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

Formerly C&GS 280, 1st Ed., Jan. 1928 G-1953-535 KAPP-670

SOUNDINGS IN FEET

12313

SCALE 1:15,000
Nautical Miles
Yards

MAGNETIC
VAR 12° 15'W(2012)
NO ANNUAL CHANGE

CONTINUED ON CHART 12314

CONTINUED ON CHART 12312

JONES INSET

JONES CHART AT LEFT

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 - 2010	NOS Surveys	full bottom coverage
B2	1970 - 1989	NOS Surveys	partial bottom coverage
B5	Pre - 1900	NOS Surveys	partial bottom coverage

SCHUYLKILL RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUN 2013

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH (FEET)
1	31.8	33.9	34.9	4-13	400	0.32	33
2	28.9	32.1	31.1	4-13	400	0.34	33
3	31.8	32.9	30.0	4-13	400	0.18	33
4	30.6	33.2	28.9	4-13	400	0.11	33
5	31.6	30.8	26.5	4-13	300	0.30	33
6	31.3	32.3	31.6	4-13	325	0.21	33
7	23.9	31.0	28.0	4-13	300	0.31	33
8	30.9	32.8	31.4	4-13	300	0.15	33
9	30.3	33.0	31.1	4-13	300	0.31	33
10	32.0	35.9	26.1	4-13	325	0.09	33
11	25.9	31.1	37.3	4-13	350	0.05	33
12	22.3	28.1	34.4	4-13	350	0.05	33
13	20.7	29.1	33.6	4-13	325	0.07	33
14	9.5	21.8	34.4	4-13	300	0.14	33
15	7.6	17.5	32.8	4-13	325	0.08	33
16	11.7	19.1	29.0	4-13	350	0.08	33
17	20.5	25.5	25.9	4-13	325	0.06	33
18	11.4	16.3	29.2	4-13	300	0.45	33
19	18.0	24.2	25.6	4-13	200	0.07	33
20	18.4	24.2	25.6	4-13	250	0.05	28
21	21.8	16.4	12.3	1-13	250	0.04	26
22	21.8	12.1	5.8	1-13	250	0.06	26
23	20.2	1.3	1.0	1-13	200	0.23	26
24	13.5	16.0	7.2	1-12	250	0.08	26
25	23.7	14.5	9.1	1-12	250	0.09	26
26	21.9	13.9	10.7	1-12	250	0.09	26
27	22.7	14.4	11.5	1-12	225	0.12	26
28	19.3	14.6	11.8	1-12	200	0.10	26
29	14.0	14.7	13.6	1-12	200	0.22	26
30	15.0	16.0	16.6	1-13	200	0.30	22
31	19.8	17.0	17.0	1-12	200	0.10	22
32	19.0	17.0	12.7	1-12	200	0.26	22
33	19.9	13.1	8.4	1-12	200	0.10	22
34	11.1	15.8	11.3	1-12	250	0.07	22
35	16.0	13.5	10.2	1-12	250	0.08	22
36	19.3	14.5	11.1	1-12	250	0.08	22
37	17.9	15.2	9.1	1-12	250	0.06	22
38	13.0	14.8	12.2	1-12	225	0.13	22

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

DELAWARE RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 2015

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH (FEET)
TINICUM RANGE	36.3	40.3	39.6	36.5	10-13	800	3.00	40
BILLINGSPORT RANGE	42.6	44.7	44.8	40.6	10-13	800	1.13	40
MIFFLIN RANGE	40.4	42.2	43.3	42.8	9-14	800	2.83	40
EAGLE POINT RANGE	42.5	44.1	42.0	42.8	10-13	800	1.74	40
HORSESHOE BEND	39.7	43.6	44.9	41.7	10-13	800-500	0.80	40
EAST HORSESHOE RANGE AND REACH M	40.8	44.4	43.9	44.4	10-13	500-400	1.19	40
REACH M TO BENJAMIN FRANKLIN BRIDGE	19.7	35.4	40.7	39.2	11-13	400	2.95	40
BENJAMIN FRANKLIN BRIDGE TO CAMBRIA ST	25.5	39.2	39.7	37.1	11-13	400	2.00	40
CAMBRIA ST TO ALLEGHENY AVE	36.7	40.9	40.4	37.1	11-13	400	0.42	40
HARBOR RANGE	39.9	39.9	40.1	39.0	10-14	400	0.73	40
FISHER CHANNEL	38.9	42.4	44.1	42.4	10-14	400	0.31	40

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

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.

Mercator Projection
Scale 1:15,000 at Lat. 39°55'

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
		feet	feet	feet
Billingsport, NJ	(39°51'N/75°15'W)	6.2	5.8	0.2
Philadelphia, Municipal Pier 11, PA	(39°57'N/75°08'W)	6.8	6.4	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. (Dec 2011)

For Symbols and Abbreviations see Chart No. 1

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, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

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

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

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

ANCHORAGE AREAS
110.157 (see note A)
Limits and assigned numbers of anchorage areas are shown in magenta.

GENERAL ANCHORAGES
9 10 11 12
13 14 15 16

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)

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.

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.

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.

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 0.402" northward and 1.302" eastward to agree with 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).

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.

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.

Philadelphia, PA KIH-28 162.475 MHz

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.

CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: ⊙

COOPER RIVER
The controlling centerline depth at mean lower low water was 6 feet to the upstream limit of the project.
Jun 1980

CAUTION
Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Mariners are advised to proceed with caution.

REGULATED NAVIGATION AREA
165.510 (see note A)

ANCHORAGE

RESTRICTED

SAFETY ZONE
165.784 (see note A)

Cable Area

Pipeline Area

Cable and Pipeline Area

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

PENNSYLVANIA - NEW JERSEY

DELAWARE RIVER

PHILADELPHIA AND CAMDEN WATERFRONTS

CONTINUATION TO BRAMELL POINT
Scale 1:15,000

KAPP 671

1007.6 X 852.8 mm

53rd Ed., Jan 2012

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.

Last Correction: 8/23/2016. Cleared through:
LNM: 4616 (11/15/2016), NM: 4716 (11/19/2016)

To ensure that this chart was 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.

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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	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Philadelphia and Camden Waterfronts
SOUNDINGS IN FEET - SCALE 1:15,000

12313