

BookletChartTM

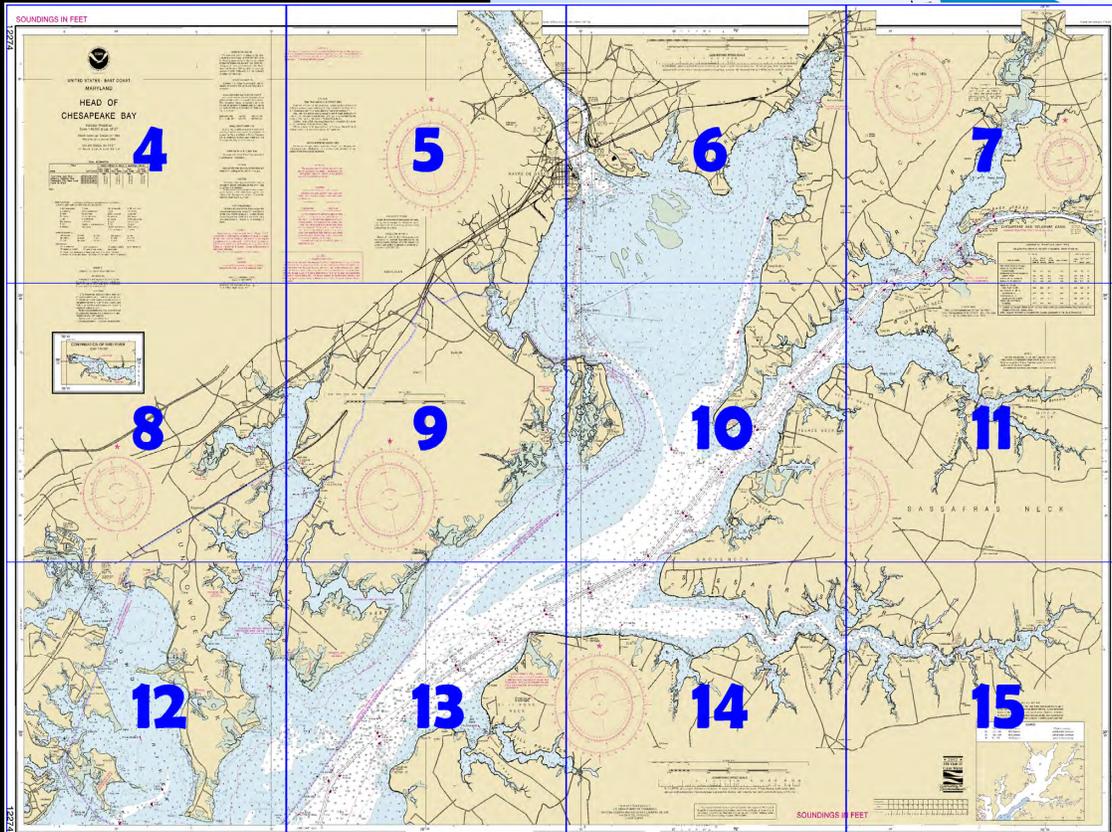
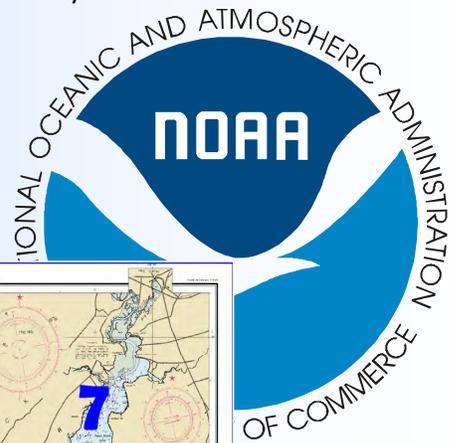
Head of Chesapeake Bay

(NOAA Chart 12274)

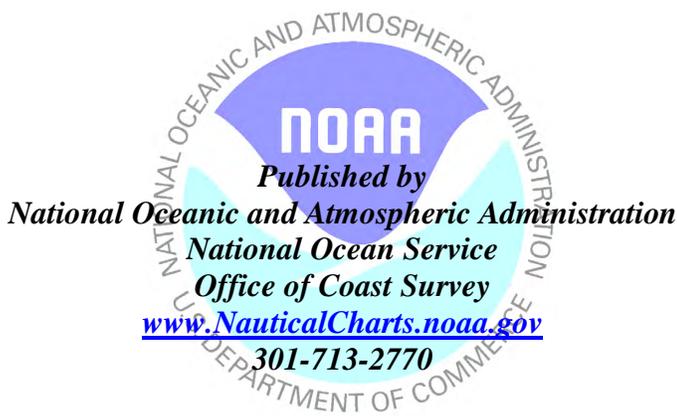


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed at: <http://www.NauticalCharts.noaa.gov>.

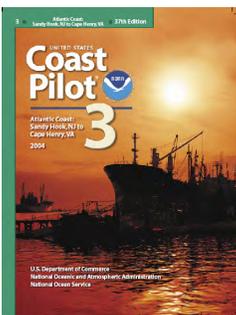
The charts and bar scales in this BookletChart have been reduced to **62%** of original scale, and are printed at the new scale of **1:64,516**.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency (formerly NIMA) Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied were:

- Coast Guard Local Notice to Mariners: **28/05 July 12, 2005**
- NGA Weekly Notice to Mariners: **29/05 July 16, 2005**
- Canadian Coast Guard Notice to Mariners: **Not Applicable**



- [Coast Pilot 3, Chapter 15 excerpts]**
- (192) **Gunpowder River** is entered through a channel marked by a light and buoys west of **Spry Island Shoal**; the shoal is covered 2 to 4 feet; the channel had depths of 8 feet for 2 miles; 2 to 9 feet for 4 miles; 3 feet in a channel leading to a creek below **Joppatowne**, with depths of 4 to 7 feet and 4 feet in the marina basin.
 - (194) Marinas above the bridge have slips, gasoline, and marine supplies.
 - (196) Some waters of the Aberdeen Proving Ground are closed to the public at all times. Others have a limited access during specified hours.
 - (199) **Bush River**. The lower 5 miles are within Aberdeen Proving Ground constituting prohibited land areas and restricted and dangerous

- water areas.
- (200) The river has depths of 7 feet to the railroad bridge 6.3 miles above the mouth, thence 5 to 6 feet for another 1.5 miles. The approach to the river and the channel are marked by buoys and a light as far as **Tapler Point**, and by a light on the east side 0.3 mile south of the railroad bridge, which shows a high-intensity beam down river; the lower light, off the western shore about 2.7 miles above the mouth shows high-intensity beams up and down river.
- (204) **Still Pond** has depths of 9 to 11 feet and is a good anchorage during easterly winds. **Churn Creek** has depths of 2 feet in the entrance and deeper water inside.
- (205) **Stillpond Creek** is entered through a narrow channel; the depth was 7½ feet through the entrance. A light and buoys mark the entrance. The channel inside Stillpond Creek is marked by a daybeacon and buoys.
- (206) **Stillpond Coast Guard Station** is on the north side of the entrance to Stillpond Creek.
- (207) **Sassafras River**. The entrance is between **Howell Point** and **Grove Point**. The river is used by vessels drawing up to 12 feet.
- (208) The river channel has depths of 13 feet to a point 1 mile above the U.S. Route 213 bridge, thence 7 to 3 feet for 2 miles. The channel is marked as far as the highway bridge.
- (212) **Fredericktown** and **Georgetown** are connected by a bridge that has a clearance of 5 feet. The bridgetender monitors VHF-FM channel 16 and works on channels 13 and 68; call sign KYU-699. The **speed limit** is 6 miles per hour in Sassafras River 0.5 mile above and below the bridge.
- (213) There are facilities on both sides of the river below the bridge. Berthing, electricity, water, gasoline, diesel fuel, and marine supplies can be obtained.
- (215) **Spesutie Narrows**. A channel leads from the flats off the southern entrance to a basin at Mulberry Point; the depth was 5 feet to the basin with 2½ to 5 feet at the landings. The entrance channel is marked by buoys and lighted ranges; the inner channel is marked by daybeacons.
- (217) Spesutie Island and Spesutie Narrows are within Aberdeen Proving Ground constituting prohibited land areas and restricted and dangerous water areas.
- (219) Mariners are required to observe the speed regulation in Elk River, Back Creek, and Chesapeake and Delaware Canal.
- (221) The current velocity is 0.8 knot.
- (223) **Bohemia River** has depths of 7 feet or more for 4 miles to the junction of **Great Bohemia Creek** and **Little Bohemia Creek**; 6 to 4 feet for 1.5 miles in Great Bohemia Creek; 7 feet for 1 mile in Little Bohemia Creek.
- (224) The cove on the southwest side of Bohemia River 3 miles above the entrance has depths of 3 to 5 feet and is a small-boat anchorage.
- (225) The **speed limit** is 6 miles per hour from the highway bridge to 1 mile downstream in Bohemia River.
- (226) There are small-craft facilities along the north side of Bohemia River and along the south side of the river below the bridge.
- (229) Above Back Creek, the channel in Elk River is marked by buoys to **Locust Point**. Depths vary considerably, ranging from 10 feet at the south end to 1 foot off Locust Point. In 1978, a depth of 1 foot was in the channel above Locust Point.
- (230) Small-craft facilities are on Elk River 5 miles above Old Town Point Wharf.
- (235) **Susquehanna River**. A marked channel leads through the flats from Chesapeake Bay to Havre de Grace. A side channel leads to a basin at City Park at Havre de Grace; the depth was 12 feet. In 1990, a controlling depth of 2 feet (5½ feet at midchannel) was in the side channel and 4½ feet in the basin at City Park
- (240) There are berthing and repair facilities at Havre de Grace.
- (241) **Perryville** has berthing facilities above the first bridge. Gasoline and marine supplies are available.
- (242) Above Havre de Grace, depths of 13 feet to 50 feet are in the channel of the Susquehanna River to Port Deposit; the river is obstructed by rocks above here.
- (243) **Garrett Island**. The favored channel is west of the island; rocks, shoals, logs, and submerged pilings in this area.
- (244) **Port Deposit**. Gasoline and some supplies are available.

Table of Chart Notes

ELK RIVER
Shifting channel reported between Plum Pt. and Elkton in Oct. 1960. The controlling depth between Locust Pt. and Elkton was reported to be 6 feet in Dec. 1971 - Apr. 1973.

Corrected through NM Jul. 6/02
Corrected through LNM Jun. 29/02

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.

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

PLANE COORDINATE GRID
(based on NAD 1927)
The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: $\begin{matrix} \text{---} \\ | \\ \text{---} \\ | \\ \text{---} \end{matrix}$. The last three digits are omitted.

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping 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)

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.

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).

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

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

ACKNOWLEDGMENT
The National Ocean Service acknowledges the exceptional cooperation received from members of the York Power Squadron, United States Power Squadrons District 5, for continually providing essential information for revising this chart.

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 0.392' northward and 1.189' eastward to agree with this chart.

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-83 162.40 MHz
Sudlersville, MD WXK-97 162.50 MHz

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

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 5° from the normal variation have been observed in the channel from Pooles Island (Chart 1227B) to Howell Point and 3° to 8° in Elk River Channel from Grove Point to Courthouse Point.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

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, cragging, or trawling vessels.
Covered wells may be marked by lighted or unlighted buoys.

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.

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 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 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.

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.

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.

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.

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping 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.

CAUTION
CHANGES IN BUOYAGE
Mariners are advised that authorized aids to navigation are being changed to conform to marine standards of the International Association of Lighthouse Authorities Maritime Buoyage System, Region B. Significant changes are: black port hand buoys to green; black and white vertically striped buoys to red and white vertically striped buoys; and lateral lights from white to red or green as appropriate. Changes to aids to navigation will be announced in the National Imagery and Mapping Agency weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (NCGSD), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation lights are white unless otherwise indicated.)
AEO aeronautical G green Mo micro code R RR radio tower
A alternating IC interrupted quick N nun Rot rotating
B black Iso isophase OBS obscured S seconds
Bn beacon LT HO lighthouse Oc occulting SEC sector
C can M nautical mile Or orange SI M statute miles
DA diaphane m minutes Q quick VQ very quick
F fixed NICO TR microwave tower R red W white
Fl flashing Mkr marker Ra Ref radar reflector WHS whistle
R Bn radiobeacon Y yellow

Bottom characteristics:
Bds bounders Co coral gy gray Oys oysters so soft
Bk broken G gravel h hard Rk rock Sh shells
Cl clay Grs grass M mud S sand Sy sticky

Miscellaneous:
AUTH authorized Obstr obstruction PD position doubtful Subm submerged
ED existence doubtful PA position approximate Rep reported
(1) 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.

CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 2004

NAME OF CHANNEL	* SEE FOOTNOTE			DATE OF SURVEY	PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER		WIDTH (FEET)	LENGTH (MILES)	DEPTH (FEET)
3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND	40.0	40.1	39.6	10-03	400	1.68	35
SOUTH END OF POOLES ISLAND TO WORTON POINT	38.1	38.4	38.1	12-03	400	4.16	35
WORTON PT. TO HOWELL PT.	37.2	38.3	37.9	12-03	400	4.84	35
HOWELL PT. TO GROVE PT.	35.1	39.2	39.6	7-03	400	3.87	35
GROVE PT. TO TURKEY PT.	35.1	36.0	33.7	7-03	400	3.40	35
TURKEY PT. TO OLD TOWN POINT WHARF	35.3	39.3	37.7	9-03	400	5.45	35
OLD TOWN PT. WHARF TO COURTHOUSE PT.	38.3	38.8	33.7	9-03	400	1.63	35
COURTHOUSE PT. TO CHESAPEAKE CITY BRIDGE	35.7	33.8	32.7	5-04	400	3.69	35
CHESAPEAKE CITY BRIDGE TO BETHEL	32.7	33.3	34.3	5-04	400	1.61	35

* CONTROLLING CHANNEL DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER ENTERING FROM CHESAPEAKE BAY. PROJECT LENGTHS IN NAUTICAL MILES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

TIDAL INFORMATION

Place	Height referred to datum of soundings (MLLW)	Mean High Water				Extreme Low Water
		Mean High Water	Higher High Water	Mean High Water	Mean Low Water	
Pond Point, Bush River	(39°23'N/76°15'W)	2.1	1.7	0.3	-5.0	
Berterton, Sassafras River	(39°22'N/76°04'W)	2.4	2.0	0.4	-5.0	
Chesapeake City, Back Creek	(39°32'N/76°49'W)	2.9	2.8	0.0	-5.0	
Heire de Grace	(39°32'N/76°05'W)	2.6	2.2	0.4	-5.0	

(602)

SOUNDINGS IN FEET

12274



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

HORIZONTAL DATUM
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AIDS TO NAVIGATION
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SMALL CRAFT WARNINGS
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SUPPLEMENTAL INFORMATION
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CAUTION
 Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
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 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.

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 Refer to charted regulation section numbers.

NOTE B
CAUTION
 Unexpended 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: -1-
 The last three digits are omitted.

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW)			
		Mean High Water	Higher High Water	Mean Low Water	Extreme Low Water
Pond Point, Bush River	(39°23'N/76°15'W)	2.1	1.7	0.3	-5.0
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(602)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
 Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo moose code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DA diaphone	m minutes	Q quick	VO very quick
F fadec	MICHO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	Whs whistle
		Rn radiobeacon	Y yellow

Bottom characteristics:

Bds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

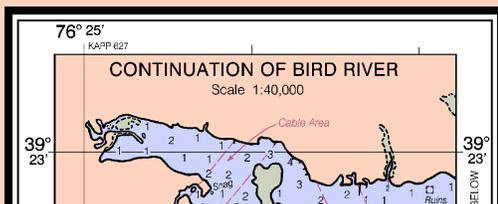
AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

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 (2) Rocks that cover and uncover, with heights in feet above datum of soundings.

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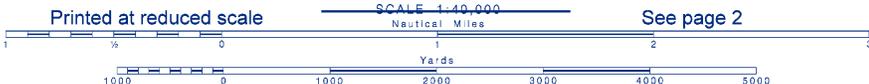
AUTHORITIES
 Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

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76° 10'

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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.

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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

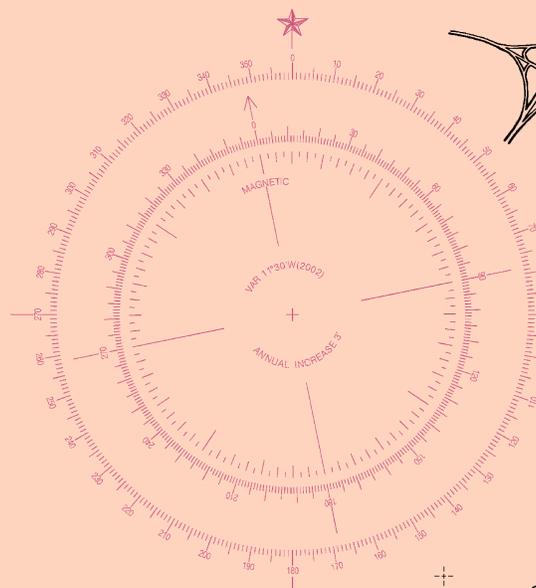
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Covered wells may be marked by lighted or unlighted buoys.

CAUTION
CHANGES IN BUOYAGE

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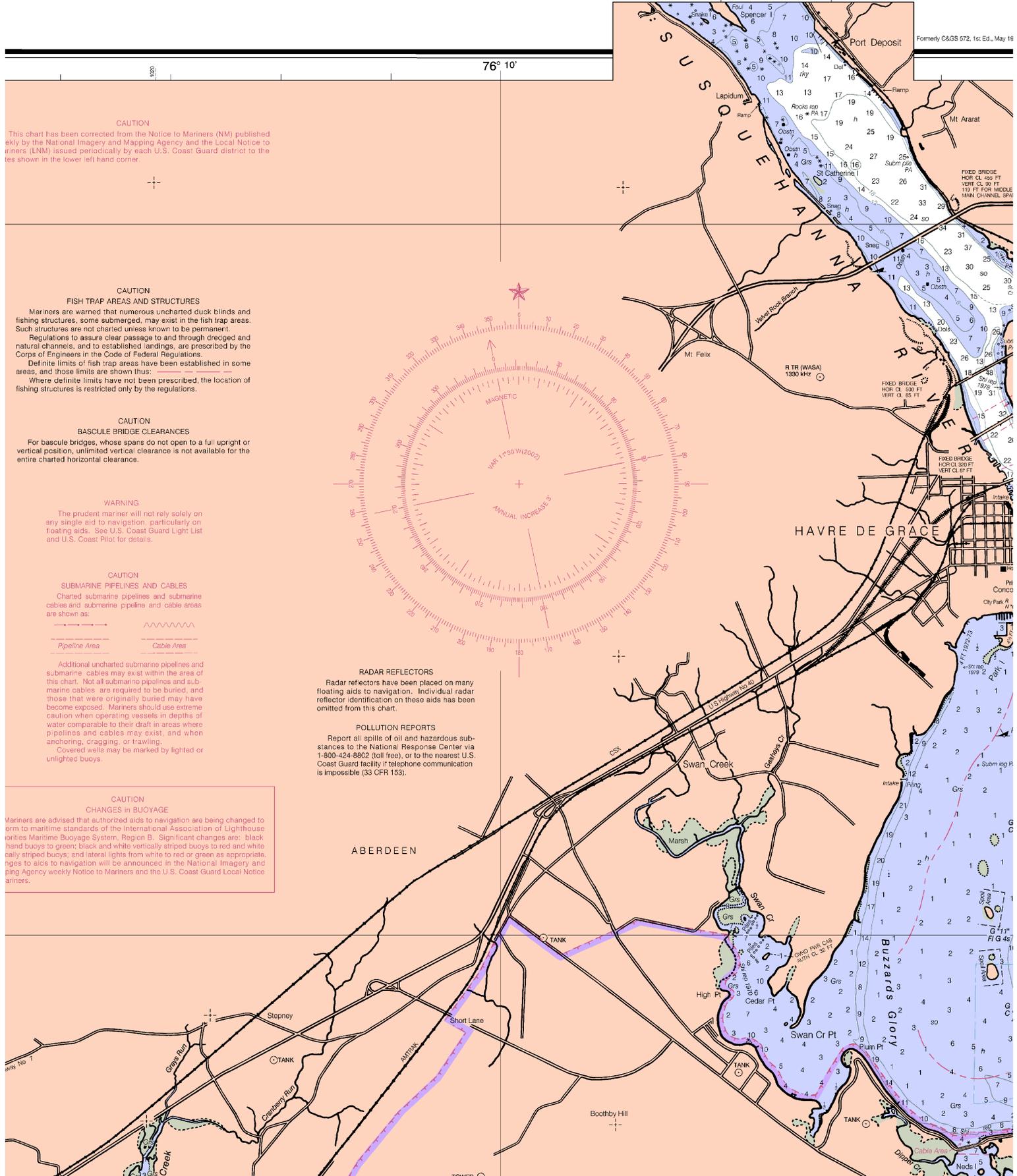


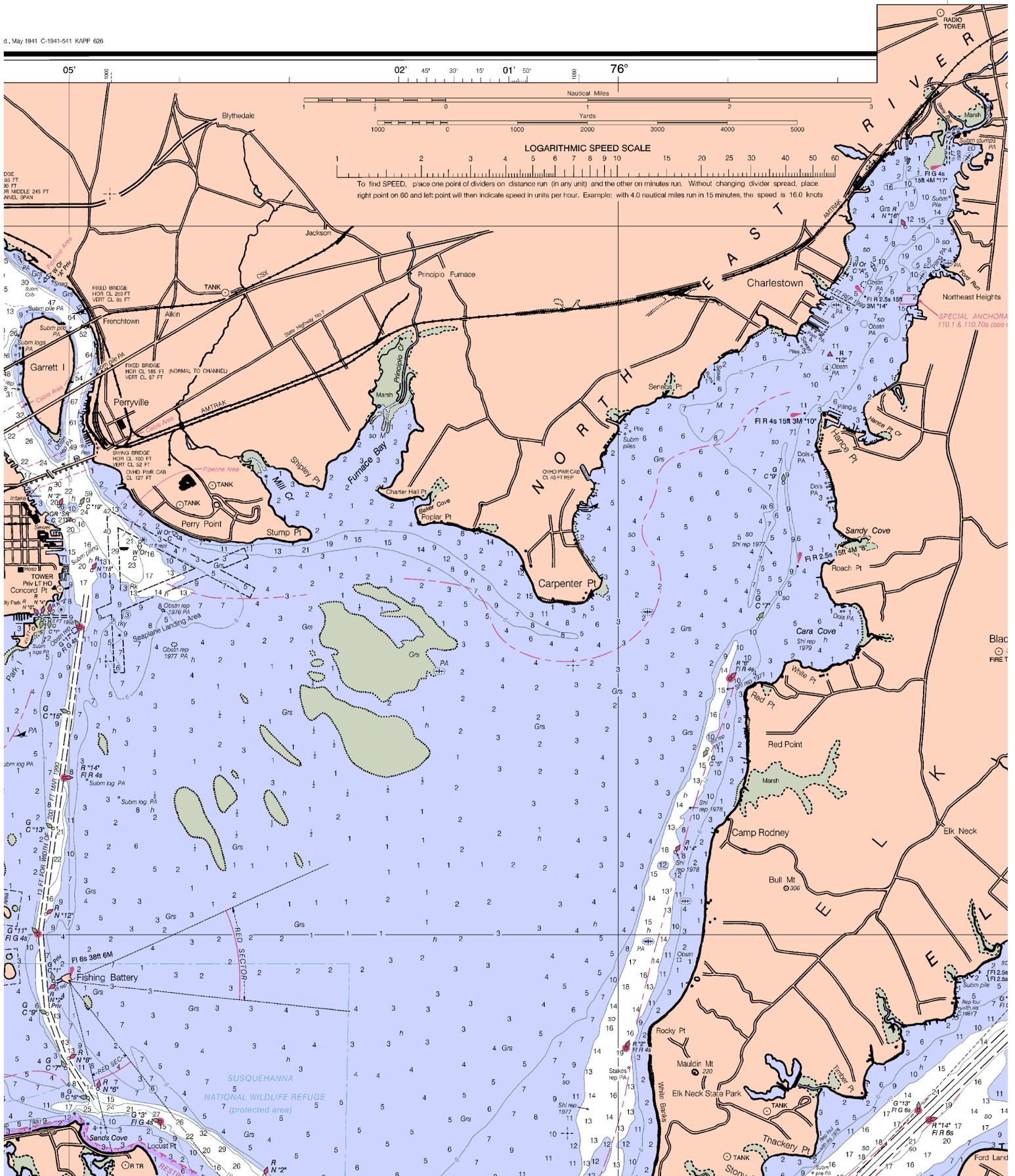
RADAR REFLECTORS

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 1-800-424-8602 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).





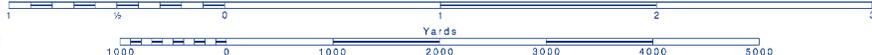
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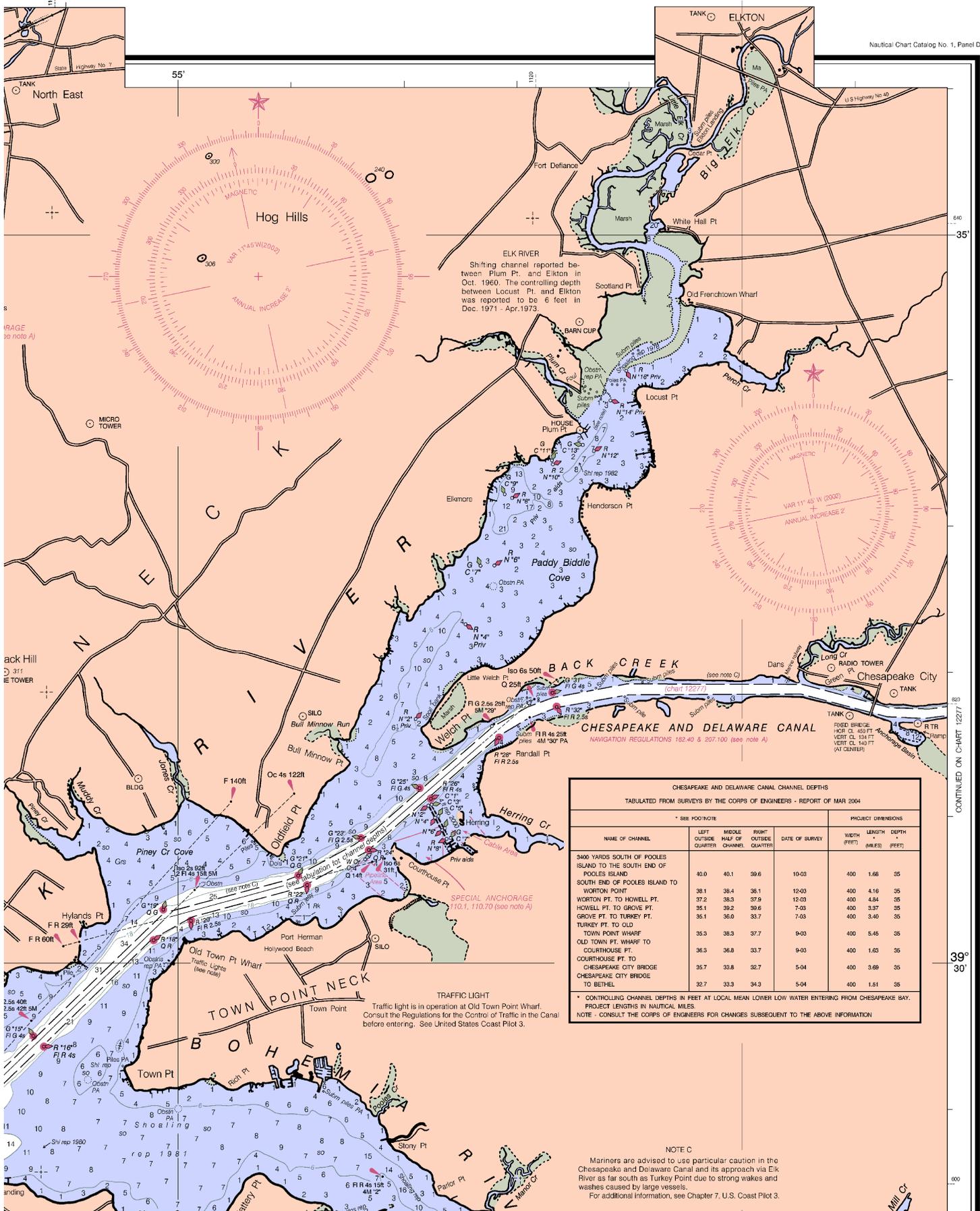


Printed at reduced scale

SCALE 1:40,000

See page 2





CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS
 TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 2004

* SEE FOOTNOTE

NAME OF CHANNEL	PROJECT DIMENSIONS			DATE OF SURVEY	WIDTH (FEET)	LENGTH (MILES)	DEPTH (FEET)
	LEFT QUARTER	MIDDLE HALF OF CHANNEL	RIGHT QUARTER				
3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND	40.0	40.1	39.6	10-03	400	1.66	35
SOUTH END OF POOLES ISLAND TO WORTON POINT	38.1	38.4	38.1	12-03	400	4.16	35
WORTON PT. TO HOWELL PT.	37.2	38.3	37.9	12-03	400	4.84	35
HOWELL PT. TO GROVE PT.	35.1	39.2	39.6	7-03	400	3.37	35
GROVE PT. TO TURKEY PT.	35.1	36.0	33.7	7-03	400	3.40	35
TURKEY PT. TO OLD TOWN POINT WHARF	35.3	36.3	37.7	9-03	400	5.45	35
OLD TOWN PT. WHARF TO COURTHOUSE PT.	36.3	36.8	33.7	9-03	400	1.63	35
COURTHOUSE PT. TO CHESAPEAKE CITY BRIDGE	35.7	33.8	32.7	5-04	400	3.69	35
CHESAPEAKE CITY BRIDGE TO BETHEL	32.7	33.3	34.3	5-04	400	1.51	35

* CONTROLLING CHANNEL DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER ENTERING FROM CHESAPEAKE BAY. PROJECT LENGTHS IN NAUTICAL MILES.
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

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.

CONTINUED ON C-CHART 12277

39° 30'

Cy clay Grs grass M mud S sand sy sicky

Miscellaneous:
 AUTH authorized Open obstruction PD position doubtful Subm submerged
 ED evidence doubtful PA position approximate Rep reported
 (1) 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.

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.

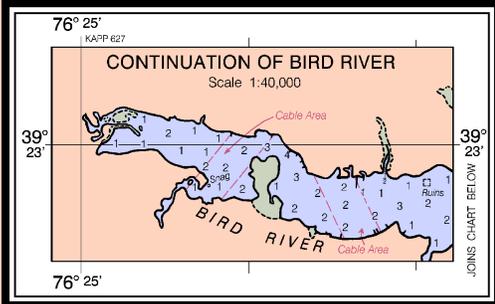
PLANE COORDINATE GRID
 (based on NAD 1927)
 The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: ---
 The last three digits are omitted.

Map conform to vertical Change Mapping to Mar

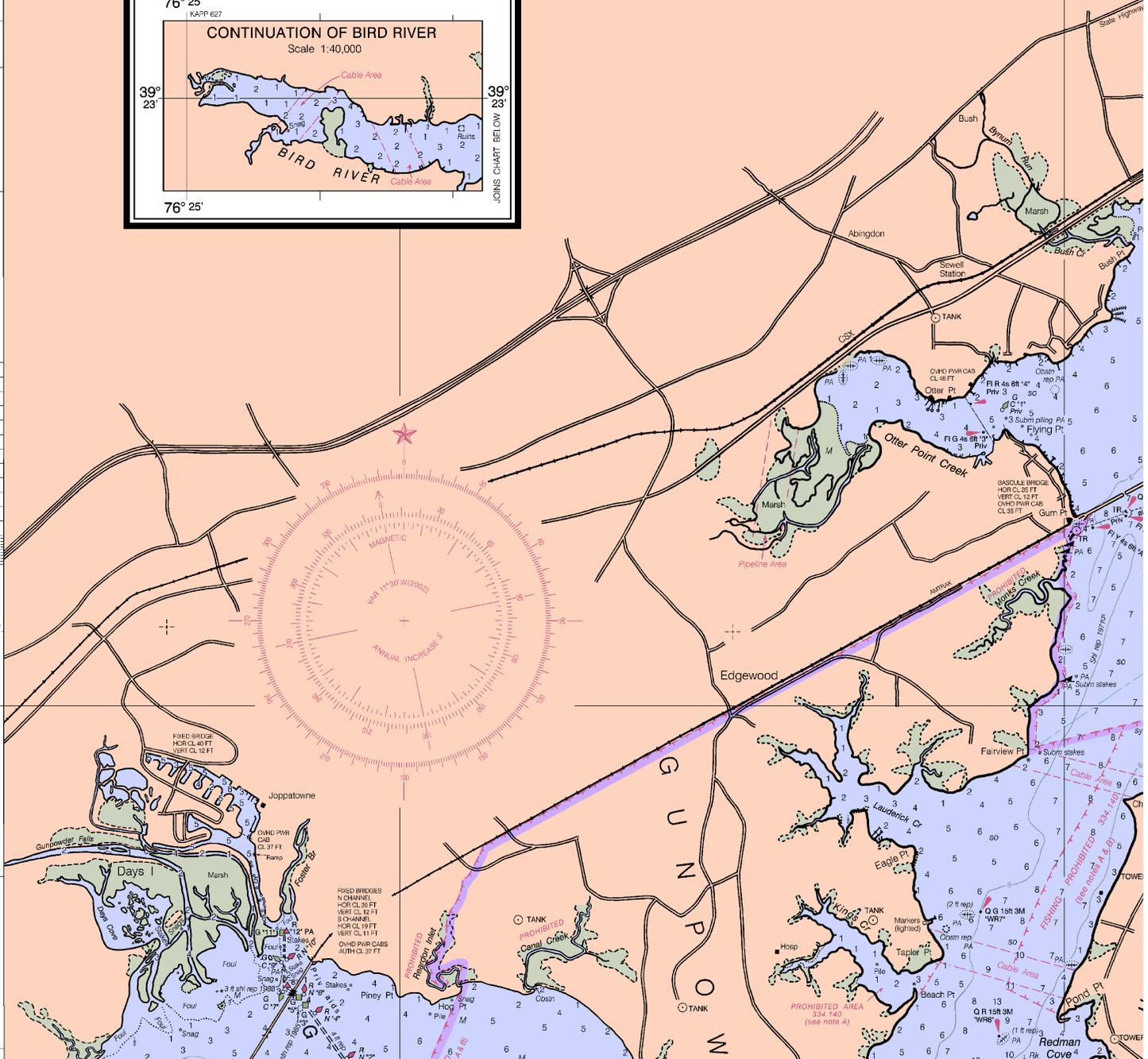
HEIGHTS
 Heights in feet above Mean High Water.

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.

CAUTION
 Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping 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:
 (O) (Accurate location) (o) (Approximate location)



39° 30'
39° 23'
27'
45'
30'
26'
50'
30'
25'



8



Printed at reduced scale



See page 2

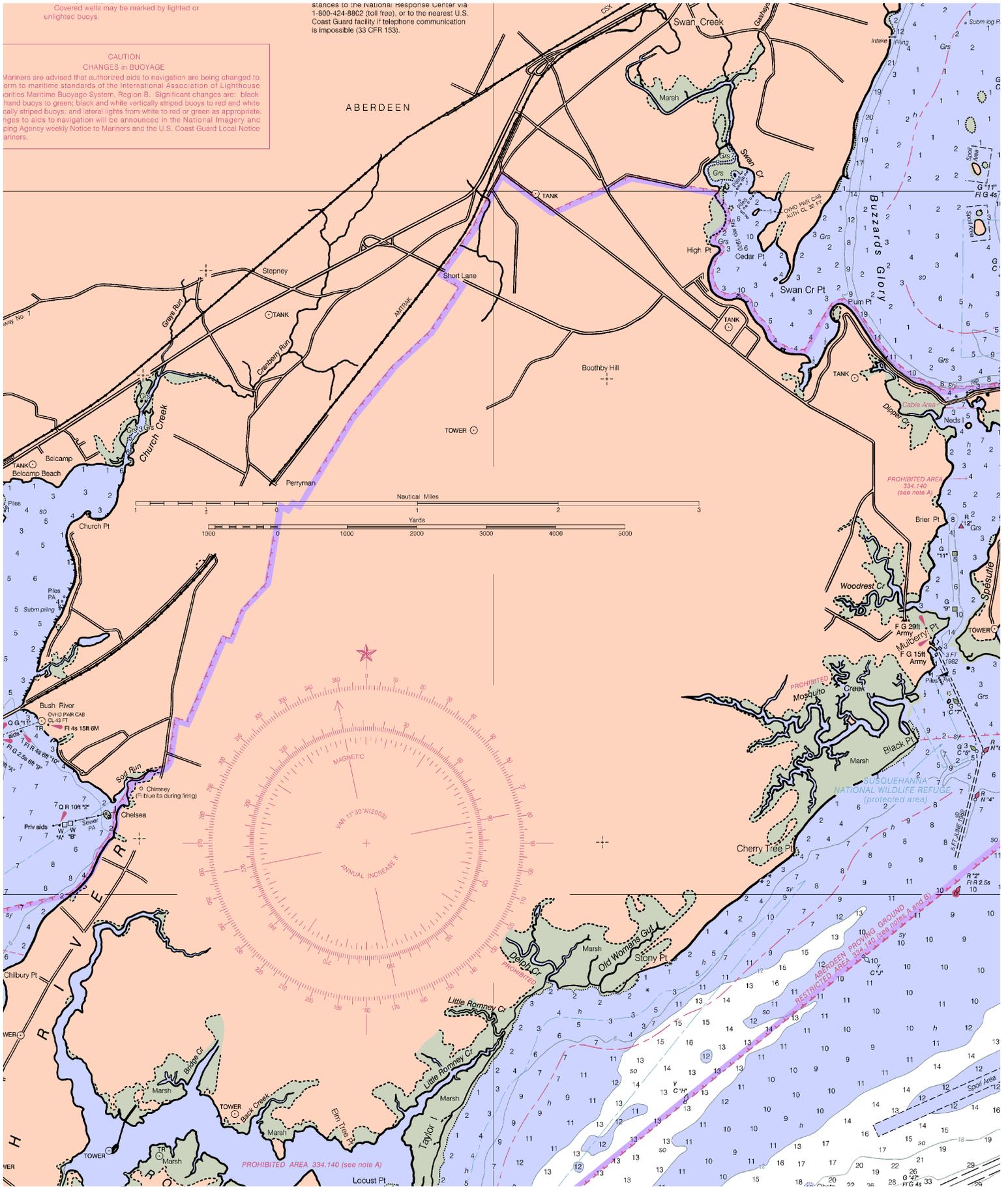


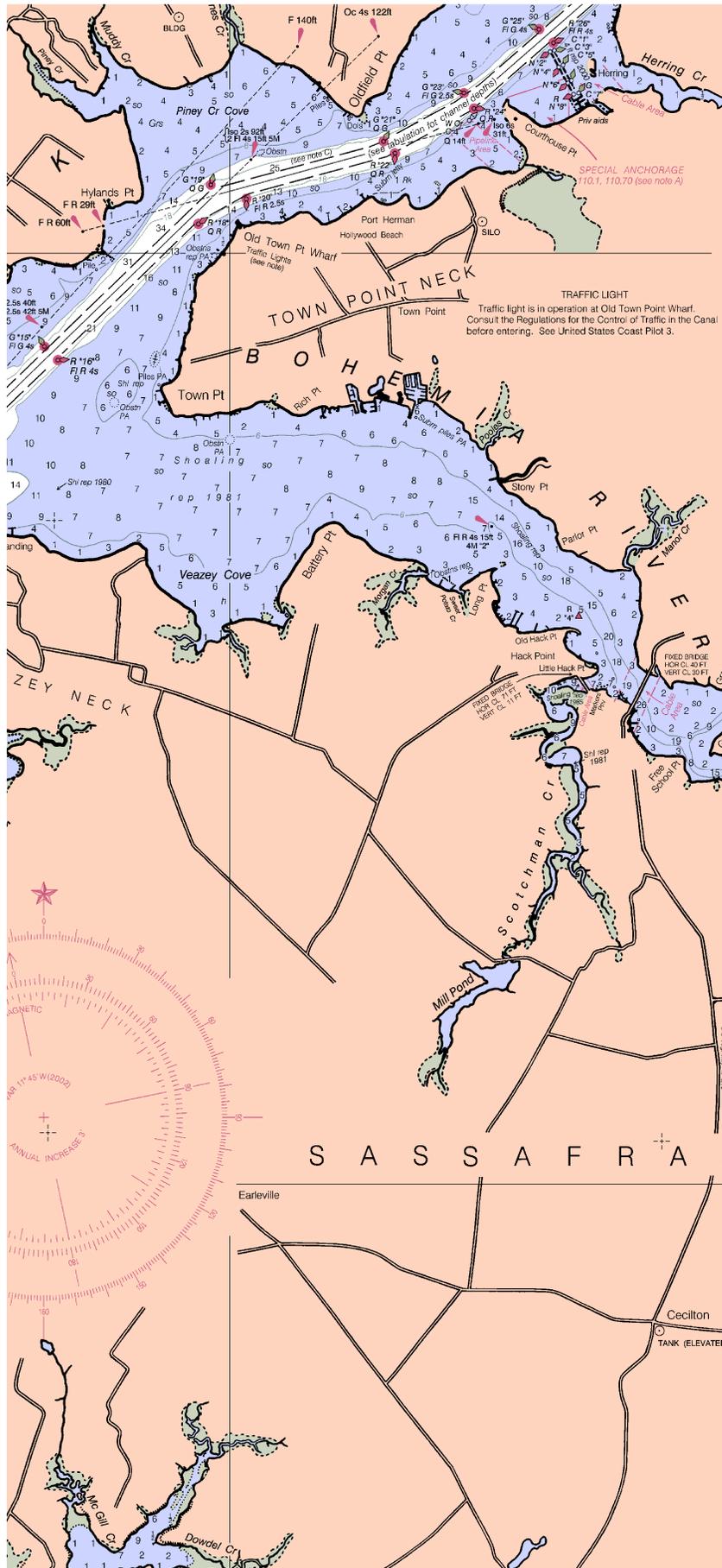
Covered wells may be marked by lighted or unlighted buoys.

distances 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
CHANGES IN BUOYAGE

Mariners are advised that authorized aids to navigation are being changed to conform to maritime standards of the International Association of Lighthouse Authorities Maritime Buoyage System, Region B. Significant changes are: black hand buoys to green; black and white vertically striped buoys to red and white daily striped buoys; and lateral lights from white to red or green as appropriate. Changes to aids to navigation will be announced in the National Imagery and Mapping Agency weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.





CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 2004

* SEE FOOTNOTE

NAME OF CHANNEL	PROJECT DIMENSIONS			DATE OF SURVEY	PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER		WIDTH (FEET)	LENGTH (MILES)	DEPTH (FEET)
3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND	40.0	40.1	39.6	10-03	400	1.66	35
SOUTH END OF POOLES ISLAND TO WORTON POINT	38.1	38.4	38.1	12-03	400	4.16	35
WORTON PT. TO HOWELL PT.	37.2	38.3	37.9	12-03	400	4.84	35
HOWELL PT. TO GROVE PT.	35.1	39.2	39.6	7-03	400	3.37	35
GROVE PT. TO TURKEY PT.	35.1	36.0	33.7	7-03	400	3.40	35
TURKEY PT. TO OLD TOWN POINT WHARF	35.3	38.3	37.7	9-03	400	5.45	35
OLD TOWN PT. WHARF TO COURTHOUSE PT.	36.3	36.8	33.7	9-03	400	1.63	35
COURTHOUSE PT. TO CHESAPEAKE CITY BRIDGE	35.7	33.8	32.7	5-04	400	3.89	35
CHESAPEAKE CITY BRIDGE TO BETHEL	32.7	33.3	34.3	5-04	400	1.51	35

* CONTROLLING CHANNEL DEPTHS IN FEET AT LOCAL MEAN LOWER LOW WATER ENTERING FROM CHESAPEAKE BAY.
PROJECT LENGTHS IN NAUTICAL MILES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

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.

CONTINUED

39° 30'

800

27'

45'

30'

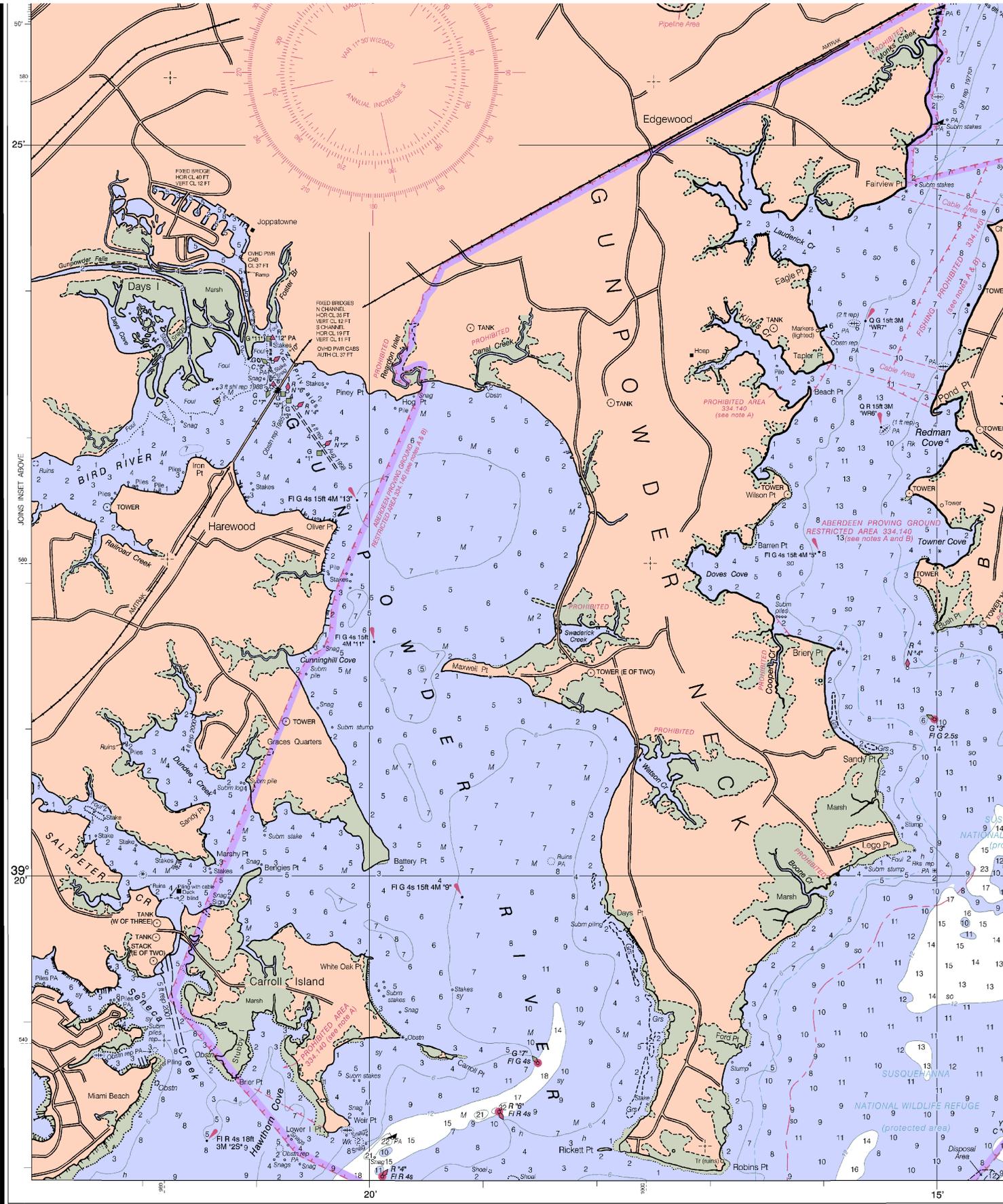
15'

26'

50'

890

25'



12274

33rd Ed., Jul. / 02 ■ Corrected through NM Jul. 6/02
 Corrected through LNM Jun. 25/02

12



Printed at reduced scale

SCALE 1:40,000
 Nautical Miles

See page 2

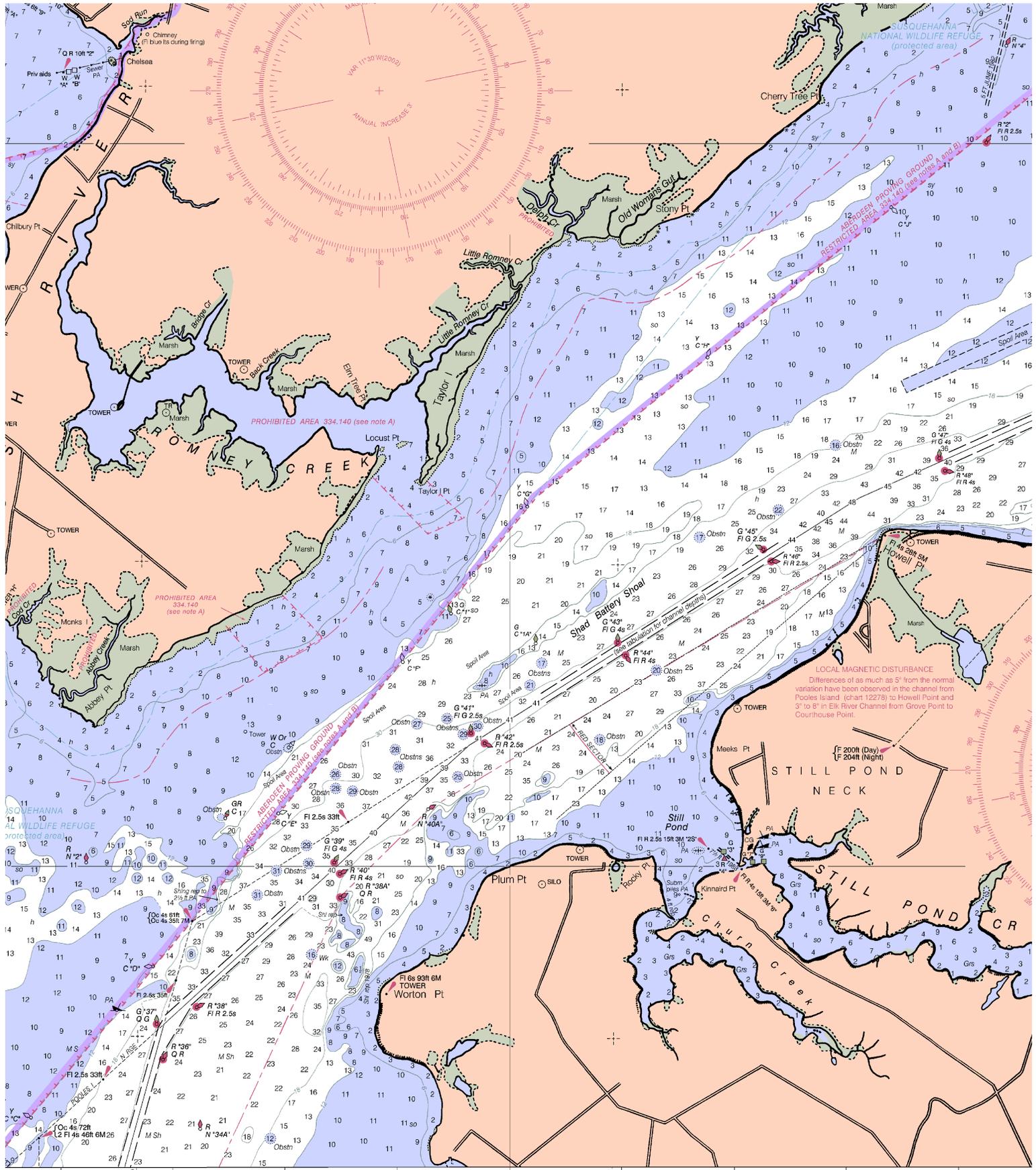


SUSQUEHANNA NATIONAL WILDLIFE REFUGE (protected area)

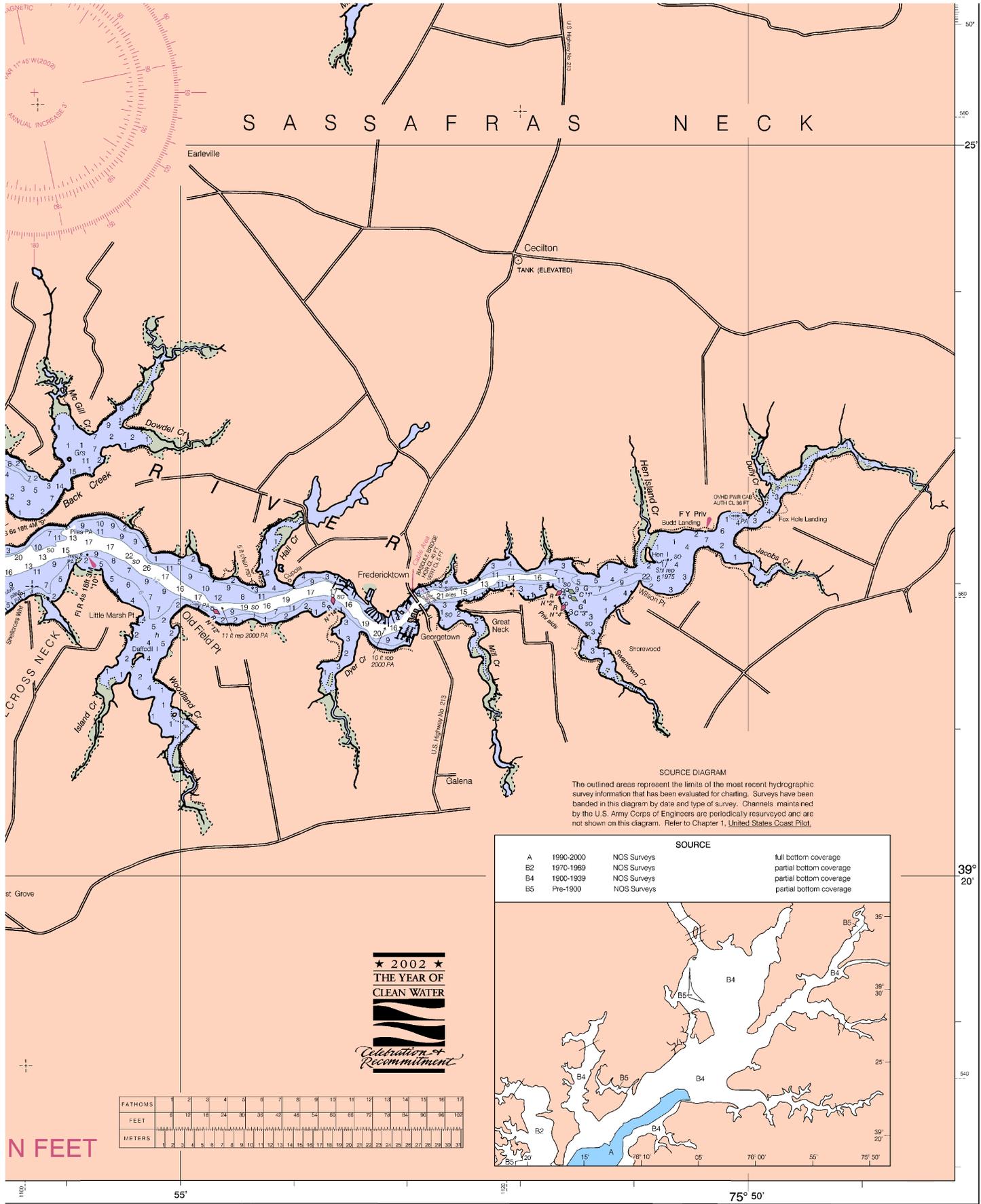
ABERDEEN PROVING GROUND RESTRICTED AREA 334.140 (see notes A and B)

PROHIBITED AREA 334.140 (see note A)

PROHIBITED AREA 334.140 (see notes A & B)



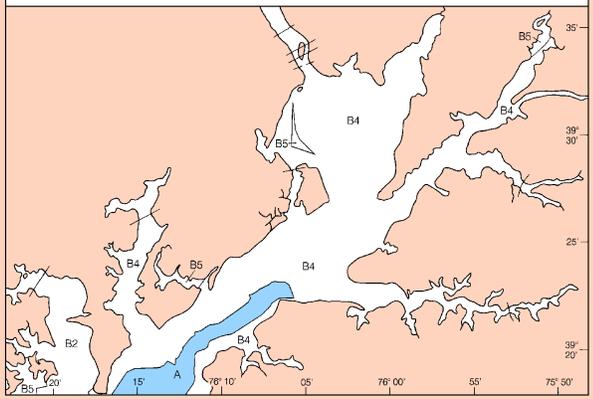
SASSAFRAS NECK



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	1990-2000	NOS Surveys	full bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B4	1800-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage



N FEET

Head of Chesapeake Bay SOUNDINGS IN FEET - SCALE 1:40,000

12274



EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Intership safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22 – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78 – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: “MAYDAY, MAYDAY, MAYDAY.”
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 800-418-7314/410-576-2525

Coast Guard Annapolis – 410-267-8108

Coast Guard Little Creek – 757-464-9371/9372

Coast Guard Stillpond – 410-778-2201-2202

Maryland Natural Resources Police – 410-260-8888

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes, producing over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Electronic Navigational Charts® (ENCs) – ENCs are digital files of each chart’s features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (RNCs) – RNCs are georeferenced digital pictures of NOAA’s charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at: www.NauticalCharts.NOAA.gov.

Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts printed in page-sized pieces. The “home edition” can be downloaded from NOAA for free and printed. The “professional edition”, containing additional boating, safety, and educational edition is available for NOAA chart agents or over the Internet.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13” by 19”, they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from official NOAA chart agents or downloaded for free at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated each week by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print on Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Chart No. 1, Nautical Chart Symbols – This reference publication depicts basic chart elements and explains nautical chart symbols and abbreviations. Download it for free at: www.NauticalCharts.NOAA.gov.

Coast Survey Navigation Managers – These ambassadors to the maritime community maintain a regional presence for NOAA and help identify the challenges facing marine transportation and boating. They are listed at <http://nauticalcharts.noaa.gov/nsd/reps.htm>.

Internet sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.



NOAA, the Nation's Chartmaker