THE NATION'S CHARTMAKERS SINCE 1807

UNITED STATES - EAST COAST

MARYLAND

HEAD OF CHESAPEAKE BAY

Mercator Projection
Scale 1:40,000 at Lat. 39°27'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE NAME	LATITUDE	LONGITUDE	Height referred to datum of soundings (MLLW) Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet	Mean Lower Low Water feet
Pond Point, Bush River	39°32'N	76°18'W	1.8	1.4	0.1	0.2
Romney Creek, Romney	39°32'N	76°16'W	2.0	1.6	0.1	0.2
Chesapeake City, Back Creek	39°30'N	75°48'W	3.3	3.1	0.2	0.2
Havre de Grace	39°32'N	76°05'W	2.5	2.1	0.2	0.2

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. (JA 0762)

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

Aids to Navigation (lights are white unless otherwise indicated)

AERO aeronautical
al alternating
B black
Bn beacon
C can
Tel telephone
F fixed
Fl flashing
G green
Gi intermittent
Iso isophase
LT HO lighthouse
M nautical mile
Mo(A) Morse (A)
MORC RR microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Pa patara
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St Mk stakeboat/mark
Tr black
W white
WHS whistle
Y yellow

Bottom characteristics:

bk broken
bl brown
Cy clay
Co coral
gl gravel
Gr green
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
St shells
sy sticky

Miscellaneous

AUTH authorized
(D) existence doubtful
Obstr obstruction
Ps position approximate
Pd position doubtful
Rep reported
Sub submerged
Wreck, rock, obstruction, or shoal swept close to the depth indicated.
Hatch: Rock (over and uncover, with heights in feet above datum of soundings.

PLANE COORDINATE GRID
(Based on NAD 1927)
The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: +
The last three digits are omitted.

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 0.05 minute northward and 1.16W eastward to agree with this chart.

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

NOAA WEATHER RADIO BROADCASTS
Weather Radio Broadcasts from the stations below provide 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.

Baltimore, MD	KEC-83	162.400 MHz
Sudlersville, MD	WXK-87	162.500 MHz

SMALL CRAFT WARNINGS
During the boating season small-craft warnings will be displayed from sunrise to sunset on Maryland Marine Police Cruisers while underway in Maryland waters of the Chesapeake Bay and tributaries.

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
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
Lights in Maryland, Delaware, and Pennsylvania, 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.

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

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additional regulations for Chesapeake Bay are published in this Notice to Mariners under the heading "Upcoming regulations" and are contained at the Office of Coast Survey, 6th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Baltimore, Maryland.
Refer to charted regulation section numbers.

NOTE B
CAUTION
Unexploded ammunition or ordnance (duds) may exist within the limits of the Restricted Area.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted stuck 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 by fish trap operations are described 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.

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

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.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown thus:
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 buried or buried to depths; 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 submarine pipelines and cables exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

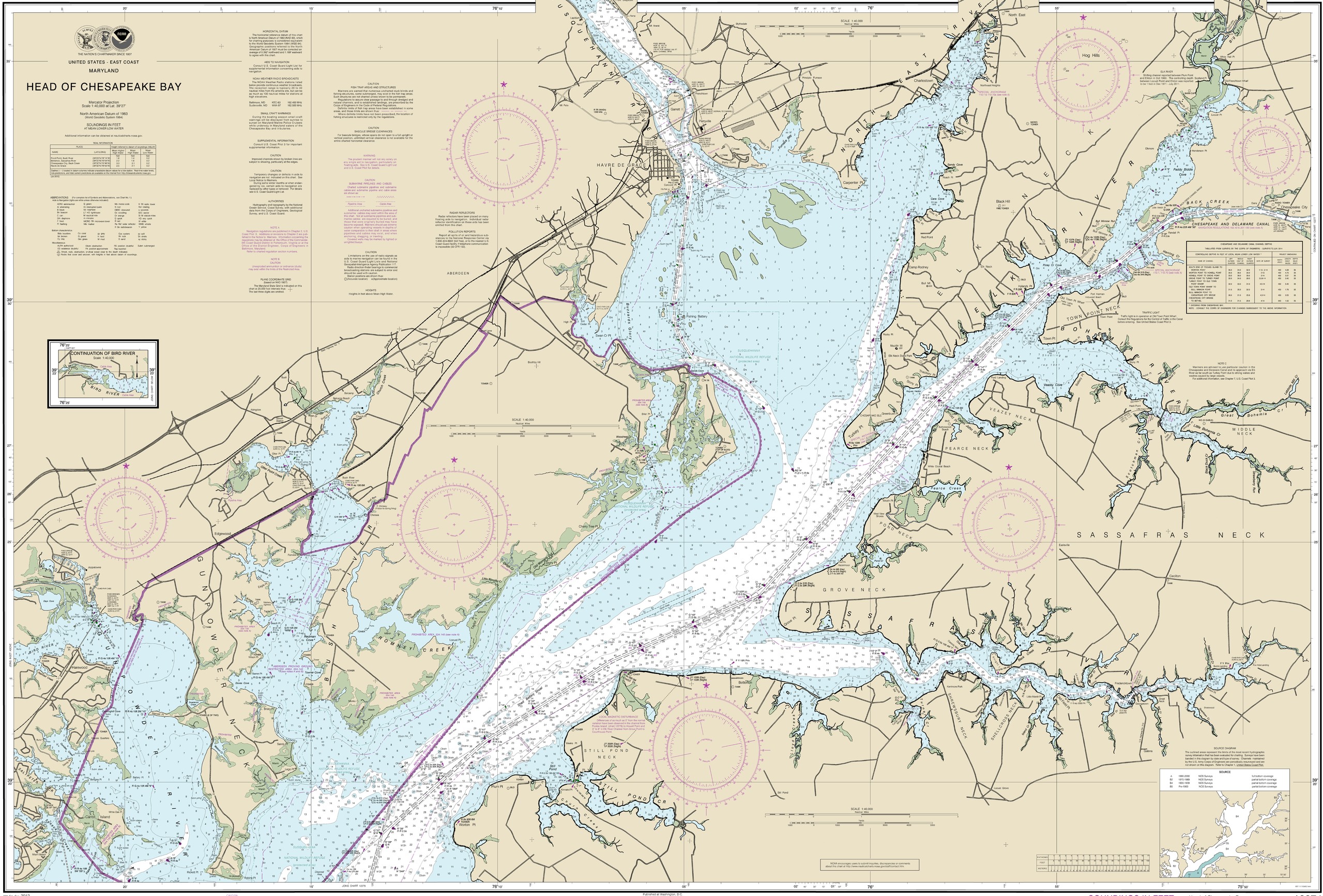
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
(A)Accurate location; (a)Approximate location)

HEIGHTS
Heights in feet above Mean High Water.

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

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802, Channel 16, or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CONTINUATION OF BIRD RIVER
Scale 1:40,000


SUSQUEHANNA RIVER
Havre de Grace
ABERDEEN
Aberdeen Proving Ground
Edgewood
Gunpowder Neck
Romney Creek
Bush River
Still Pond Neck
Still Pond Cr
Worton Pt
Carpenter Pt
Charlestown
North East
Elk Neck
Turkey Pt
Veazey Neck
Pearce Neck
Town Point Neck
Town Pt
Grove Neck
Sassafras Neck
Middle Neck
Great Bohemia
Chesapeake City
Back Creek
CHESAPEAKE AND DELAWARE CANAL
Hog Hills
Black Hill
Red Point
Bull Mt
Elk Neck State Park
Tawes Cr
Fairhaven
Bird River
Romney Creek
Bush River
Gunpowder Neck
Still Pond Neck
Still Pond Cr
Worton Pt
Carpenter Pt