

# Chesapeake Bay Approaches to Baltimore Harbor

Chart 12278

## BookletChart

Commemorative Edition – June, 2012

### PATAPSCO RIVER AND THE APPROACHES

From a Trigonometrical Survey

By the direction of ER. HASSLER and AD. BACHE, Superintendents of the  
SURVEY OF THE COAST OF THE UNITED STATES

Triangulation by J. FERGUSON, Assistant

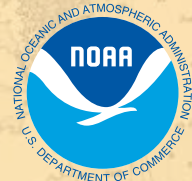
Topographic by ER. GILDES, R. D. CUTTS, EDWIN A. BRIGGS, Assistants.

Revised 1908, 1910, 1912, 1914, 1916, 1918, 1920, 1922, 1924, 1926, 1928, 1930, 1932, 1934, 1936, 1938, 1940, 1942, 1944, 1946, 1948, 1950, 1952, 1954, 1956, 1958, 1960, 1962, 1964, 1966, 1968, 1970, 1972, 1974, 1976, 1978, 1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, 2012

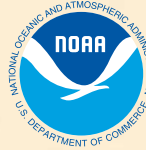
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United States – East Coast  
MARYLAND  
CHESAPEAKE BAY  
APPROACHES TO BALTIMORE HARBOR



2012-2015  
"Our Flag Was Still There"

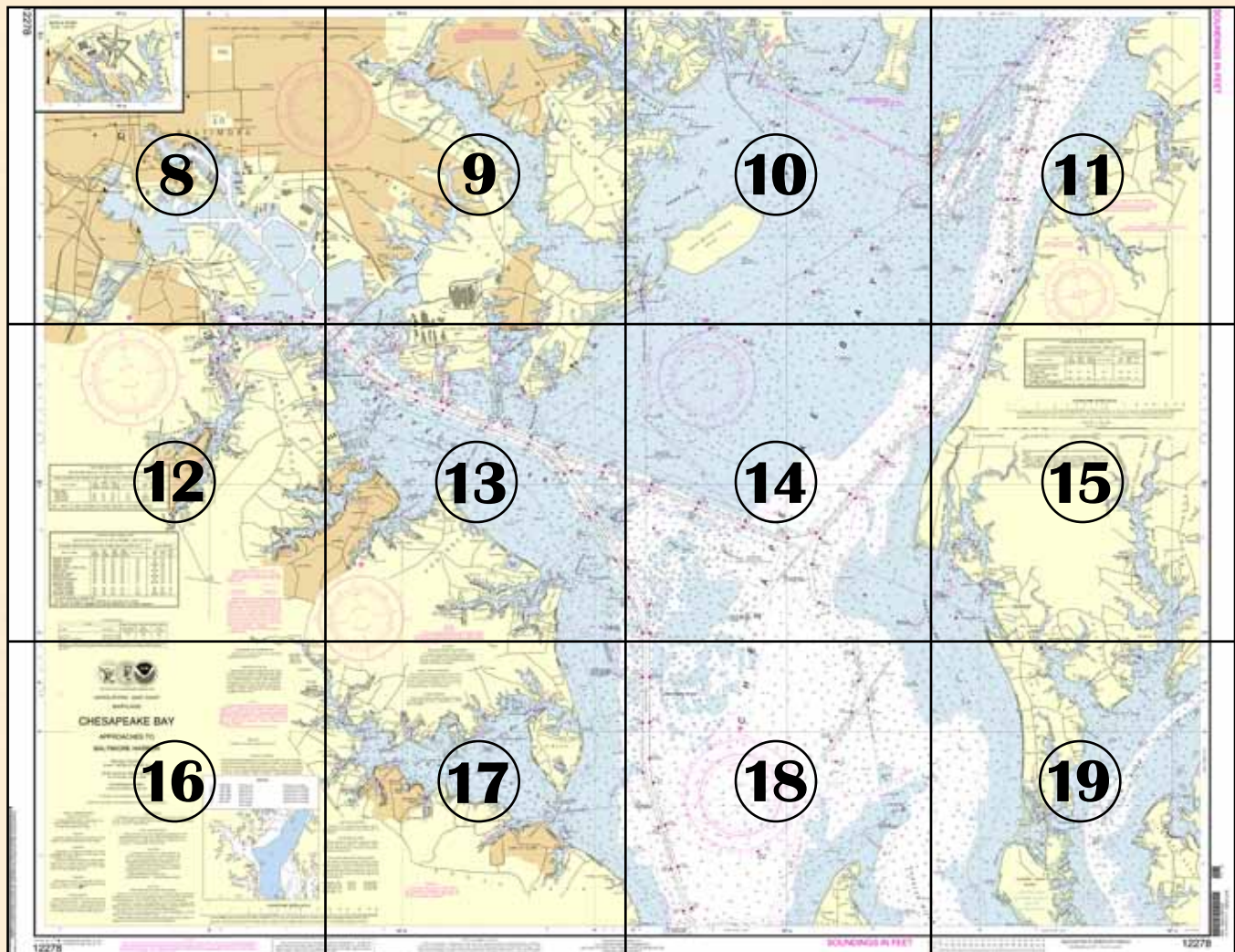
NOAA is proud to join with the nation's ports, the U.S. Navy, and OpSail, to celebrate the bicentennial of the War of 1812, a pivotal time in our nation's history.

This special commemorative BookletChart, which adds event berthing areas, historical background, and images to NOAA's regular BookletChart, can be downloaded for printing on any home printer. This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

Noted event dates and times may be subject to change.  
For the latest information, please check in regularly at [nauticalcharts.noaa.gov/WarOf1812](http://nauticalcharts.noaa.gov/WarOf1812).



The chart on the cover is a Navigation Chart of the Patapsco River and Approaches (Chart No. 384), published in 1859 by the U.S. Coast Survey.



# Baltimore, the U.S. Navy, and the War of 1812

**B**altimore contributed to America's fight against the seaborne enemy during the War of 1812 by engaging in privateering, confronting British forces on the Chesapeake Bay, and defending Baltimore itself.

## Privateering

With peacetime commerce at an end, a substantial portion of Baltimore's 50,000 inhabitants who depended on overseas commerce for their income relied on privateering instead. Patriotism mingled with profit, as Baltimore stood behind the Madison administration's decision for war. Privateer owners and privateersmen wanted to take revenge for years of British seizures of ships and goods, and their impressment of sailors.

Baltimoreans dispatched 122 privateers and letter-of-marque traders, privately owned armed vessels authorized to capture the enemy's commerce on the high seas. Commissioned vessels – many of them Baltimore schooners remarkable for their speed – took more than 500 British merchant ships, captured 1,600 prisoners, and cost British merchants millions of dollars. Privateers forced the British to deploy naval vessels for the protection of merchant convoys, devote naval assets to blockade the Chesapeake, and assign warships to defend ports and islands.

## Confronting the British on the Bay

In 1813, the British blockaded the mouth of the Chesapeake Bay. They led expeditions along the bay shores, pillaging towns, plantations, and warehouses. They burned what they could not carry away. The British met only weak opposition, for, with the bulk of the U.S. Army fighting on the border with Canada, militia units and the U.S. Navy's undermanned gunboat flotillas were inadequate for local defense.

In July 1813, Baltimore's Joshua Barney proposed a new waterborne force to counter the British raiders. As a successful sea captain and privateersman, and former officer in the Continental Navy and the navy of Republican France, Barney persuaded the U.S. Secretary of the Navy to appoint him as commander of a flotilla of barges and row galleys. Of shallow draft and armed with a heavy cannon, these small vessels would operate inshore where the great ships with their deep drafts could not follow, intercepting boats sent by British warships and breaking up their raids.

In May 1814, Barney set out from Baltimore with a fleet of 18 vessels but, on June 1, a superior enemy fleet chased them into the Patuxent River. The American flotilla held the enemy at bay until August 21 when, facing overwhelming odds, Barney was forced to retreat. He landed his men at Pig Point, near Upper Marlboro, and then marched to assist in defending Washington against the approaching British invasion force. He left a small contingent to burn the ships to prevent their capture.



Joshua Barney, commander of the United States Chesapeake Bay Flotilla during the War of 1812. (Navy Art Collection, Naval History & Heritage Command)



A view of the bombardment of Fort McHenry, near Baltimore, by the British fleet taken from the Observatory under the command of Admirals Cochrane & Cockburn. (The Mariners' Museum, Newport News, VA)

## The Defense of Baltimore

After the British burned Washington on August 24 and 25, the invasion force moved against Baltimore. In the predawn hours of September 12, 1814, a British army contingent disembarked at North Point, Maryland. Royal Navy warships began bombarding Fort McHenry the next morning. U.S. merchant vessels that were scuttled at the entrance of Baltimore Harbor near Fort McHenry denied the British easy access to the city.

The British army planned to assault the city from the east, while the navy would secure the harbor. The U.S. Army and Navy worked together, and Commodore John Rodgers deployed his naval contingent under orders from Major General Samuel Smith. When Fort McHenry did not capitulate quickly to the bombardment, the British admiral realized his squadron would suffer too many casualties from solid American defenses. He decided that the Royal Navy could not support the army in a two-pronged attack on Baltimore, and ended the expedition.

Baltimore's gallant defense inspired young Francis Scott Key to compose the ode to the Star Spangled Banner that became the United States national anthem.

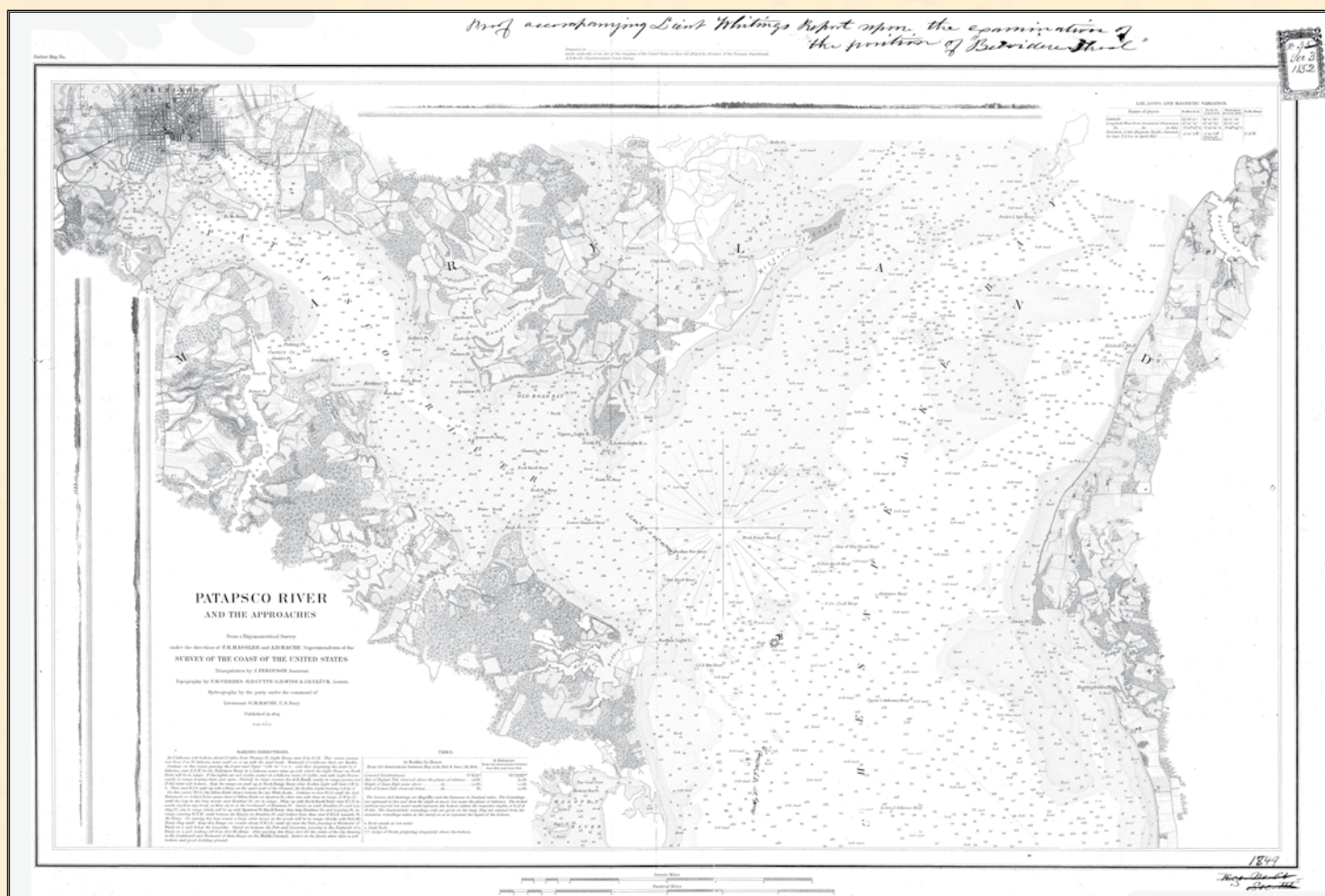
## Baltimore and the U.S. Coast Survey

In 1807, losing ships to accidents in U.S. coastal waters was a common occurrence. The young nation needed nautical charts, so President Thomas Jefferson signed a law authorizing the Survey of the Coast. The Survey would measure water depths, establish a spatial reference system from which we determine location, and produce the nation's navigational charts.

At the same time, relations between the United States, England, and France grew contentious, and Jefferson instituted an economic embargo against the countries. The unsettled international climate, with the U.S. recalling American seamen and effectively terminating the American merchant marine and international trade, delayed the Survey of the Coast for the rest of the Jefferson Administration.

Jefferson's successor, James Madison, reinstated the Survey and sent Hassler to Great Britain in late 1811 to procure survey instruments. President Madison declared war on Great Britain eight months after Hassler's arrival in London, and Hassler was unable to return to the U.S. until 1817. When he came back, he brought equipment and some of the best experts in Europe with him.

In 1843, Alexander Bache, a great-grandson of Benjamin Franklin and a great scientific mind in his own right, became the Superintendent of the U.S. Coast Survey and deployed surveyors to various sections of the U.S. coastline. In 1845, Coast Survey had triangulated (established the geospatial measurement baseline) the northern end of the Chesapeake and was completing the hydrographic water depth measurements of the Patapsco. In 1849, Coast Survey issued its first chart for Baltimore Harbor. 'Patapsco River and the Approaches' depicted water depths, characterized the seafloor, gave sailing directions, showed the meandering shorelines of creeks, rivers, and bays, and depicted some of the topography of Baltimore city.



Navigation Chart of the Patapsco River and the Approaches, 1859 (NOAA Office of Coast Survey Historical Chart Collection)

Today, America's coastal waters remain as central to the nation's prosperity as they were 200 years ago. Mariners still rely on NOAA's Coast Survey navigational charts, constantly updated with the accuracy and precision needed to protect life and property. Over 30,000 historical maps and charts are online for your exploration, at [nauticalcharts.noaa.gov/history](http://nauticalcharts.noaa.gov/history)

# NOAA's Navigation Services serve American communities coast to coast



*President Thomas Jefferson* founded the U.S. Coast Survey in 1807 and tasked it with creating charts of the nation's coastal waters so America's young shipping industry could thrive. Today, America's coastal waters remain as central to the nation's prosperity as they were 200 years ago, and NOAA's Coast Survey is still making the nation's charts.

The nation's economy depends on a robust and reliable marine transportation system. From America's agricultural communities – whose farm exports reached a record \$136.3 billion in 2011 – to the 13 million people with jobs that rely on commercial ports, to the 10 million Americans who take a cruise every year, businesses and families everywhere rely on a safe, efficient, and dependable marine transportation system. The ships and ports that are charged with the safe transport of people and products, in turn, rely on the critical informational infrastructure and services provided by NOAA's Navigation Services.



## Stay safe with NOAA nautical charts

Recreational boaters, unlike commercial mariners, are not required to carry nautical charts. As coastal waterways grow more crowded, however, smart boaters use the latest nautical charts, updated by NOAA with the precision and accuracy that mariners rely on. Obtaining the latest chart is easier than ever. It can be as easy as clicking a link. [www.nauticalcharts.noaa.gov/staff/charts.htm](http://www.nauticalcharts.noaa.gov/staff/charts.htm)

## Plan for fun and safety at the Bicentennial War of 1812 events

Special commemorative charts and posters: [www.nauticalcharts.noaa.gov/WarOf1812/](http://www.nauticalcharts.noaa.gov/WarOf1812/)

Event calendars and websites: [www.ourflagwasstillthere.org/events.html](http://www.ourflagwasstillthere.org/events.html)

nowCoast marine observations: [nowcoast.noaa.gov](http://nowcoast.noaa.gov)

Marine weather forecasts: [www.nws.noaa.gov/om/marine/home.htm](http://www.nws.noaa.gov/om/marine/home.htm)

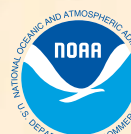
Tides and Currents: <http://www.ourflagwasstillthere.org/events.html>

Buoy observations: [www.ndbc.noaa.gov](http://www.ndbc.noaa.gov)

NOAA's mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources.

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2012-2015  
"Our Flag Was Still There"

This BookletChart is published by  
National Oceanic and Atmospheric Administration  
National Ocean Service  
Office of Coast Survey  
nauticalcharts.noaa.gov

## Q What are nautical charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, and other aids to navigation. The information promotes safe and efficient navigation.

Chart carriage is mandatory on the commercial ships that carry goods to and from America's shores. They are also used on every Navy and Coast Guard ship, fishing boats, and passenger vessels. Smart recreational boaters also carry nautical charts.

## Q What is a BookletChart?

The BookletChart helps recreational boaters locate themselves on water. It has been reduced in scale for convenience, but otherwise contains all the information

of the full-scale nautical chart. (This special commemorative edition also contains event and historical information not available on full-scale charts.) The bar scales are reduced, but accurately measure distances. (See the note at the bottom of page X for the reduction in scale applied to this chart. Whenever possible, use the official full-scale NOAA nautical chart for navigation. Check your local marine store, or go to [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov) for a list of chart agents. This BookletChart does not fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

## Q 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 Weekly Notice to Mariners and, where applicable, the Canadian Coast Guard Notice to Mariners. NOAA has made additional chart corrections in advance of their publication in a Notice to Mariners. Coast Pilot excerpts are not updated from the time of publication.

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### Excerpts from U.S. Coast Pilot 3, chapter 15

**Bodkin Creek**, which flows into Patapsco River along the inner side of Bodkin Neck, has depths of 9 feet in the approaches and 7 to 9 feet for considerable distances into its branches. The channel is very narrow at the mouth and leads between extensive shoals. Shoaling to 3 feet is reported in the entrance to the creek between Daybeacon 9 and Light 11; mariners are urged to use caution in this area.

**Back Creek** is on the northeast side of Bodkin Creek just inside the mouth. A boatyard is in the upper part of the creek. Gasoline and slips are available. Hull and engine repairs can be made; marine railway, 50 tons; lift, 5 tons.

**Main Creek** is separated from Back Creek by **Spit Neck**. Both branches have depths of 7 to 9 feet almost to their heads and are much used by pleasure craft.

Several marinas are on **Graveyard Point**, on the south side of Main Creek 0.2 mile above the mouth. Gasoline, diesel fuel, slips, and some marine supplies can be obtained. Hull and engine repairs can be made. Largest haul-out capacities are: railway, 55 feet; lift, 5 tons.

**Rock Creek**, on the northwest side of Rock Point, has depths of 11 feet almost to the head. It is marked; a light on the east side marks the narrow part of the channel off **Fairview**, 0.5 mile above the mouth.

**Wall Cove** empties into the southeast side of Rock Creek along the south side of Fairview. In 1991, centerline controlling depths of about 10 feet were reported available for most of its length but gradual shoaling to about 5 feet had occurred near the head of the cove. The Maryland Yacht Club piers on the Fairview side of the entrance have depths of about 13 feet at their outer ends.

There are several marinas and boatyards in Wall Cove and along Rock Creek where marine supplies, gasoline, diesel fuel, pump-out station, launching ramp, storage, water and ice can be obtained. Largest haulout capacities for hull and engine repairs are: marine railway, 60 feet; lift, 50 tons.

**Stony Creek**, on the southwest side of Patapsco River 5 miles above Bodkin Point, has depths of 12 feet or more almost to the head. The channel along the west side of the entrance is about 70 yards wide and marked by a light and buoys; the east side is obstructed by rocks, some of which bare at all stages of the tide. The State Route 173 highway bridge 0.8 mile above the mouth of Stony Creek

has a 40-foot bascule span with a clearance of 18 feet. The bridgetender monitors VHF-FM channel 16 and works on channels 13 and 68; call sign KAJ-667. A marina on the north side just above the bridge has gasoline.

**Nabbs Creek**, a tributary on the northwest side of Stony Creek, 1 mile above the mouth, has depths of 12 feet almost to the head. A marina near the head of the creek has gasoline, diesel fuel, berths, and marine supplies. Hull and engine repairs can be made. A marine railway can handle craft up to 60 feet; a 15-ton lift is available.

**Back Cove**, on the north side of Nabbs Creek near the mouth, has depths of 12 feet to a boatyard 0.3 mile above the entrance. The marine railway can handle craft up to 60 feet for hull and engine repairs; gasoline is available.

**Old Road Bay**, which empties into the north side of Patapsco River along the west side of North Point, has general depths of 7 to 12 feet. A rock with a depth of 1 foot is about 1.1 miles northwest of North Point; a light marks the edge of a shoal that extends westward from North Point; a light 0.25 mile off the north shore of the bay marks a shoal that extends 0.5 mile from the west shore. Mariners are advised to exercise caution in this area.

**North Point Creek** and **Jones Creek**, which empty into the northeast and northwest corners of Old Road Bay, respectively, have depths of 4 to 6 feet. Approach both creeks by passing eastward of the light off the north shore of the bay, being careful to avoid the reported underwater obstruction about 150 yards south of the light. Small-craft facilities are in both creeks.

**Tolchester Beach**, on the east side of Chesapeake Bay 4.5 miles north-northeast of Swan Point, has a privately dredged entrance channel and basin. In 2003, the reported approach and alongside depth was 6 feet. Gasoline, diesel fuel, marine supplies, pump-out station, storage, water, ice, electricity, and limited berths are available. A 55-ton mobile lift is available for repairs.

**Fairlee Creek**, on the east side of Chesapeake Bay 8.5 miles north-northeastward of Swan Point, has a narrow entrance between a jetty on the east and a long, low hook on the west. The privately buoyed entrance has depths of about 6 feet. In 2007, shoaling to 3.3 feet was reported in the entrance. A marina with berthing facilities is on the east side of the creek just inside the entrance; gasoline, diesel fuel, pump-out station, and some marine supplies are available. A 50-ton mobile lift is available for hull and engine repairs.

# Table of Selected Chart Notes

**AREA 1**  
Fishing traps permitted  
Oct 2 to May 19 inclusive

Corrected through NM Jul. 9/11  
Corrected through LNM Jul. 5/11

**HEIGHTS**  
Heights in feet above Mean High Water.

Mercator Projection  
Scale 1:40,000 at Lat. 39° 10'  
North American Datum of 1983  
(World Geodetic System 1984)

**SOUNDINGS IN FEET**  
AT MEAN LOWER LOW WATER

**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.

**MAGOTHY RIVER**  
The channel north of Gibson Island is marked by private lights from May 1 to November 1, which are not charted.

**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.

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

**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.

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

**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-63	162.400 MHz
Sudlersville, MD	WXK-97	162.500 MHz
Washington, DC	KHB-36	162.550 MHz

**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 (chart 12274).


For Symbols and Abbreviations see Chart No. 1

**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 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.

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

**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**  
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: --+-  
The last three digits are omitted.

**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.

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

**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).

**NOTE B**  
**WARNING**  
Small craft operators in Frog Mortar Creek are advised to use extreme caution in the vicinity of Martin State Airport, Runway 33. Small craft with mast exceeding 37 feet in height above the waterline may create an obstruction with aircraft using the 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.

**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.

**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)

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

**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.

**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**  
**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.

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 (N/C52), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

**TIDAL INFORMATION**

PLACE	Height referred to datum of soundings (MLLW)	Mean Higher High Water		
		Mean Higher High Water	Mean High Water	Mean Low Water
Love Point (39°02'N/76°18'W)	feet	1.7	1.4	0.2
Baltimore, Ft. McHenry (39°16'N/76°35'W)	feet	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>. (May 2011)

**CHESAPEAKE AND DELAWARE CANAL CHANNEL DEPTHS**  
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAY 2011

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 (FEET)
3400 YARDS SOUTH OF POOLES ISLAND TO THE SOUTH END OF POOLES ISLAND	36.2	37.1	37.0	5-11	400	1.88	35
SOUTH END OF POOLES ISLAND TO WORTON POINT	36.6	36.2	35.0	4-11	400	4.28	35

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

**CURTIS BAY AND CREEK CHANNEL DEPTHS**  
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2008

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 (NAUT. MILES)	DEPTH (FEET)
CURTIS CREEK	36.0	35.6	36.2	8-08	200	0.54	35
LOWER REACH	19.6	20.6	18.4	8-08	200-390	1.09	22
MIDDLE REACH	17.1	16.7	14.8	8-08	200-100	0.55	22

A. EXCEPT FOR SHOALING TO 12.5 FT AT 39° 11' 42.9" N 76° 34' 10.2" W  
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

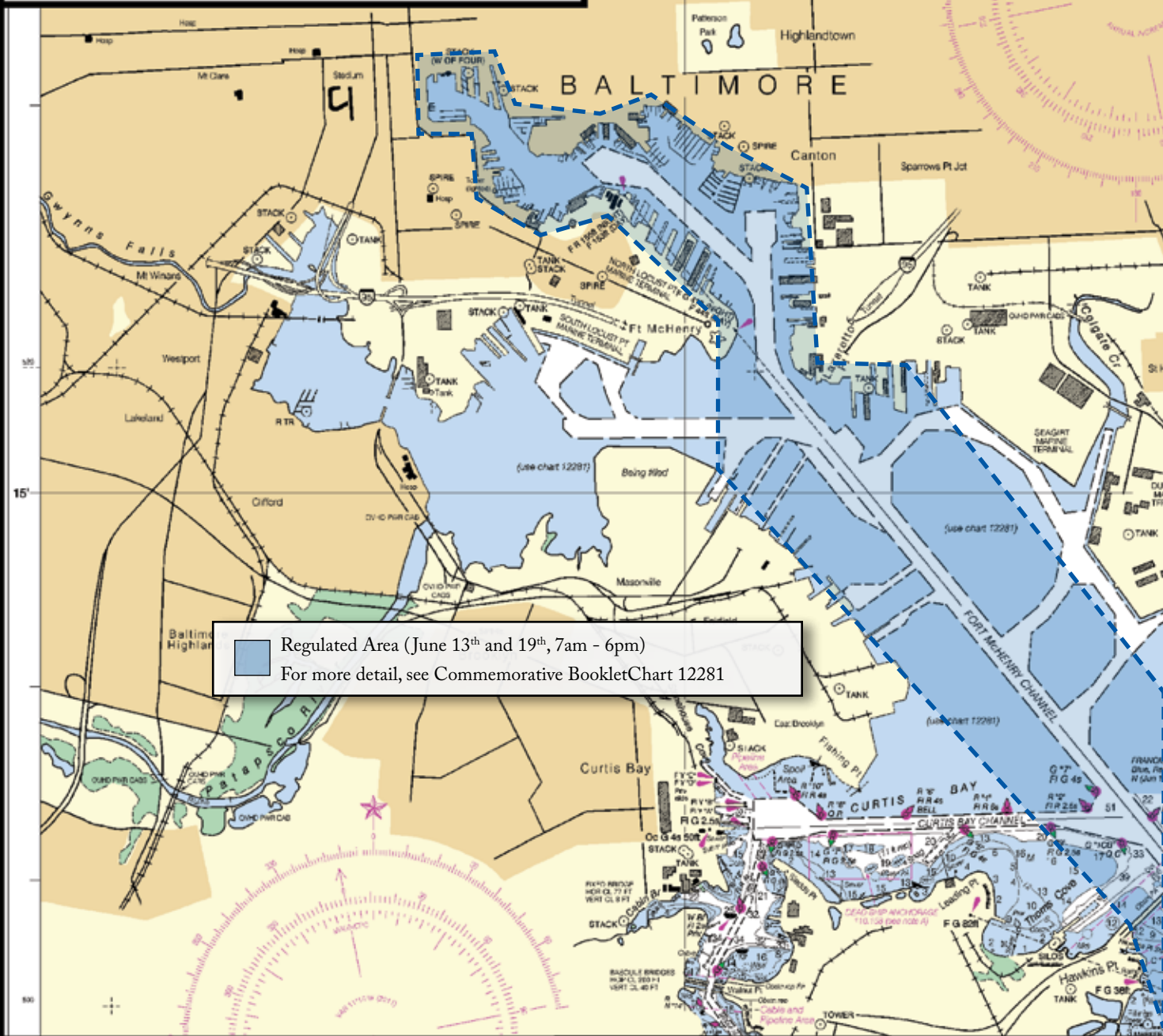
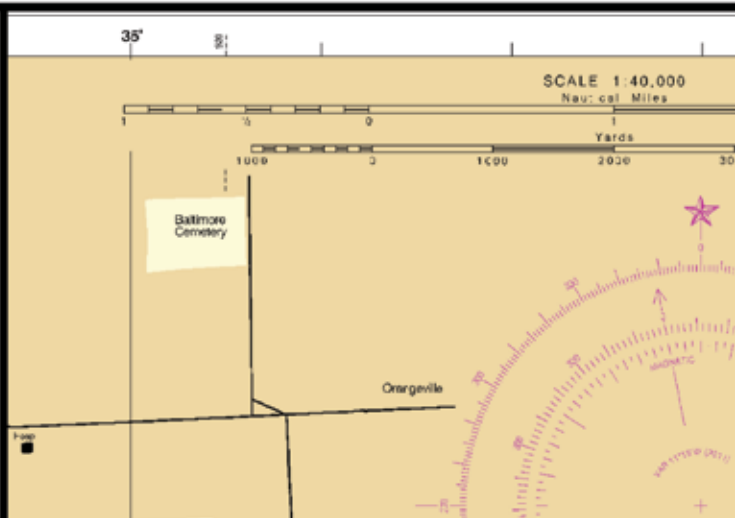
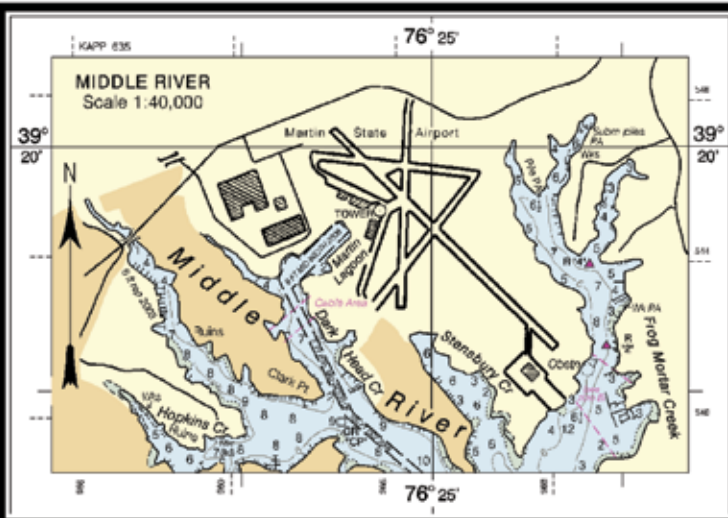
**PRINT-ON-DEMAND CHARTS**  
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**BALTIMORE HARBOR CHANNEL DEPTHS**  
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2011

CONTROLLING DEPTHS FROM SEAWARD 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 (FEET)
CRAIGHILL ENTRANCE	48.0	50.0	51.0	50.0	1-11	700	3.79	50
CRAIGHILL CHANNEL	49.0	51.0	51.0	47.0	4-09	700	3.24	50
CRAIGHILL ANGLE	42.0	44.0	46.0	41.0	3-11	700-1870	1.88	50
CRAIGHILL CHANNEL UPPER RANGE	50.0	50.0	50.0	50.0	8-10	700	2.00	50
CUTOFF ANGLE	50.0	51.0	49.0	49.0	3-09	700-1740	1.14	50
BREWERTON CHANNEL	49.0	50.0	50.0	48.0	8-10	700	3.50	50
BREWERTON ANGLE	49.0	50.0	50.0	48.0	1-09	700-1460	1.10	50
FORT MCHENRY CHANNEL	50.0	50.0	50.0	50.0	3-10	700	4.22	50
CURTIS BAY CHANNEL	49.0	50.0	50.0	50.0	4-11	400-1275	2.25	50
BREWERTON CHANNEL EASTERN EXTENSION	33.0	34.0	32.0	32.0	5-11	600	6.33	35
SWAN POINT CHANNEL	35.0	35.0	35.0	35.0	6-09	600	3.13	35
TOLCHESTER CHANNEL	31.0	35.0	36.0	35.0	6-09	450-600	10.67 **	35

\* ALL DEPTHS REPORTED TO NEAREST FOOT  
\*\* THE LAST 1.88 NM OVERLAPS WITH THE CHESAPEAKE AND DELAWARE CANAL CHANNEL  
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

**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](http://nauticalcharts.noaa.gov).

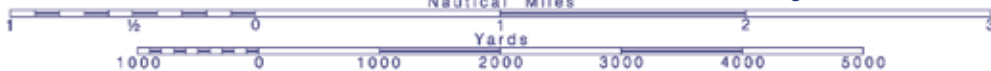


 Regulated Area (June 13<sup>th</sup> and 19<sup>th</sup>, 7am - 6pm)  
 For more detail, see Commemorative Booklet Chart 12281

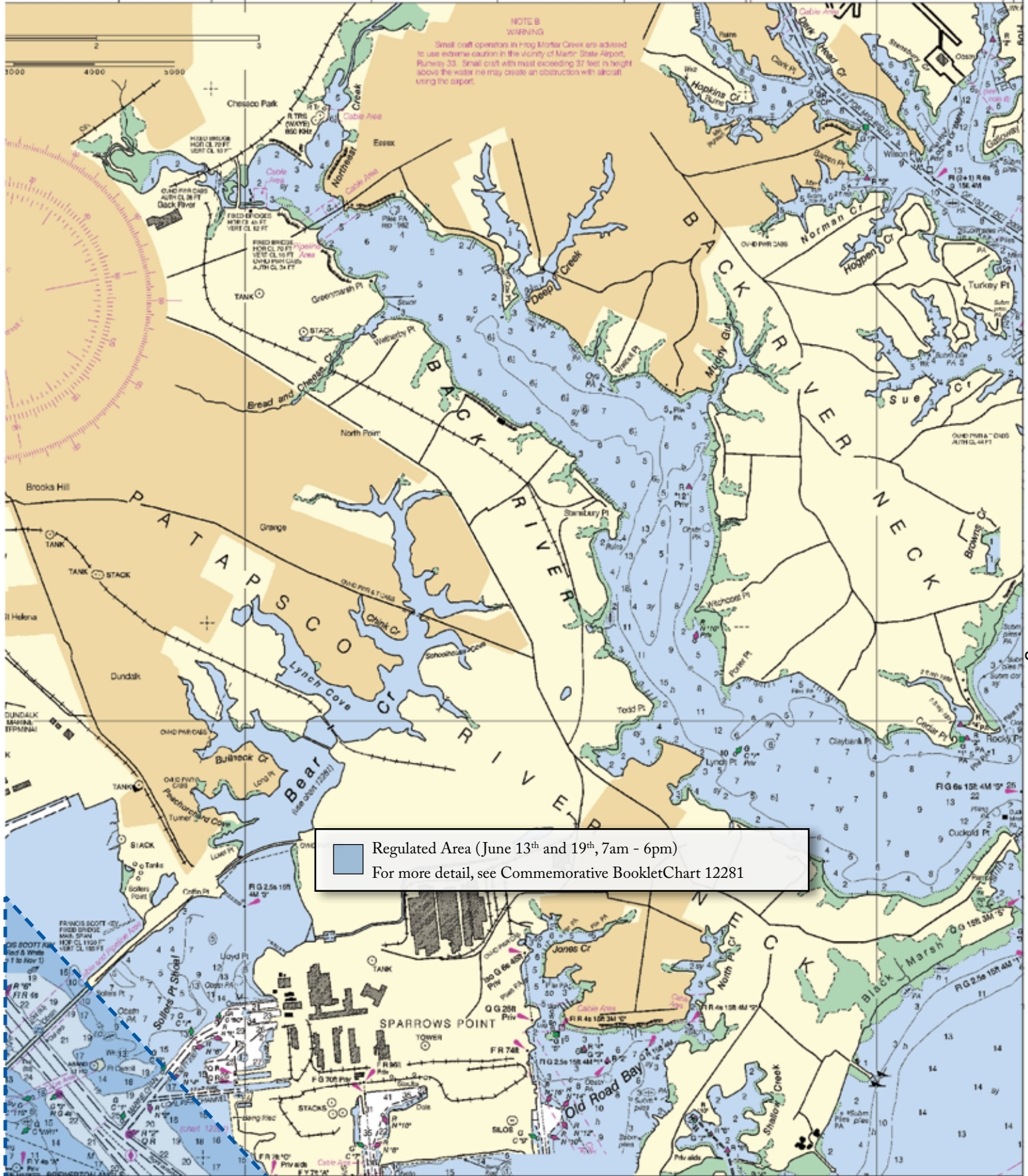
Joins Page 12

Printed at reduced scale.

SCALE 1:40,000 Nautical Miles See Note on Page 9



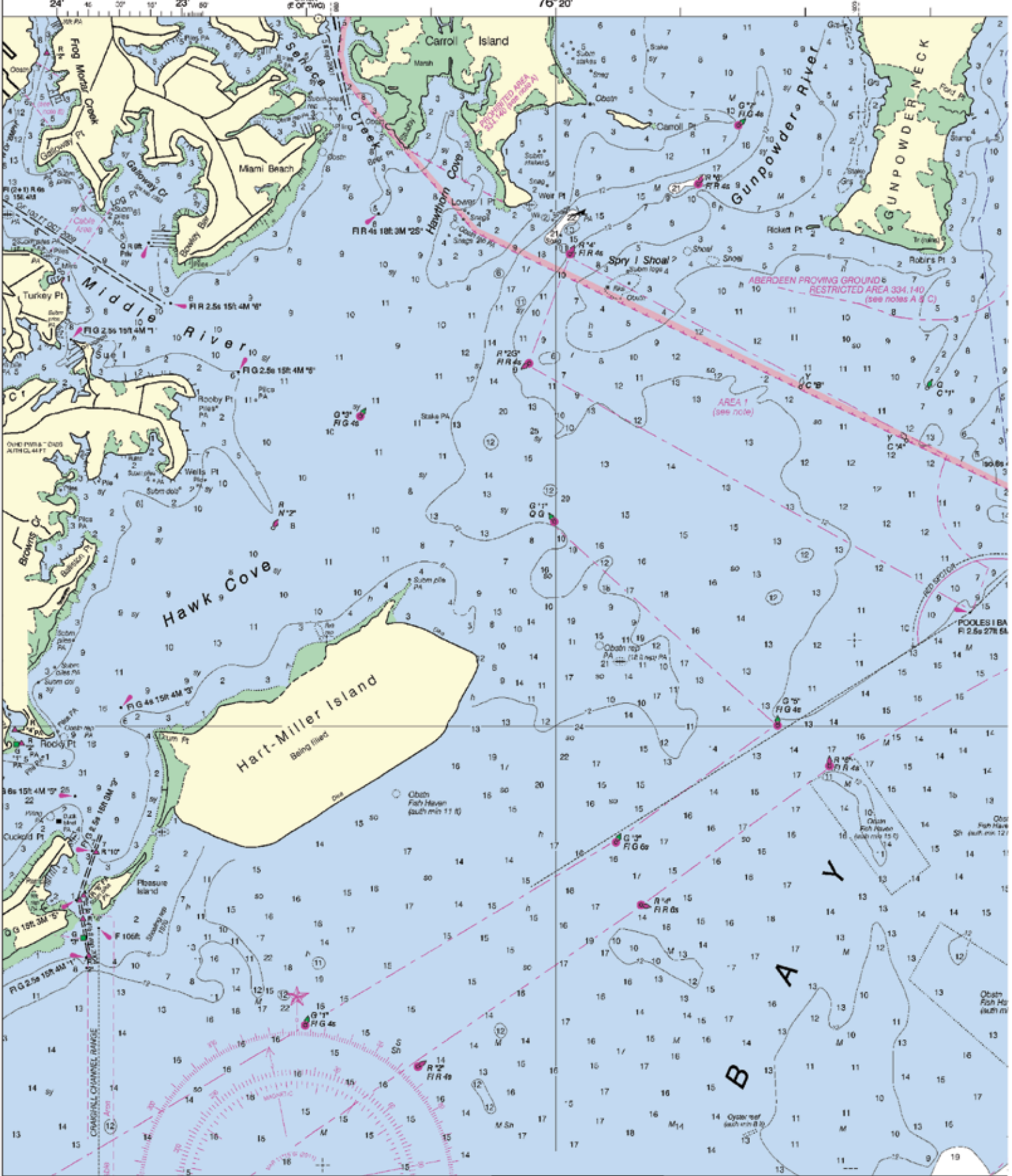




Joins Page 10

Joins Page 13

This BookletChart was reduced to 70% of the original chart scale.  
 The new scale is 1:57143. Barscales have also been reduced and  
 are accurate when used to measure distances in this BookletChart.



Joins Page 9

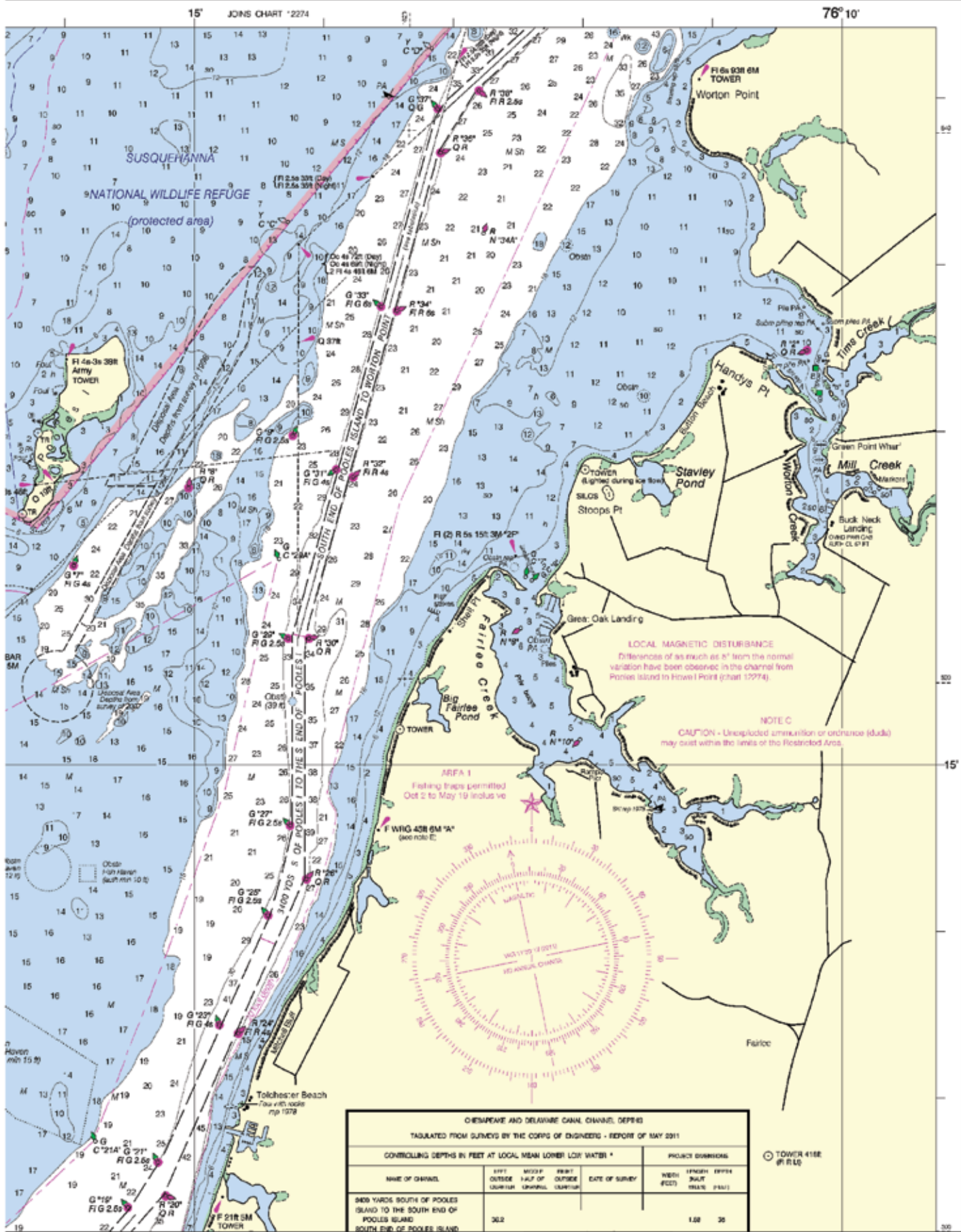
Joins Page 14

Printed at reduced scale. SCALE 1:40,000 See Note on Page 9



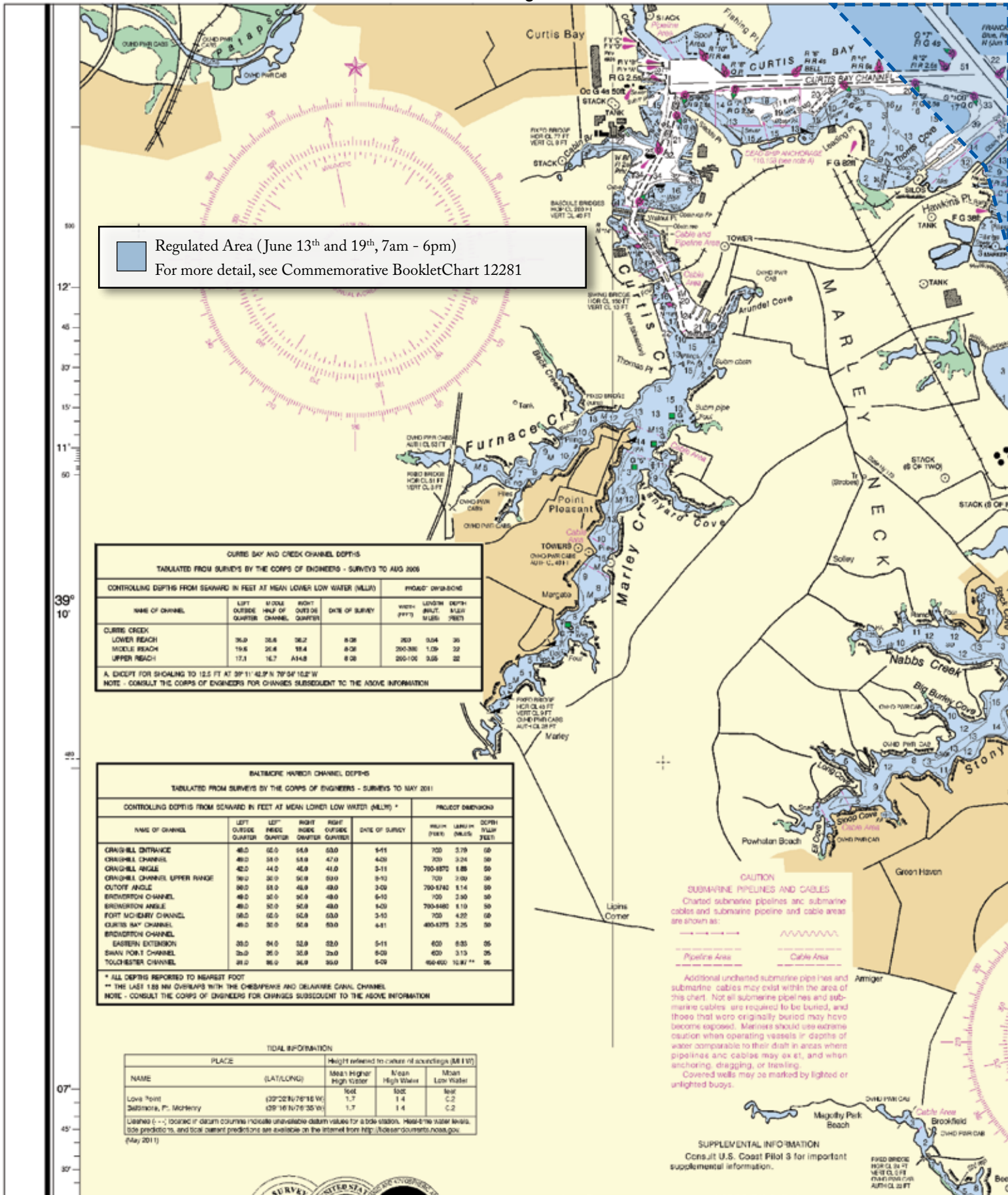
10





Joins Page 15

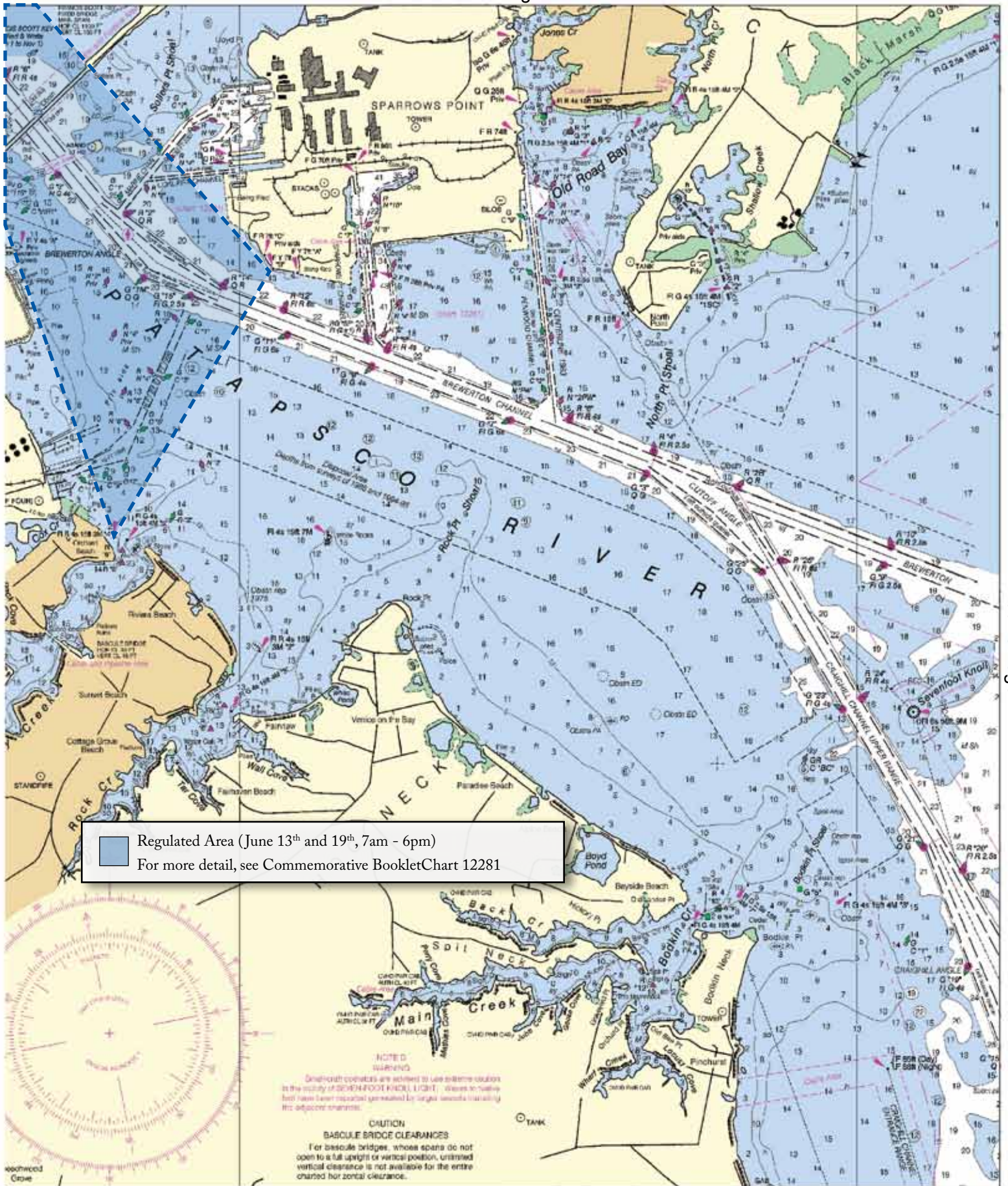
This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 4811 11/29/2011,  
 NGA Weekly Notice to Mariners: 4911 12/3/2011,  
 Canadian Coast Guard Notice to Mariners: n/a .



Printed at reduced scale.

SCALE 1:40,000 See Note on Page 9





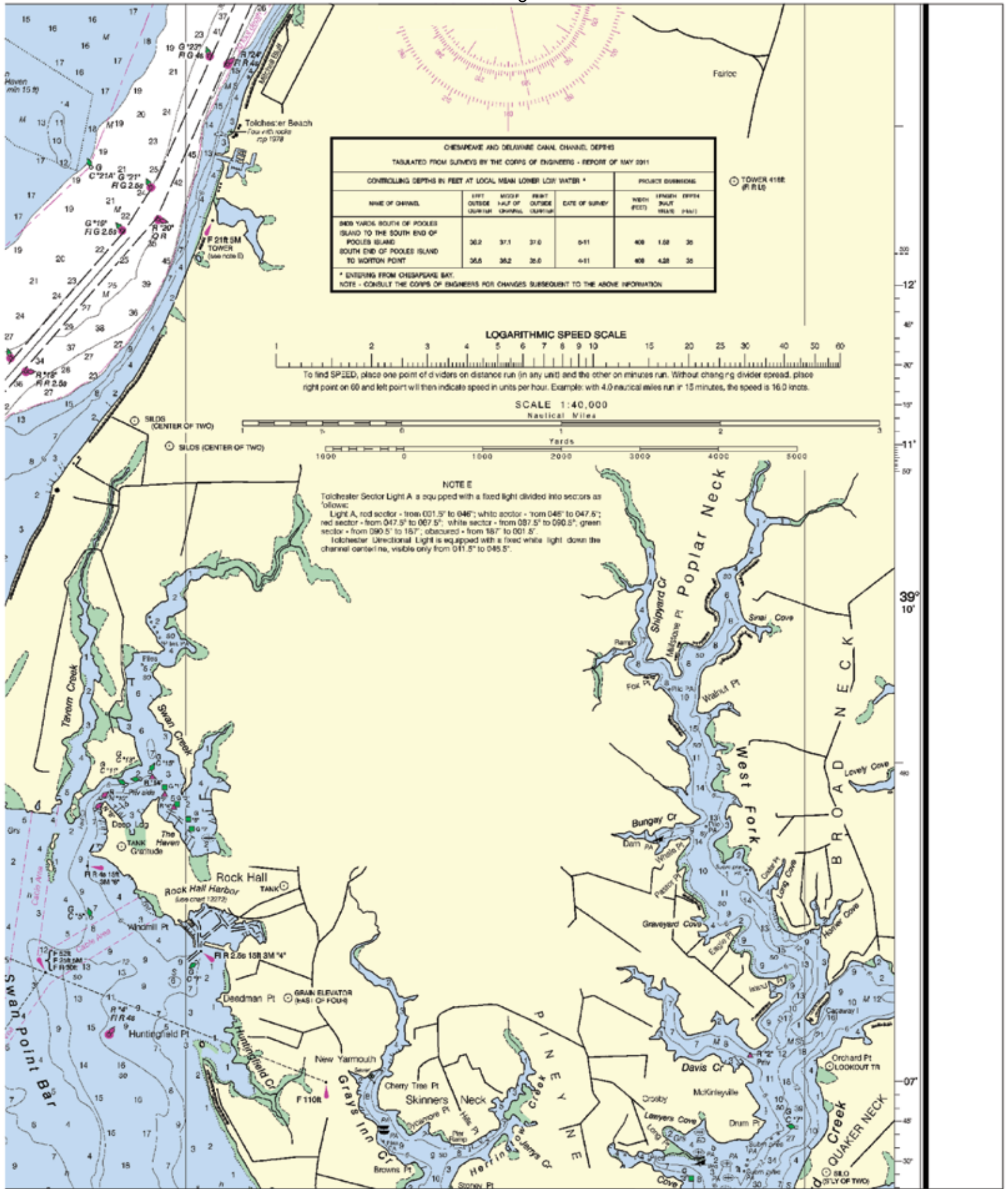
Regulated Area (June 13<sup>th</sup> and 19<sup>th</sup>, 7am - 6pm)  
 For more detail, see Commemorative Booklet Chart 12281

**NOTED**  
 Daylight operations are advised to use extreme caution in the vicinity of SEVENFOOT KNOLL LIGHT. Users in this area have been reported generated by target vessels transiting the adjacent channel.

**CAUTION**  
**BARSCULE 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.

Joins Page 14





SWAN POINT CHANNEL	26.0	35.0	30.0	26.0
TOUCHSTONE CHANNEL	31.0	35.0	36.0	35.0

\* ALL DEPTHS REFERRED TO MEASUREMENT FOOT  
 \*\* THE LAST 1.85 NM OVERLAPS WITH THE CHESAPEAKE AND DELAWARE CANAL CHANNEL  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

TIDAL INFORMATION

PLACE	NAME (LAT/LONG)	Height referred to center of soundings (MSL)		
		Mean High Water	Mean Low Water	Mean Low Water
Love Point	(39°28'N/76°18'W)	1.7	1.4	0.2
Deltamora, Ft. McHenry	(39°16'N/76°35'W)	1.7	1.4	0.2

Useless (-) located in datum column indicate unavailable datum values for a tide station. Mean-tide water levels, tide predictions, and local current predictions are available on the internet from <http://noaa.gov> (May 2011)



UNITED STATES - EAST COAST  
 MARYLAND  
**CHESAPEAKE BAY**  
 APPROACHES TO  
 BALTIMORE HARBOR

Mercator Projection  
 Scale 1:40,000 at Lat. 39° 10'

North American Datum of 1983  
 (World Geodetic System 1984)

SOUNDINGS IN FEET  
 AT MEAN LOWER LOW WATER

For Symbols and Abbreviations see Chart No. 1

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

**PLANE COORDINATE GRID**  
 (Based on NAD 1983)  
 The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: . The last three digits are omitted.

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

**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:

**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.

**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.

**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**  
 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:  
 (O) (Accurate location)    (o) (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.

**Pipeline 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.

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

**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 0.302' northward and 1.140' eastward to agree with this chart.

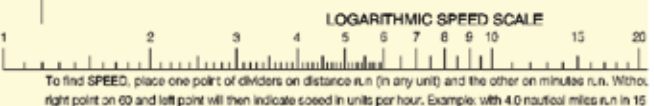
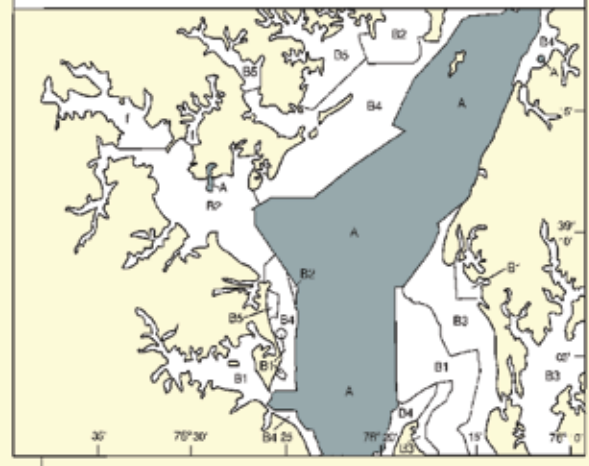
**NOTE A**  
 Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 6th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in Baltimore, Maryland.  
 Refer to charted regulation section numbers.

**HEIGHTS**  
 Heights in feet above Mean High Water.

**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	1990-2005	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 12281	



77th Ed., Jul. 11  
**12278**  
 Corrected through NM Jul. 9/11  
 Corrected through LNM Jul. 5/11

**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](http://nauticalcharts.noaa.gov).

This nautical chart has been designed to meet Ocean Service encourages users to submit corrections improving this chart to the Chief, Marine Chart L Service, NOAA, Silver Spring, Maryland 20910-2

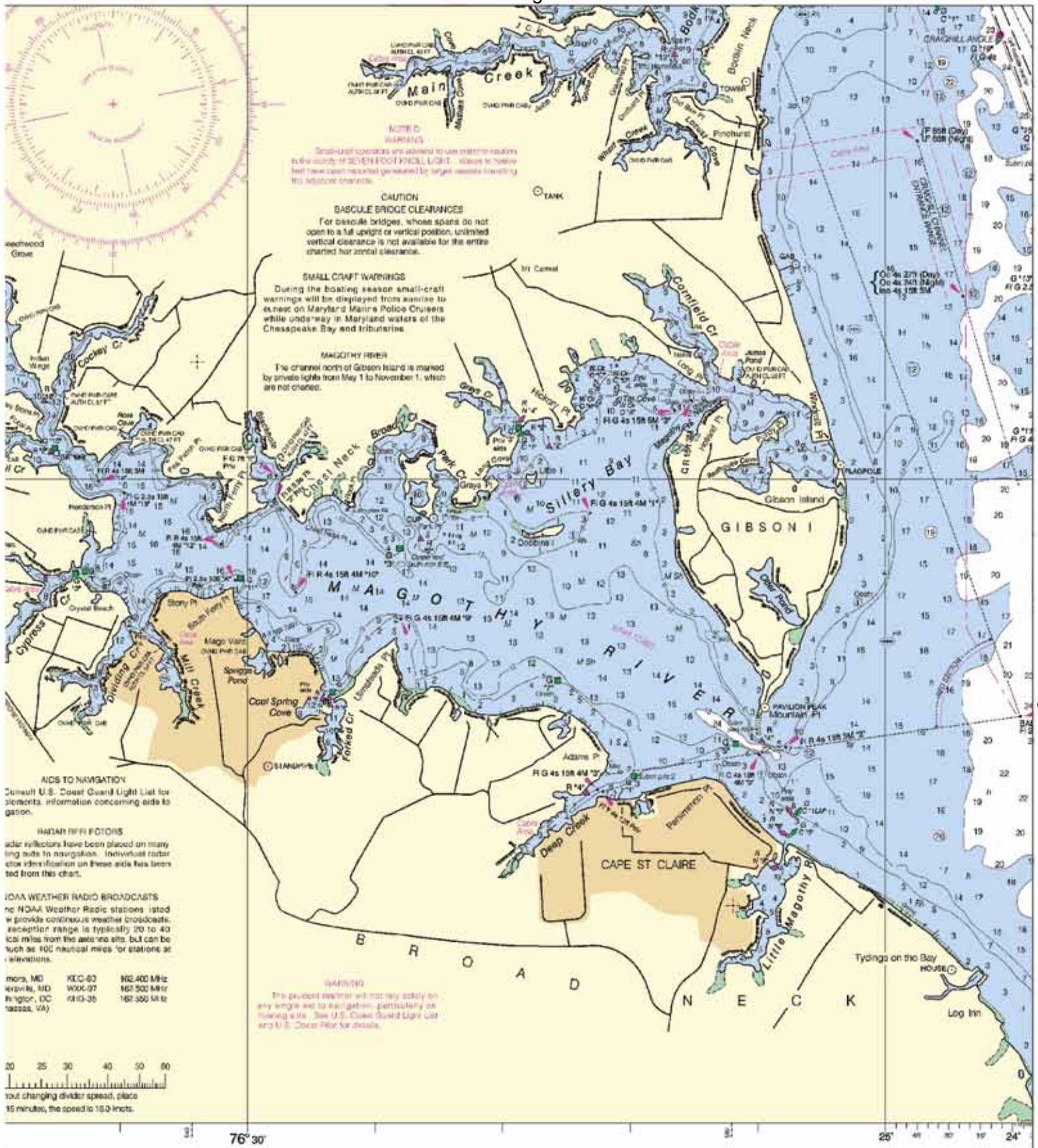


Printed at reduced scale.

SCALE 1:40,000 See Note on Page 9  
 Nautical Miles







**NOTE C WARRINGS**  
Small-craft operators are advised to use extreme caution in the vicinity of SEVEN FOOT KNOLL LIGHT. Reports to States but have been reported generated by target vessels transiting the adjacent channels.

**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.

**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.

**MAGOOTHY RIVER**  
The channel north of Gibson Island is marked by private lights from May 1 to November 1, which are not charted.

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

**RAZAR REFLECTORS**  
Aid reflectors have been placed on many aids to navigation. Individual reflector color identification on these aids has been noted from this chart.

**NOAA WEATHER RADIO BROADCASTS**  
The NOAA Weather Radio stations listed provide continuous weather broadcasts. Reception range is typically 20 to 40 nautical miles from the aid site, but can be much less for stations at low elevations.

Maryland, MD	XEC-63	162.400 MHz
Virginia, VA	WXX-97	167.500 MHz
Washington, DC	WDC-26	167.550 MHz

20 25 30 40 50 60  
Your changing divider speed, place 15 minutes, the speed to 15.0 knots.

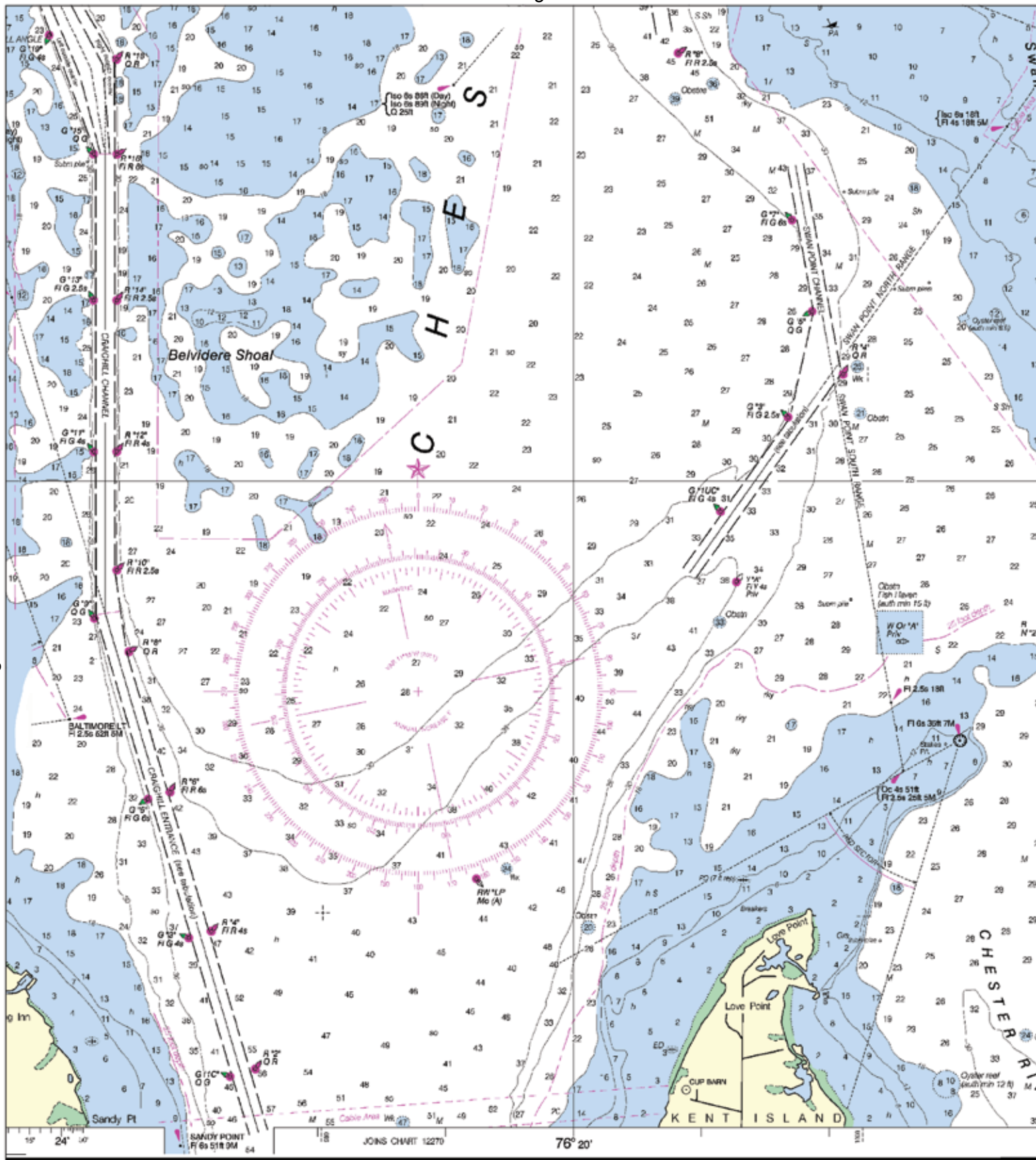
omplete safe navigation. The National Oceanic and Atmospheric Administration (NOAA) National Ocean Service (NOS) is responsible for the production, distribution, and maintenance of nautical charts. For more information, contact the National Ocean Service, 1205 East-West Highway, Silver Spring, MD 20910, or visit our website at <http://www.noaa.gov>.

**WARNING**  
The present material will not rely solely on any single aid to navigation, particularly on mooring aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

**PRINT-ON-DEMAND CHARTS**

NOAA and its partner, OceanGraphics, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://oosdata.nod.noaa.gov/dn/inquiry.aspx>, or OceanGraphics at 1-877-86CHART or <http://www.oceangraphic.com>.

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



At Washington, D.C.  
 DEPARTMENT OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 U.S. COAST AND GEODETIC SURVEY

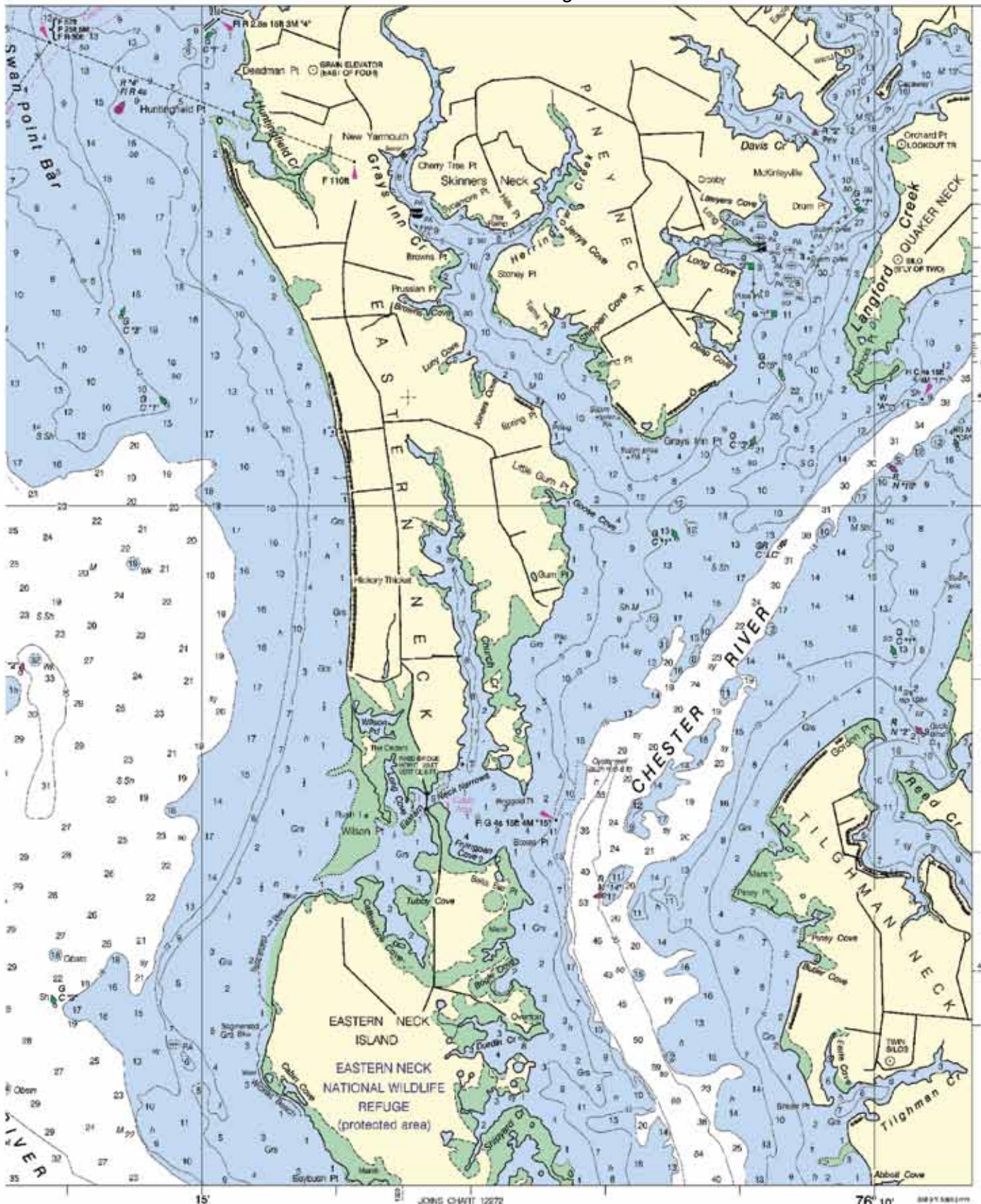
**SOUNDINGS IN FEET**

**18**



Printed at reduced scale. SCALE 1:40,000 See Note on Page 9

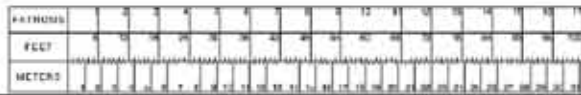




JOINS CHART 12272

JOINS CHART 12272

88 21 58 21 71



Approaches to Baltimore Harbor  
 SOUNDINGS IN FEET - SCALE 1:40,000

12278



NSN 764-201-4007632  
 NGA REFERENCE NO. 12A-HA12278

# Star-Spangled Sailabration

## 2012 Boating Safety Message

### Boat Responsibly

The upper Chesapeake Bay and its tributaries offer unlimited opportunities for you to enjoy Maryland's beautiful waters. You must invest the necessary time to educate yourself in safe boating practices before you go out on the water. You can do this by being knowledgeable of both federal and state boating laws. Remember, you are responsible for the safety of your vessel and your passengers.

### Always Wear Your Life Jacket

Drowning is the number one cause of boating fatalities and the most preventable. The U.S. Coast Guard recommends you always wear a life jacket and require your passengers to do the same.

All recreational vessels must carry one wearable life jacket for each person on board. Any boat 16 feet or longer (except canoes and kayaks) must also carry one throwable (Type IV) device. Life jackets should be worn at all times when the vessel is underway. A life jacket can save your life, but only if you wear it.

Maryland law states that ALL CHILDREN under the age of 13 MUST WEAR a U.S. Coast Guard approved Personal Flotation Device (PFD - Type I, II, III or V) while underway on a recreational vessel under 21 feet in length on Maryland waters. Recreational vessels include motorboats, sailboats, canoes, kayaks, rowboats, and any other device capable of being used for transportation on the water, when the vessel is being used for other than commercial purposes. The life jacket must be the proper size for the child and must be in good and serviceable condition. A child under the age of 4 must wear a U.S. Coast Guard approved PFD which features additional safety precautions, as appropriate for an infant, toddler, or young child.

This requirement does not apply when a vessel is moored, anchored, or when the child is below deck or in an enclosed cabin.

### Boating Under the Influence

BUI is just as deadly as drinking and driving! Every boater needs to understand the risks of boating under the influence of alcohol or drugs. It is illegal to operate a boat while under the influence of alcohol or drugs in every state. The Coast Guard also enforces a federal law that prohibits BUI. This law pertains to ALL boats (from canoes and rowboats to the largest ships). Penalties can include fines, suspension or revocation of boat operator privileges, and jail terms. The Coast Guard and Maryland cooperate fully in BUI enforcement to remove impaired boat operators from the waters. Don't let a great day on the water turn into a tragedy of a lifetime—BE RESPONSIBLE!

### Create a Float Plan

Why should you take the time to prepare a float plan? The answer is simple—there are just too many facts that need to be accurately remembered and ultimately conveyed in an emergency situation. Without a float plan you are counting on someone else, a friend, neighbor, or family member to remember detailed information that rescue personnel need in order to find you—information that can make a difference in the outcome. A float plan is equally effective for the owner of a 10 foot kayak or flat-bottom skiff as it is for a 48-foot express cruiser, or a 90 foot sport-fishing vessel or luxury yacht. Typically, the Skipper of a vessel is the individual who prepares the float plan. However, any passenger can prepare a Float Plan. Make sure you complete a Float Plan before you go boating and leave it with a reliable person who you can depend upon to contact the Coast Guard, or other rescue organization, should you not return or check-in as planned. If you have a change of plans after leaving, be sure to notify the person holding your Float Plan.



## EMERGENCY INFORMATION

### VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

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

**Channel 13** – Navigation purposes at bridges, locks, and 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 22A** – 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 and 78A** – Recreational boat channels.

**Mobile Phones** — Call 911 for water rescue.

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

Maryland Natural Resources Police 410-260-8888

**NOAA Weather Radio (MHz)** — 162.400, 162.425, 162.450, 162.475, 162.500, 162.525, 162.550

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. Respond to distress signals, but do not endanger yourself.

### 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!**

## NOAA CHARTING PUBLICATIONS

**Official NOAA Nautical Charts** – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce 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](http://www.nauticalcharts.noaa.gov)

**Official Print-on-Demand Nautical Charts** – These full-scale NOAA charts are updated weekly 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](http://www.oceangrafix.com)

**Official Electronic Navigational Charts (NOAA ENC<sup>®</sup>)** – 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](http://www.nauticalcharts.noaa.gov)

**Official Raster Navigational Charts (NOAA RNC<sup>™</sup>)** – RNCs are geo-references 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](http://www.nauticalcharts.noaa.gov)

**Official BookletCharts<sup>™</sup>** – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be

downloaded from NOAA for free and printed from [www.nauticalcharts.noaa.gov/bookletcharts](http://www.nauticalcharts.noaa.gov/bookletcharts)

**Official PocketCharts<sup>™</sup>** – PocketCharts<sup>™</sup> 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<sup>®</sup>** – The Coast Pilots are nine 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 NOAA chart agents or may be downloaded for free at [www.nauticalcharts.noaa.gov](http://www.nauticalcharts.noaa.gov)

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### Internet Sites

[www.nauticalcharts.noaa.gov](http://www.nauticalcharts.noaa.gov)

[www.noaa.gov](http://www.noaa.gov)

[www.tidesandcurrents.noaa.gov](http://www.tidesandcurrents.noaa.gov)

[www.nos.noaa.gov](http://www.nos.noaa.gov)