.2	37.9	37.5	36.8	11-11,2-12	750	13.8	37

A. CHANNEL IS RESTRICTED TO EXCLUDE VESSELS AND TOWS DRAWING LESS THAN 25 FEET. CHANNEL MAINTAINED TO 50 FEET.
B. PROJECT MAINTENANCE DISCONTINUED
C. 51 FOOT OBSTRUCTION LOCATED AT 36°57'12.4"N, 76°24'45.1"W.
D. CHANNEL WIDTH MAINTAINED TO 800 FEET
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

PLANE COORDINATE GRID
(based on NAD 1927)

The Virginia State Grid (South Zone) is indicated on this chart at 20,000 foot intervals thus: The last three digits are omitted.

NOTE D
Chesapeake Bay Bridge - Tunnel
(Private Lights)

Trestles A & 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 the outermost bridge support piling on each side of the openings.
North Channel & Fishermans 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.

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 these limits are shown thus:
Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

NOTE L
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 M
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 S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

LYNNHAVEN INLET TO BROAD BAY

Lynnhaven Inlet is subject to continual change. The controlling depth in the improved channel from 36°54'15.2" N 76°05'16.2" W to Broad Bay is 2½ feet for a width of 90 feet.
Apr 2013

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.

THE NARROWS

A depth of 6 feet for a width of 90 feet was available in the improved channel through The Narrows.
Apr 2013

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 6° from the normal variation have been observed 3 to 17 nautical miles offshore from Cape Henry to Currituck Beach Light.

NOTE E

Numerous duck blinds, stakes, piles and pipes exist in the waterways of Lynnhaven Bay, Long Creek, Broad Bay and Linkhorn Bay. Submerged piles which have been located are charted but additional submerged piles may exist.

55th Ed., Feb. 2015
12222

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.

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

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NATIONAL OCEAN SERVICE
COAST SURVEY

SOUNDINGS IN FEET

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102

Cape Charles to Norfolk Harbor
SOUNDINGS IN FEET - SCALE 1:40,000