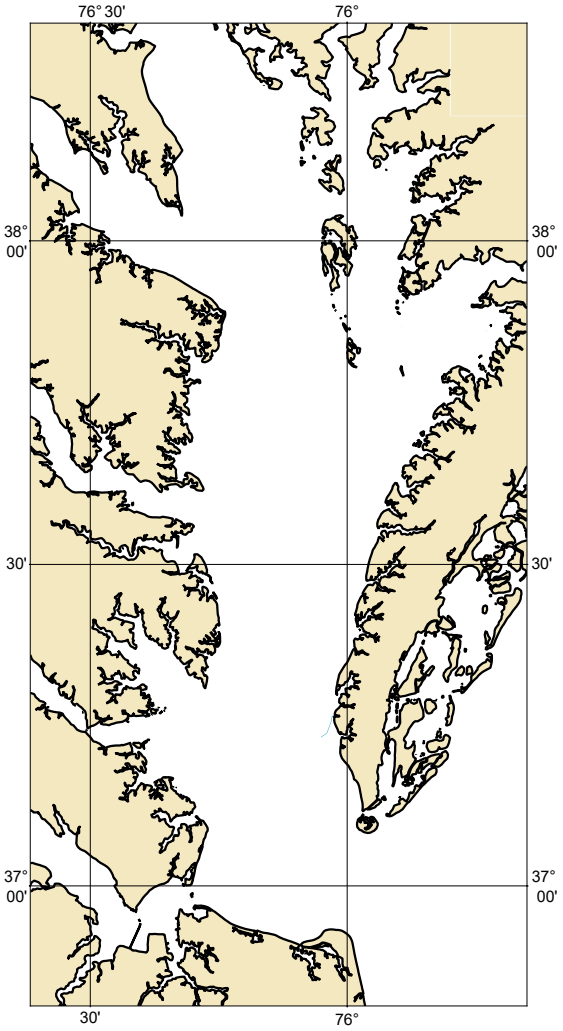
Zone of Confidence (ZOC) Diagram



ZOC CATEGORIES

ZOC	COLOR	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A1		± 5 m + 5% depth ± 16.4 ft + 5% depth	= 0.50 m +1% d = 1.6 ft +1% d = 0.3 fm +1% d	All significant seafloor features detected.
A2		± 20 m ± 65.6 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	All significant seafloor features detected.
B		± 50 m ± 164.0 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	Uncharted features hazardous to surface navigation are not expected but may exist.
C		± 500 m ± 1640.4 ft	= 2.00 m +2% d = 6.6 ft +2% d = 1.1 fm +2% d	Depth anomalies may be expected.
D		Worse than ZOC C	Worse than ZOC C	Large depth anomalies may be expected.
U		Unassessed - The quality of the bathymetric data has yet to be assessed.		

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NOAA CUSTOM CHART
NOTES GEOSPATIAL DATABASE
VERSION 3.0B - 20 FEBRUARY 2025

The records of the NOAA Custom Chart Notes Geospatial Database are current as of February 20, 2025. Subsequent additions and refinements are to be expected. Please refer to all available navigational publications for complete information about the charted area.

CAUTION
CHART UPDATES

This NOAA Custom Chart contains up-to-date information only as of the time of creation, and will become outdated. Mariners are advised to visit https://distribution.charts.noaa.gov/navigation-updates/ to check for critical and routine updates, and to render a new NOAA Custom Chart when the ENC data used to make the chart is updated. Notices to Mariners are not issued for corrections to this NOAA Custom Chart.

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.

COMMENTS REQUESTED

NOAA encourages users to submit inquiries, discrepancies, or comments about this chart via NOAA's ASSIST tool at https://nauticalcharts.noaa.gov/customer-service/assist/ .

CAUTION
AUTOMATED CHART GENERATION

This NOAA Custom Chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC®) data. Mariners using this NOAA Custom Chart are advised that this is a static reproduction of the NOAA ENC®. This NOAA Custom Chart has not been individually quality checked or adjusted for optimal use for navigation. The portrayal may be at a different scale from that of the original NOAA ENC®. Mariners are advised to use caution when using this NOAA Custom Chart for navigation and are encouraged to use the latest NOAA ENC® to access the most up-to-date information. Mariners must also comply with all applicable regulatory requirements.

HEIGHTS

Heights of fixed aids to navigation and vertical clearances of overhead obstructions will be shown in feet if the units are set to feet or fathoms. If units are set to meters, heights will be shown in meters. Land elevation values are shown in meters only.

WATER LEVELS, CURRENTS, AND TIDES

Real-time water levels, tide predictions, and tidal current predictions are available on the internet from NOAA’s Center for Operational Oceanographic Products and Services (CO-OPS) at https://tidesandcurrents.noaa.gov/water_level_info.html and https://tidesandcurrents.noaa.gov/currents_info.html .

ABBREVIATIONS

For complete list of Symbols and Abbreviations, see Chart No. 1.

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).

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.

SUPPLEMENTAL INFORMATION

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

VERTICAL DATUM

Overhead clearances are referred to Mean High Water (MHW).

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, VA or at the Office of the District Engineer, Corps of Engineers in Norfolk, VA.

Refer to charted regulation section numbers.

AIDS TO NAVIGATION

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

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

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

SOUNDING DATUM

Soundings referred to Mean Lower Low Water (MLLW).

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, VA or at the Office of the District Engineer, Corps of Engineers in Baltimore, MD.

Refer to charted regulation section numbers.

COLREGS DEMARCATION LINE

The Inland Navigational Rules Act of 1980 is in effect for vessels transiting this area. The seaward boundaries of this area are the COLREGS demarcation lines. In the area seaward of the COLREGS demarcation lines, vessels are governed by COLREGS: International Regulations for Preventing Collisions at Sea, 1972. The COLREGS demarcation line is defined in COLREGS 33 CFR 80.505e.

OYSTER AQUACULTURE

Oyster bed aquaculture leases may exist within the limits of this chart. Mariners are cautioned that numerous markers may exist and watermen may be active in the area. Caution should be exercised when navigating in or near these areas, not to anchor or ground, in order to avoid damage to the beds. Depths may be shallower than the soundings shown. For more information, contact the local department of natural resources.

PRECAUTIONARY AREA

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.

HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations. Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved. Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

PRECAUTIONARY AREA

Vessels should use caution while transiting this area due to naval operations.

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 exist on this product. The Northeast Approach is 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.

TRAFFIC SEPARATION SCHEME

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, draft 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.

TRAFFIC SEPARATION SCHEME

One-way traffic lanes present on this chart in the vicinity of Smith Point are RECOMMENDED for all vessels except small craft. They have been designed to aid in the prevention of collisions but are not intended in any way to supersede or alter the applicable Rules of the Road. The recommended route is marked by a fairway buoy and separates the courses of inbound and outbound vessels. Vessels should leave the buoy on their port hand.

CAUTION
FISH TRAP AREAS

Uncharted stakes, piles and, fishing structures, some submerged, may exist within this area.

CAUTION
TUNNEL AREAS

Area is open to unrestricted surface navigation but all vessels are to use extreme caution not to anchor within Tunnel Areas the Elizabeth and Southern Rivers.

TRAFFIC SEPARATION SCHEME

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.

CAUTION

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

CAUTION
LIMITATIONS ON THE
USE OF RADIO SIGNALS

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.

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.

BUOY TESTING AREA

There is a buoy testing area at the entrance of the Chesapeake Bay.

RESTRICTED AREA
RIGHT WHALE SEASONAL
MANAGEMENT AREA
(50 CFR 224.105)

All vessels greater than or equal to 65 feet / 19.8 meters in length must slow to speeds of 10 knots or less in seasonal management areas.

CAUTION

Numerous duck blinds, stakes, piles and pipes exist in the waterways of Lynnhaven Bay, Long Creek, Broad Bay and Linkhorn Bay; those above or awash at MHHW are not charted. Submerged piles which have been located are charted, but additional submerged piles may exist.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details, see U.S. Coast Guard Light List.

DANGER AREA

Area approaching Chesapeake Bay Entrance is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, or conduct and similar type of operation because of residual danger from mines on the bottom.

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) website: https://www.epa.gov/vessels-marinas-and-ports .

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.

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.
Salisbury, DE KEC-92 162.475 MHz

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures.

NOTE

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

UNEXPLODED ORDNANCE

Possible unexploded bombs and ammunition in and adjacent to danger zone in the vicinity of Little Inlet.

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.
Lewes, DE WXJ-94 162.550 MHz

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.
Accomack, VA KJY-99 162.525 MHz

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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.
Heathsville, VA WXM-57 162.400 MHz

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