Formerly C&GS 1226, 1st Ed., June 1913 C-1933-390 KAPP-625

SOUNDINGS IN FEET

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

MARYLAND

CHESAPEAKE BAY

SANDY POINT TO SUSQUEHANNA RIVER

Mercator Projection
Scale 1:80,000 at Lat. 39°18'

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.& ONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Old Town Point Wharf, Elk River	(39°30'N/75°53'W)	2.7	2.4	0.2
Havre de Grace, Susquehanna River	(39°32'N/76°05'W)	2.5	2.1	0.2
Baltimore, Ft. McHenry	(39°16'N/76°35'W)	1.7	1.4	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.

(Jan 2014)

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
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mer meaner
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk brown
Cy clay
Co coral
Gl gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
ELI existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged
Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

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.

BALTIMORE HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2015

CONTROLLING DEPTHS FROM SEARARD 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 (MILES) DEPTH MLLW (FEET)
CRAGHILL ENTRANCE	45.0	48.0	51.0	46.0	5-15	700	3.79 50
CRAGHILL CHANNEL	45.0	50.0	51.0	45.0	5-15	700	3.24 50
CRAGHILL ANGLE	43.0	45.0	46.0	43.0	4-14	700-1870	1.86 50
CRAGHILL CHANNEL UPPER RANGE	47.0	51.0	51.0	49.0	9-15	700	2.00 50
CUTOFF ANGLE	51.0	51.0	51.0	50.0	4-15	700-1740	1.14 50
BREWERTON CHANNEL EASTERN EXTENSION	49.0	51.0	51.0	49.0	9-15	700	3.50 50
	31.0	36.0	34.0	31.0	6-15	600	6.32 35
SWAN POINT CHANNEL	33.0	34.0	35.0	35.0	9-15	600	3.13 35
TOLCHESTER CHANNEL	31.0	33.0	34.0	33.0	10-15	450-600	10.87 ** 35

* ALL DEPTHS REPORTED TO NEAREST FOOT

** THE LAST 1.86 NM OVERLAPS WITH THE CHESAPEAKE AND DELAWARE CANAL CHANNEL

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2014

CONTROLLING DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER *						PROJECT DIMENSIONS	
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY		WIDTH (FEET)	LENGTH (MILES) DEPTH MLLW (FEET)
3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND	31.0	36.0	36.0	3-14		450	1.88 35
SOUTH END OF POOLES ISLAND TO MORTON POINT	35.0	34.0	32.0	1-13; 3-14		450	4.28 35
MORTON POINT TO HOWELL POINT	36.0	36.5	35.0	3-13		450	4.75 35
HOWELL POINT TO GROVE POINT	33.0	36.0	30.0	3-14		450	3.37 35
GROVE POINT TO TURKEY POINT	32.0	34.0	29.0	3,5,6-14		450	3.40 35
TURKEY POINT TO OLD TOWN POINT WHARF	32.0	33.0	31.0	4,5-14		450	5.45 35
OLD TOWN POINT WHARF TO BULL MINNOW POINT	31.0	35.0	32.0	3-14		450	1.79 35
BULL MINNOW POINT TO CHESAPEAKE CITY BRIDGE	26.0	31.0	25.9	4,5-14		450	3.53 35
CHESAPEAKE CITY BRIDGE TO BETHEL	31.0	31.5	29.8	4-14		450	1.52 35

* ENTERING FROM CHESAPEAKE BAY

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

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	1990-2002	NOS Surveys	full bottom coverage
B1	1990-1999	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		Chart 12272	
g		Chart 12274	
h		Chart 12278	
i		Chart 12282	

SCALE 1:80,000
Nautical Miles

Yards

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 0.291" northward and 1.159" eastward to agree with this chart.

NOTE B

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

NOTE C

Mariners are advised to use particular caution in the Chesapeake and Delaware Canal and its approach via Elk River as far south as Turkey Point due to strong wakes and washes caused by large vessels.

For additional information, see Chapter 7, U.S. Coast Pilot 3.

For detailed information use large scale charts

AREA 1

Fishing Traps permitted Oct 2 to May 19 inclusive.

NOTE F

WARNING

The FAA requires small craft operators with mast heights of 37 feet or greater to observe caution while transiting Frog Mortar Creek in the vicinity of Martin State Airport.

NOTE D

WARNING

Small-craft operators are advised to use extreme caution in the vicinity of SEVEN-FOOT KNOLL LIGHT. Waves to twelve feet have been reported generated by larger vessels transiting the adjacent channels.

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 5° from the normal variation have been observed in the channel from Pooles Island to Howell Point and 3° to 8° in Elk River Channel from Grove Point to Courthouse Point.

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.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed 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-97	162.600 MHz
Washington, DC (Manassas, VA)	KHB-36	162.550 MHz

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

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: (Rk)

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)

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.

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.

CABLE AND PIPELINE AREAS

The cable and pipeline areas falling within the areas of the larger scale charts are shown thereon and are not repeated on this chart.

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

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.

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.

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.

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.

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.

AIDS TO NAVIGATION

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

SCALE 1:80,000
Nautical Miles

Yards

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 and Philadelphia, Pennsylvania. Refer to charted regulation section numbers.

JOINS CHART 12263

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.

59th Ed., May 2014. Last Correction: 12/2/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)

To ensure that this chart is printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

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

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

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

Chesapeake Bay, Sandy Point to Susquehanna River
SOUNDINGS IN FEET - SCALE 1:80,000

12273