THE NATION'S CHARTMAKER 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		Height referred to datum of soundings (MLLW)		
NAME	LAT/LONG	Mean Higher High Water	Mean High Water	Mean Low Water
Pond Point, Bush River	(39°22'N/76°15'W)	1.8	1.4	0.2
Bellevue, Susquehanna River	(39°32'N/76°05'W)	2.2	1.6	0.2
Chesapeake City, Back Creek	(39°32'N/75°49'W)	2.3	1.8	0.2
Reedy Point, Delaware	(39°32'N/75°35'W)	2.5	2.1	0.3

Elevations in meters relative to datum of soundings. Tidal time meter levels, tidal current, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov. (see ADN)

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

Aids to Navigation (lights are white unless otherwise indicated):

ABN aeronautical beacon	G green	Mo morse code	R Tr radio tower
Al alternating	IQ interrupted quick	Nr red	Rot rotating
Bn beacon	Iso isophase	Obscd obscured	Ro reflector
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	mi minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
FI flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bldrs boulders	Co coral	gy grey	Oys oysters	so soft	
bk broken	G gravel	h hard	Pk rock	Sh shells	
Cl clay	Gm green	M mud	S sand	sy sticky	

Miscellaneous:

ADRK authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	Pa position approximate	Rep reported	

Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
Rocks that cover and uncover, with heights in feet above datum of soundings.

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 World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.382" northward and 1.199" 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
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The useful broadcast range is typically 25 to 40 nautical miles from the antenna site, but can be as much as 120 nautical miles for stations at high elevations.

Baltimore, MD	KEC-83	162.400 MHz
Sudlersville, MD	WXK-97	162.500 MHz

SMALL CRAFT WARNINGS
During small craft warnings, all non-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.
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.

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. 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 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.

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.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted stake fy/rods 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 improved channels, and to anchorage areas, 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: Limits of Fish Trap Area
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 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 are cautioned to 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.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Pilot and in the 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) o(Approximate location)

HEIGHTS
Heights in feet above Mean High Water.

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.

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).

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 the area of a lease, when 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.

CONTINUATION OF BIRD RIVER
Scale 1:40,000
Cable Area
BIRD RIVER
39°23'
76°25'

SCALE 1:40,000
Nautical Miles
Yards
Meters

PROJECT DEPTHS
Channel legends and tabulations, where indicated, reflect the U.S. Army Corps of Engineers (USACE) project depths. The controlling depth is the least depth in the channel or fairway. For detailed channel information and maximum depths as reported by USACE, use NOAA Electronic Navigational Charts. USACE surveys and channel condition reports are available at http://navigation.usace.army.mil/Survey/Hydro.

CHESAPEAKE AND DELAWARE CANAL PROJECT DEPTHS (see note)	
NAME OF CHANNEL	PROJECT DEPTH (FEET)
SOUTH END OF PIGGES ISLAND TO MORTON POINT	35
MORTON POINT TO ROWELL POINT	35
ROWELL POINT TO GROVE POINT	35
GROVE POINT TO TURKEY POINT	35
TURKEY POINT TO OLD TOWN POINT WHARF	35
OLD TOWN POINT WHARF TO BULL MINNOW POINT	35
BULL MINNOW POINT TO CHESAPEAKE CITY BRIDGE	35
CHESAPEAKE CITY BRIDGE TO BETHEL	35

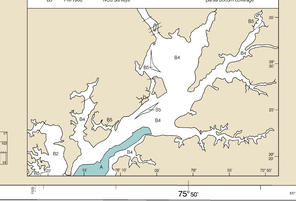
TRAFFIC LIGHT
Traffic light is in operation at Old Town Point Wharf. Consult the Regulations for the Control of Traffic in the Canal before entering. See United States Coast Pilot 3.

NOTE C
Mariners are advised to use particular caution in the Chesapeake and Delaware Canal and in the mouth of the River as far south as Turkey Point due to strong currents and washes caused by large vessels.
For additional information, see Chapter 7, U.S. Coast Pilot 3.

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 the 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	1990-2000	NOS Surveys	full bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre 1900	NOS Surveys	partial bottom coverage



SCALE 1:40,000
Nautical Miles
Yards
Meters

| FATHOMS | | | | |