Formerly C&GS 570, 1st Ed., May 1938 G-1938-477 KAPP 631

SOUNDINGS IN FEET

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

MARYLAND–DELAWARE–NEW JERSEY

CHESAPEAKE AND DELAWARE CANAL

Mercator Projection
Scale 1:20,000 at Lat. 39°32'

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.

CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 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 (NAUT. MILES)	DEPTH MLLW (FEET)
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
BETHEL TO GUTHRIES RUN	29.2	31.0	31.5	4-14	450	1.13	35
GUTHRIES RUN TO SUMMIT BRIDGE	33.0	34.0	33.0	4-14	450	1.02	35
SUMMIT BRIDGE TO CONRAIL BRIDGE	35.0	34.9	32.0	4-14	450	1.65	35
CONRAIL BRIDGE TO ST. GEORGES BRIDGE	32.0	36.0	28.4	4-14	450	2.27	35
ST. GEORGES BRIDGE TO BIDDLE POINT	28.7	33.9	32.0	4-14	450	1.87	35
BIDDLE POINT TO REEDY POINT BRIDGE	33.4	34.7	33.6	4-14	450	1.68	35
REEDY POINT BRIDGE TO DELAWARE RIVER	29.0	34.5	31.2	4-14	450	1.63	35

* ENTERING FROM CHESAPEAKE BAY.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

SALEM RIVER CHANNEL							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2014							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUTICAL MILES)	DEPTH MLLW (FEET)
ELSINBORO POINT TO OAKWOOD BEACH	13.4	12.4	11.9	8-14	150	1.48	16
OAKWOOD BEACH TO SINNICKSON LANDING	13.6	15.3	15.8	8-14	150	1.56	16
SINNICKSON LANDING TO END OF PROJECT	18.2	17.0	17.7	8-14	150	0.71	16
	TURNING BASIN PROJECT WIDTH 80%	100%					
TURNING BASIN	12.0	9.7		5-14	320	0.2	16

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

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.

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

TIDAL INFORMATION				
PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Reedy Point	(39°34'N/75°34'W)	5.8	5.5	0.2
Summit Bridge	(39°32'N/75°44'W)	3.8	3.6	0.1
Chesapeake City	(39°32'N/75°49'W)	3.3	3.1	0.2
Old Town Point Wharf	(39°30'N/75°55'W)	2.7	2.4	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.
(Aug 2014)

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.

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.

Philadelphia, PA KIH-28 162.475 MHz
Sudlersville, MD WXK-97 162.500 MHz

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.

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 1990-2009	NOS Surveys	full bottom coverage
B2 1970-1989	NOS Surveys	partial bottom coverage
B4 1900-1939	NOS Surveys	partial bottom coverage

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 Philadelphia, Pennsylvania.
Refer to charted regulation section numbers.
Additional general instructions supplementing 207.100, may be found in Chapter 7, Coast Pilot 3.

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 2° to 5° from the normal variation have been observed along the Delaware River Channel.

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.

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 0.396" northward and 1.238" eastward to agree with this chart.

PRIVATE CHANNELS
Bulkhead Shoal Channel, the turning basin and Cedar Creek Channel are projects of Star Enterprise Co.
Aids to navigation are private.

NOTE B
DELAWARE RIVER
The project depth is 40 feet in Reedy Island Range and New Castle Range. For controlling depths, use chart 12311.

LIGHTS
Mercury vapor lights are located approximately 140 feet from the edge of the channel. The lights in general are 500 feet apart on both banks.

NOTE C
TRAFFIC LIGHTS
Traffic lights are in operation at Reedy Point Entrance and at Old Town Point Wharf.
Consult Chapter 7, U.S. Coast Pilot 3 for regulations for the control of traffic in the Canal before entering.

NOTE D
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.

Pilot Transfer Station Note:
A pilot transfer station exists between 39° 31' 56" N, 075° 47' 24" W, one mile on either side of the Chesapeake City Bridge.

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 6° from the normal variation have been observed in Elk River Channel from Old Town Point to Courthouse Point.

CHESAPEAKE AND DELAWARE CANAL BRIDGE CLEARANCES					
VERTICAL CLEARANCES ARE EXPRESSED IN FEET ABOVE MEAN HIGH WATER (MHW)					
	225 feet South of C/L	150 feet South of C/L	Centerline of Canal	150 feet North of C/L	225 feet North of C/L
REEDY PT BRIDGE	134 (133)	135	136	135	134 (133)
ST GEORGES BRIDGE E	132	134	137	134	132
ST GEORGES BRIDGE W			142		
CONRAIL LIFT BRIDGE	45 (Down) *129 (Low Lift) **137 (High Lift)		45 (Down) *130 (Low Lift) **138 (High Lift)		45 (Down) *129 (Low Lift) **137 (High Lift)
PIPELINE CROSSING	141	141	141	141	141
SUMMIT BRIDGE	135 (132)	137	138	137	135 (131)
CHESAPEAKE CITY BRIDGE	136 (135)	138	140	138	136 (134)

Notes: 136- -Clearances below lowest steel girder of bridge.
(134)-Clearances below navigation lights.
*Normal low limit stop for raised position of Conrail Lift Bridge.
**The Conrail Lift Bridge limit override allows an additional 8 feet of clearance. (indicated by alignment of white lines)

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.

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

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).

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; Mkr marker; Mo morse code; N nun; OBSC obscured; Oc occulting; Or orange; Osc oscillating; 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; WHIS whistle; Y yellow
Bottom characteristics: Blds boulders; bk broken; Cy clay; Co coral; G gravel; Grs grass; gy gray; h hard; M mud; Oys oysters; Rk rock; S sand; so soft; Sh shells; sy sticky
Miscellaneous: AUTH authorized; ED existence doubtful; Obstn obstruction; PA position approximate; PD position doubtful; Rep reported; Subm submerged
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

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.

PLANE COORDINATE GRID
(based on NAD 1927)
The Maryland State Grid is indicated on this chart at 10,000 foot intervals thus: The last three digits are omitted.

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

SCALE 1:20,000

36th Ed., Oct. 2014
12277

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.

SOUNDINGS IN FEET

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

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

Chesapeake and Delaware Canal
SOUNDINGS IN FEET - SCALE 1:20,000

12277

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

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If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

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