

**MARINERS' ADVISORY COMMITTEE
FOR THE BAY AND RIVER DELAWARE
MEETING
March 14th, 2013 MINUTES**

The Regular Quarterly Meeting of the Mariners' Advisory Committee for the Bay and River Delaware was held March 14th, 2013 at Ristorante LaVeranda Philadelphia. Captain Stephen Roberts presided over the meeting. Captain Roberts called the meeting to order at 1100 hours. The meeting was attended by 73 Members, Associate Members, and interested parties.

I. Welcome

Captain Roberts welcomed members and guests.

II. Reading of the Minutes

Captain Roberts reported that the Minutes from the December 2013 Meeting were posted on the website for review. Captain Charles Futchter moved that the reading of the minutes be approved, Captain James Roche seconded. All approved.

III. Report of the Treasurer

On behalf of MAC Treasurer Rick Iulucci who could not attend today's meeting, Scott Anderson (Maritime Exchange) read the report. Mr. Anderson reported a balance of \$16,826.24. He also noted three new MAC members: Commerce Construction Corp, Pennoni and Port Vision. Captain Roberts reminded those in attendance that there are still outstanding dues yet to be paid.

IV. Aids to Navigation USCG

On behalf of John Walters who could not attend today, Christopher Runt reported on the following lights and projects and distributed a detailed report on the following:

Maintenance and Improvements projects

1. Miah Maull Shoal Light
2. Delaware Bay Light 32
3. Deepwater Point Range Front Light
4. Devlin Lower Range Front Light
5. Miah Maull Shoal Light (additional info to the above)
6. Elbow of Cross Ledge Light
7. Construction Tender Operations
 - a. CGC Sledge
 - b. Light, Fisher Point Range Front Light and Keystone Range Front Light
 - c. LED optics
8. Future AtoN
 - a. Baker Range
 - b. Delaware River and Bay Deepening Project
 - c. The replacement of: Liston Range, Reedy Island Range and New Castle Range
 - d. Buoy Sound Signals
 - e. Navigation Items of Interest
 1. Offshore Renewable Energy Installations
 2. Offshore Anchorages
 3. GPS interference tests

We've installed two *mariner-activated* sound signals; one in Cape May and one in Manasquan. There is a Broadcast Notice to Mariners on how to activate them.

Captain Roberts asked that if anyone has any comments about the red sector or the sound signals, you could send them to him (chairman@macdelriv.org) and he'd pass them on to John Walters.

V. NOAA

Filling in for Jon Swallow, Rachael Medley distributed the latest chart editions. (see distribution)

Rachael Medley noted that NOAA was impacted by the sequester, a 5% cut across the board and significant reduction in sea-days for surveys.

Ms. Medley also reported on their new booklet chart (examples were handed out). It's a full scale chart printable from your home or office computer.

Darren Wright reported on the pending budget issue that will affect the PORTs program. Mr. Wright noted that it's not affected by the sequestering but is a partnership program that has expired. He added that we can keep the program running up to September 1st but would have to shut the whole system down at that point. Any sensors that break or begin disseminating bad data, will have to shut them off since we can't repair them.

Captain Roberts reported that mariners use PORTS constantly and noted that it's part of our "go, no-go" matrix. He added that terminal operators, ship owners and agents know the costs associated with that "go, no-go" decision. He added that this is a very critical part of the safety system on this river and I strongly encourage everyone to get in touch with the PRPA. Captain Roche added the following: This is a serious situation. The PRPA has done a great job over the years acting as a sponsor. They are the conduit for the Commonwealth. The Governor's office has been funding this. The Governor understands the need for the system but has no money. He is asking each member of the MAC to write letters to the three governors to secure funding. We can't compromise safety on the Delaware. The MAC needs to have its voice heard as to how this is going to affect commerce.

Dennis Rochford volunteered to compile a template for MAC members with a focus on reaching Senators Lautenberg and Coons. The templates can be found by logging into www.macdelriv.org and going to the MAC drop-down menu.

Captain Roche added that they'd uninstall the whole thing and take it away and that we'd have to start the whole process over again if we got funding back.

Captain Roberts said that the system only costs \$250,000 on the Delaware and actually saves us money in operating and shipping costs, and helps makes money for the port.

It was discussed that there is relief funding from Hurricane Sandy for repairs to PORTS but that money remains tied up until a local partner was found. Captain Roberts reported damage to Brown Shoal and Brandywine during the hurricane.

Tom Johnston suggested a ship-based, "an assessment against vessels", user fee to be collected by the Maritime Exchange as a possible revenue source for PORTS. Further discussion ensued including how much could be raised.

Captain Roberts concluded that we are looking for a short-term fix while at the same time looking for a long term fix that could possibly include full federal nationwide coverage.

VI. Army Corps of Engineers (ACOE)

Tim Rooney distributed his report and commented on the following: (See March 14th 2013 distribution).

1. Delaware River, Philadelphia to Sea & Main Channel Deepening
2. Wilmington Harbor
3. Delaware River: Philadelphia to Trenton
4. Salem River
5. Schuylkill River
6. C&D Canal

VII. Sector Delaware Bay

See Presentations:

VIII. Old Business

MAC WEBSITE

Our website has registered over 24,000 hits and encouraged members to sign up for access. We could link the USCG events there as well.

WIND FARM

Captain Broadley reported that plans for the wind farm here fell apart due to funding.

IX. New Business

Captain Roberts reported the following:

There have been complaints about dive operators not displaying proper flags and not calling out on channel 13. It is the responsibility of the dive operator to display and alert mariners of their presence.

Starting April 26th – May 11th, (0900-2100) the Tacony Palmyra Bridge is doing re-decking operations and is requiring 12 hours notice for openings.

MAC has formed a small sub-committee of docking masters and river pilots to discuss issues terminal access, berth shoaling and fendering. Nick Warmouth of the Docking Pilots Association added the following comments: this is a focus group to filter issues that we feel justified to bring to the attention of the MAC for review. That group commences its first meeting today following the MAC meeting.

The 2014 National Harbor Safety Conference is coming to Philadelphia in late summer. The MAC will host the event in celebration of our 50th Anniversary. Scott Brotemerle of the Transportation Research Board will help coordinate the event.

PORT VISION

New MAC member Jason Tieman of PORT VISION announced to the MAC their services including AIS tracking, anchorage studies, grant processes and other services. <http://www.portvision.com/>

X. Presentations

USCG

Captain Weimer awarded the Good Samaritan Certificate of Appreciation, presented to the Captain and crew of the m/v Delaware for the rescue of a capsized kayaker.

CAPTAIN BROADLEY

Captain Roberts presented, recently retired, Captain Bill Broadley with a plaque commemorating his dedication and service to the MAC.

RIDE THE DUCKS

Captain Walt Bohn, of RIDE THE DUCKS, presented to the MAC details of their current safety steps including AIS on their boats, new training for their captains on "prudent marinership" and radio usage. Also presented to the MAC was their new route and duration on the river. He added that they have a tow boat on standby in the event that it is needed.

DRWC

Jim Malony of the Delaware River Waterfront Corporation presented a slideshow to the MAC with his vision of the proposed shuttle service for the Delaware River; four boat fleet, 22 passengers each. It was reported that there are no plans to cross the river with only 4 locations/piers planned. It was suggested that the ferry service consider serving commercial vessels; crew changes, stores, etc...

DRWE

John Anderson, managing director of the Delaware River Waterway Express reported on his progress on his proposed hovercraft operations- see distribution. In December we received approval from the DRPA to operate on the Delaware River. The USCG recommended that a MAC subcommittee be formed to review hovercraft operations and transit areas in an effort to proceed. Currently we are doing our economic analysis and financial projections and reviewing plans for a 45 knot working speed on the river. Captain Roberts offered to reach out to targeted members to form a sub-committee.

XI. Adjournment

Captain Roberts announced the next meeting of the MAC is scheduled for June 13th at 1100 hours at the LaVeranda Restaurant in Penn's Landing.

With no further agenda items or discussion, Captain Tom Sharpe moved that the meeting be adjourned and Captain Ward Guilday seconded. The meeting was adjourned at 1315 hours.

Mariners' Advisory Committee For the Bay & River Delaware

Agenda For Thursday March 14, 2013 @ 1100 hours

Memorandum to: Mariner's Advisory Committee Members
Associated Members and Interested parties

Your presence is requested at the Quarterly Meeting of the above-mentioned Committee on **Thursday, March 14, 2013 at 1100 hours**. The meeting will be held at The Ristorante LaVeranda, N. Columbus Blvd., Philadelphia, PA.

AGENDA

- I. Approval of the Minutes** December 2012 Meeting
- II. Reports**
 - A. Treasurer's Report
 - B. Aids to Navigation – USCG District 5
 - C. NOS – NOAA
 - D. Dredging – Army Corps of Engineers
 - E. Sector Delaware Bay – COTP
 - F. Chairman's Report
- III. Old Business**
 - A. Ride the Ducks
 - B. Wind Energy Projects
- IV. New Business**
 - A. Docking Sub-Committee
 - B. Penn's Landing ShoreLink Shuttle
 - C. Hovercraft Operations Sub-Committee
 - D. 2014 National Harbor Safety Conference
- IV. Open Discussion**
- V. Adjournment**

Next meeting: June 13, 2013

Adjournment followed by Luncheon at the Ristorante LaVeranda, Philadelphia, PA.

Mariner's Advisory Committee
For the Bay and River Delaware
March 14,th 2012
TREASURER'S REPORT

Deposits

MAC Annual Dues Memberships including these new members:

Commerce Construction Corp
Pennoni
Port Vision

Total deposits.....\$5,600.00

Disbursements

Administrative services.....\$	220.00
Mac Website (USA HOST).....\$	488.00
Quarterly Yahoo email service	\$ 29.85
123-Awards/promotions.....\$	68.99
La Veranda (December 2012 MAC meeting) \$	2,935.40

Total disbursements.....\$3,742.24

Current Balance as of March 14, 2012.....\$16,826.00

MAC-Treasurer Rick Iulucci

**MARINERS ADVISORY COMMITTEE
FOR THE BAY AND RIVER DELAWARE
March 14, 2013**

Maintenance and Improvement projects:

Miah Maull Shoal Light: We have completed operational designs to convert the optic in this light to a duplex Vega VLB 44 8-tier LED lantern, to remove the classical Fresnel lens and to remove the red sector. The RACON will be retained. The A&E designed, solar power system is being provided to the New Jersey State Historic Preservation Officer, as required by Section 106 of the National Historic Preservation Act consultation process. Based upon feedback after last year's meeting, we've investigated the possibility of retaining the red sector, with an LED option. Due to a very recent advancement in technology, a LED red sector option is available but at a significant cost. We've received indications that a red sectored LED will cost approximately \$23,000. Based on this estimate we need to revisit the requirement to install a sectored optic. Is the red sector essential for safe navigation? Consultation with the New Jersey SHPO continues for the solarization of Miah Maull Shoal Light. The SHPO has no objection to solarizing Elbow of Cross Ledge Light.

Delaware Bay Lt 32: The construction contract has been awarded to DAL Construction of Newport News, Virginia for \$958K. The mobilization date remains to be determined however the Contract Completion Date is 11/23/13.

Deepwater Point Range Front Light: The range platform and battery rack were damaged earlier this year as a result of an allision. The responsible party has come forward and opted to pursue its own repair contract, under Coast Guard supervision. Repair specifications have been approved.

Devlin Lower Range Front Light: River currents have undercut the foundation requiring structural repairs requiring an aggressive safety assessment prior to technicians climbing the tower. There may be a point in the near future when the condition of the tower will preclude servicing of the optic, meaning the light may become extinguished prior to repairs being made. Planning for that eventuality, we have begun plans to relocate the structure into the Delaware River using a Coast Guard construction tender.

Miah Maull Shoal Light: In addition to the main optic signal we are proposing to discontinue the sound signal and the emergency light. Both changes will lower the operating costs of the light and remove signals that may no longer substantially contribute to navigation safety.

Elbow of Cross Ledge Light: Similar to Miah Maull Ledge Light, we are proposing to discontinue the sound signal as a cost reduction effort for a signal that may no longer substantially contribute to navigation safety.

Construction Tender Operations

CGC SLEDGE maintenance trip to Delaware River and Bay is scheduled for this coming construction season to include construction or repair to **Devlin Range Front**

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Light, Fisher Point Range Front Light and Keystone Range Front Light.

LED optics: We continue to change out incandescent optics with LED optics, with our first priority being buoys, followed by major and minor lights. Your comments regarding the newer optics are appreciated.

Future AtoN Improvements

Baker Range: The structural condition of the range rear tower necessitates its reconstruction and relocation. We are proposing to change the RF and RR characteristics to FG at night and FW during the day. Simultaneously, the submarine power cable will be removed and the range will be solar powered. The project, with a construction cost estimate of \$3.7M has been submitted to and approved by Coast Guard Headquarters. The availability of funds for A&E services pend passage of the FY13 budget.

Delaware River and Bay Deepening Project: The Coast Guard preliminary estimate for improvements to the Delaware River and Bay buoy-marking scheme are estimated at \$3.7M. This estimate will escalate as we examine range lights for continued suitability.

Preliminary design work has begun to replace **Liston Range, Reedy Island Range and New Castle Range**. Our entering parameters are to provide the intensities required to meet IALA and Coast Guard operating standards.

Buoy Sound Signals: The Coast Guard is soliciting comments in the Local Notice to Mariners to discontinue sound signals throughout the Fifth District. If there is no demonstrated need for them, the sound signals will be discontinued during the scheduled buoy hull reliefs. The following stations are due for scheduled relief in CY 13:

Bulkhead Bar Range LBB 2B
Cherry Island Range Junction LBB 2CR
Chester Range LGB 1C
Marcus Hook Range LBB 2M

Navigation Items of Interest

Offshore Renewable Energy Installations (OREIs): The Energy Policy Act of 2005 designated the Department of the Interior as the lead Federal agency for permitting and approval of OREIs on the OCS. The Coast Guard's role is as a cooperating agency under the National Environmental Policy Act and as such is limited to providing an evaluation of potential impacts of the proposed facilities on the safety of navigation, traditional uses of a waterway and Coast Guard missions. The BOEM Call for Information and Nomination (Call) for wind energy areas in coastal North Carolina closed on March 7th. The Coast Guard recommends that the MAC remain abreast of all East Coast wind energy initiatives, assess their potential impacts to the Delaware Bay and River ports and provide that assessment to BOEM, USACE and the Coast Guard. The following site

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posts the most recent activity associated with offshore renewable energy in each state:
<http://www.boem.gov/Renewable-Energy-Program/State-Activities/Index.aspx>.

Offshore Anchorages: The Coast Guard Authorization Act of 2010 includes among other items, the authority to create anchorages up to 12NM offshore. We've received information that is sufficient for us to move ahead to begin the consultation process with the state of Delaware under the auspices of the Coastal Zone Management Act.

GPS interference tests: GPS tests within the Fifth Coast Guard District are scheduled in the vicinity of Patuxent River, MD from 1300Z to 2200Z on the following dates:

Geographic Location: IVO Patuxent River, MD Testing date/times:

21 Mar 13 - 22 Mar 13; 1300Z - 2000Z

25 Mar 13 - 29 Mar 13; 1300Z - 2000Z

01 Apr 13 - 05 Apr 13; 1300Z - 2000Z

08 Apr 13 - 12 Apr 13; 1300Z - 2000Z

15 Apr 13 - 19 Apr 13; 1300Z - 2000Z

Frequencies: GPS L1/L2
Center Point: 38-15.684N 076-28.202W
Impact radius: 14.35NM of center point

If GPS or dGPS abnormalities are observed, at any time, please notify the Coast Guard Navigation Center

Contact Information:

dGPS Navigation Information (703) 313-5902

www.nmccen.uscg.gov

Fifth District Local Notice to Mariners

www.fivcen.uscg.gov/lnm/15/

AtoN Discrepancy reports: **Sector Delaware Bay:**

215-271-4940, CH 16 VHF-FM

Send items for publication in the Fifth District Local Notice to Mariners to:

wiliam.r.jones@uscg.mil.

Our address is: Commander (dpw)
Fifth Coast Guard District
431 Crawford Street
Portsmouth, Va. 23704

e-mail address:lonnie.p.harrison@uscg.mil
john.r.walters@uscg.mil

BookletChart™



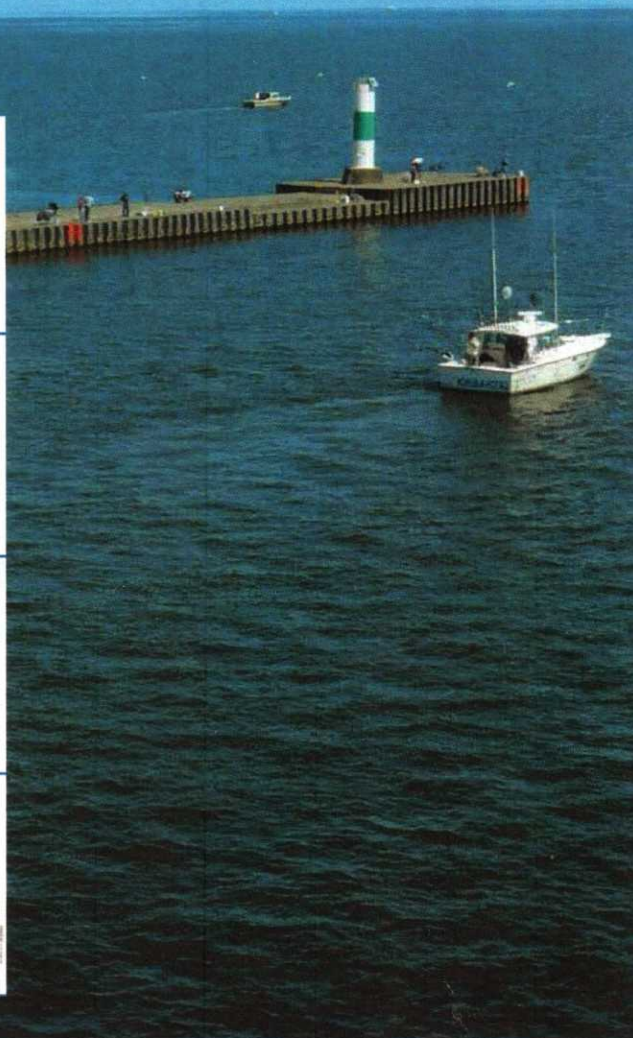
Delaware Bay NOAA Chart 12304

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
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Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

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. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

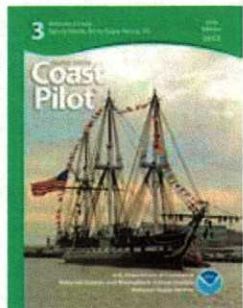
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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 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 to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12304>



(Selected Excerpts from Coast Pilot)

Delaware Bay and Delaware River form the boundary between the State of New Jersey on the east and the States of Delaware and Pennsylvania on the west. The bay is an expansion of the lower part of Delaware River; the arbitrary dividing line, 42 miles above the Delaware Capes, extends from Liston Point, Del., to Hope Creek, N.J. Deep-draft vessels use the Atlantic entrance, which is about 10 miles wide between Cape May on the northeast and Cape Henlopen on the southwest.

Mileages shown in this chapter, such as Mile 0.9E and Mile 12W, are the nautical miles above the **Delaware Capes** (or "the Capes"), referring to a line from Cape May Light to the tip of Cape Henlopen. The letters N, S, E,

or W, following the numbers, denote by compass points the side of the river where each feature is located.

Cape May is the extensive peninsula on the northeast side of the entrance to Delaware Bay. **Cape May Light** (38°55'59"N., 74°57'37"W.), 165 feet above the water, is shown from a white tower with a red cupola and two white dwellings nearby on Cape May Point.

The shoals off Cape May are mixed clay and sand and have the consistency of hardpan; the ridges run in approximately the same directions as the currents. **Cape May Channel**, 1 mile southwest of the cape, is an unmarked passage between shoals, with depths from 2 to 4 feet on either side. The channel is seldom used, and then only by fishing vessels and pleasure craft; local knowledge is required for safe passage.

Lower River and Bay.—1. The maximum fresh water draft for river transit from sea to Delair, New Jersey is 40 feet.

2. All vessels arriving with a fresh water draft in excess of 37 feet are to transit during flood current only.

3. All vessels over Panamax size beam (106 ft) having a fresh water draft in excess of 35'–06" shall only transit during flood current.

4. Vessels outbound from Paulsboro, NJ and above, having a fresh water draft of 37 feet and up to 40 feet should arrange to sail 2 hours after low water. Due to the extended time of transit for these particular deep draft vessels, two (2) river pilots will be arranged for transit to sea.

5. The maximum salt-water draft for entrance into Delaware Bay and Big Stone Beach anchorage is 55 feet, as per federal regulation. Qualified offshore advisors with portable DGPS units are available upon request from the Pilots' Association for the Bay and River Delaware.

6. Safe Under-Keel Clearance (UKC) should be assured for all transits, taking into consideration the vessel's squat and variations of actual tidal levels due to high winds, barometric pressure, and other atmospheric conditions. Actual tidal heights for many points in the Delaware Bay and River can be determined on the NOAA PORTS web site at <http://co-ops.nos.noaa.gov/dbports/dbports.html>, or by calling 1-866-307-6787 (1-866-30-PORTS).

7. Actual tidal levels and currents will vary from predicted heights due to high winds, barometric pressure, and other atmospheric conditions. Actual tidal heights, currents, bridge air gaps, and other data can be determined for many points in the Delaware Bay and River on the NOAA PORTS web site at <http://co-ops.nos.noaa.gov/dbports/dbports.html>, or by calling 1-866-307-6787 (1-866-30-PORTS).

8. The U.S. Army Corps of Engineers periodically surveys the bottom conditions of the Delaware Bay and River main channel and anchorages, publishing the results of these surveys at <http://www.nap.usace.army.mil/channel/list.htm>.

Vessel Reporting.—It is recommended that vessels report their position and status to the Maritime Exchange over VHF-FM channel 14 in the following situations:

1. When anchoring.
2. When getting underway.
3. When passing through Marcus Hook.
4. When entering or exiting the C&D canal.
5. When making fast to the dock.
6. Tugs operating without a barge are exempt from this recommendation. Tugs with barges are requested to report to the Philadelphia Maritime Exchange when anchoring and leaving all anchorages. It is important to stand by on VHF-FM channels 14 and 16 at all times. And AIS should always be on if the vessel is equipped with it.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Norfolk	Commander	
	5th CG District	(575) 398-6231
	Norfolk, VA	

Table of Selected Chart Notes

CAUTION
Entrance to channel may be foul with rocks.

FORTESCUE CREEK
Controlling depth for centerline is 2 feet from Delaware Bay to Downs Avenue Bridge.
Sep 1986

OYSTER GROUNDS
CAUTION - Numerous stakes and obstructions exist within these areas.

Lighted dredging buoys are not charted as they are frequently moved.

CAUTION
Unexploded ordnance may exist within an area extending 2.5 miles offshore from Kitts Hummock to Little River.

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:80,000 at Lat. 39°06'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

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

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 etc, but can be as much as 100 nautical miles for stations at high elevations.

Atlantic City, NJ	KHB-38	162.400 MHz
Salisbury, MD	KEC-92	162.475 MHz
Lewes, DE	WXJ-94	162.550 MHz
Sudlersville, MD	WXX-97	162.500 MHz

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 0.407" northward and 1.347" eastward to agree with this chart.

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

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.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices, as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

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

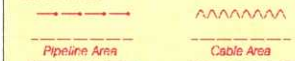
RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION
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)

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.

COHANSEY RIVER
Controlling depths were 5' feet to Fairton; thence 6 feet to approximately 2000 yards south of Bridgton; thence 1 foot to Bridgton.
Mar 1988 - Sep 2003

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

MALRICE RIVER
Numerous buoys are not charted because they are frequently shifted in position. Obstruction reported extending across the eastern half of the river at the shipbuilding company about 5 miles above the mouth.
Numerous uncharted wrecks exist along the banks of the river above Marlacotown.
The controlling depth is reported to be 6 feet from Buckshutem to Millville in 1967.

MISPILLION RIVER
After passing through jetties, the controlling depth was 3 feet to 38°57'00"N, 75°18'46"W.
May 2012
The controlling depth was 2 feet to the bascule bridge, thence 2 feet to Milford with shoaling to 1 foot at Milford.
Feb 1981 - Aug 1996

CAUTION
Numerous uncharted duck blinds, stakes, piles, signs and pipes, some submerged, may exist in the area of this chart.

NOTE D
PRECAUTIONARY AREA
Traffic within the PRECAUTIONARY AREA may consist of cruising pilots and vessels making the transition between operating in Delaware Bay and one of the traffic areas. Mariners are advised to exercise extreme care in navigating within this area.

NOTE B
DANGER AREA
Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any other similar type of operation because of residual danger from mines on the bottom.

NOTE C
TRAFFIC SEPARATION SCHMF
One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to Delaware Bay, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones use extreme caution.

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.

HURRICANES AND TROPICAL STORMS
Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.
Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Floods to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.
Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

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.

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.

NOTE E
CAUTION
The controlling depth within the Five Fathom Bank inbound traffic lane is 40 feet. The Mariners Advisory Committee recommends that vessels with drafts of 36 feet or greater use the Delaware to Cape Henlopen inbound traffic lanes.
The controlling depth within the Cape Henlopen to Five Fathom Bank outbound traffic lane is 43 feet.

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.

NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilot's appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

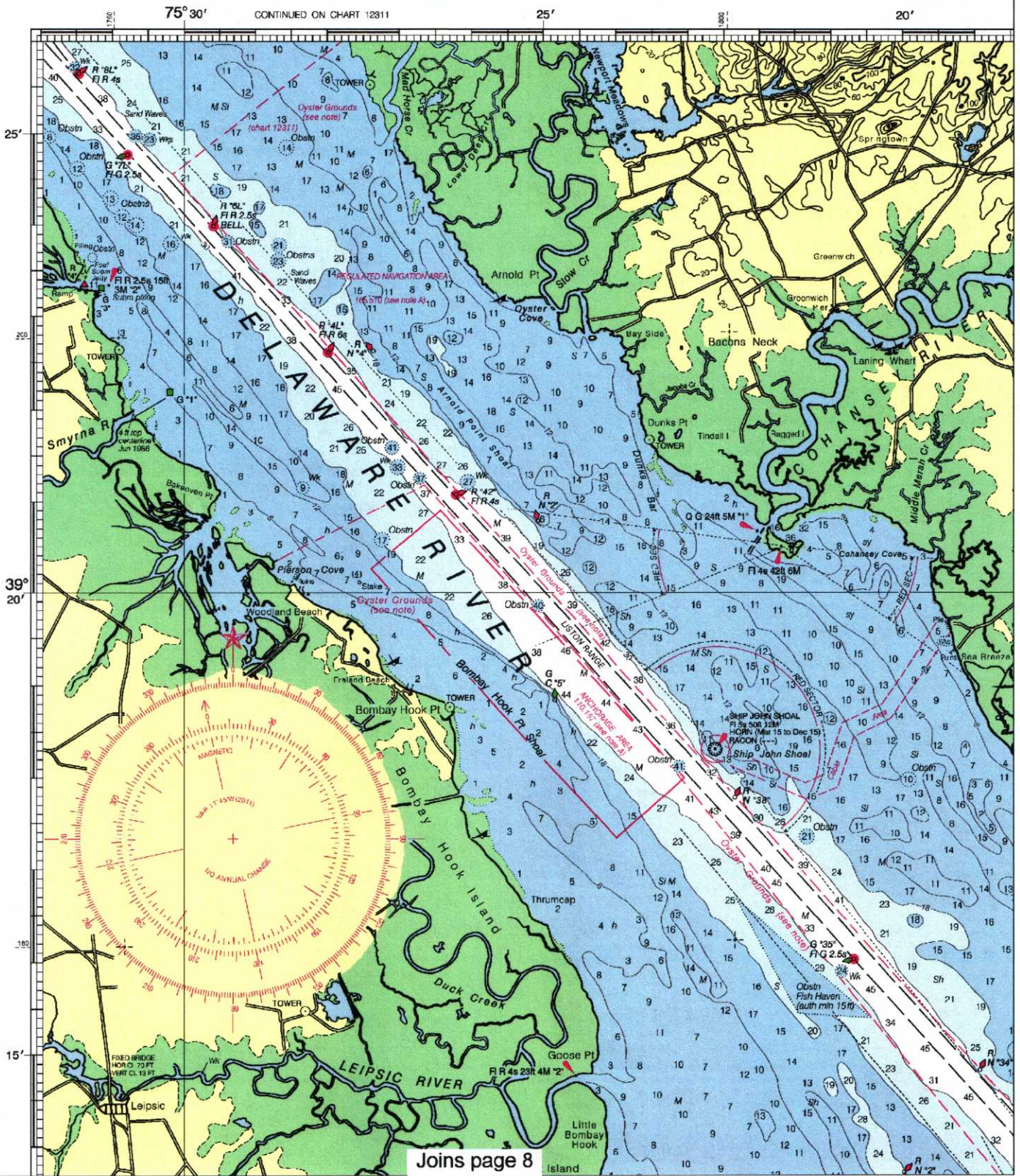
TIDAL INFORMATION				
PLACE	Height referred to datum of soundings (MLLW)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
NAME	(LAT/LONG)	feet	feet	feet
Cape May Point	(38°51'N/75°58'W)	5.4	5.0	0.2
Breakwater Harbor	(38°47'N/75°07'W)	4.7	4.2	0.2
Muccellek River Entrance	(39°04'N/75°24'W)	5.7	5.3	3.1
Woodland Beach	(39°20'N/75°26'W)	6.4	6.1	0.2

Dashes (-) located in datum columns indicate unavailable datum values for a tide station. Real time water level, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.
(Mar 2011)

NOAA and its partner, OceanGraphix, 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://oceansdata.nod.noaa.gov/dre/inquiry.aspx>, or OceanGraphix at 1-877-56CHART or <http://www.oceangraphix.com>.

SOUNDINGS IN FEET

12304

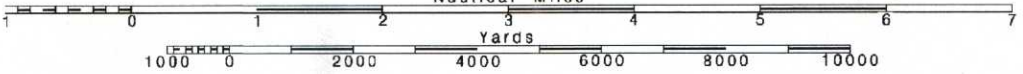


Joins page 8

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



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Note: Chart grid lines are aligned with true north.

Philadelphia District Corps of Engineers
Project Status Update
Mariners Advisory Committee for the Delaware River and Bay
14March2013

Delaware River, Philadelphia to Sea & Main Channel Deepening

The Reach A portion of the Delaware River Deepening was awarded to Great Lakes Dredge and Dock Company for \$14,550,438. The dredging operation began on 16September2012 and was completed on 03February2013 with a total quantity dredged of 1.26mcy placed into the government owned facility known as National Park. The contract consists of new work dredging within the Delaware River which will include dredging of the Philadelphia Harbor, East Horseshoe, Horseshoe, Eagle Point, Mifflin, Billingsport, and Tinicum Ranges of the Delaware River main channel. The dredging is required to a depth of 45 feet MLLW plus 1-foot allowable over depth.

The Reach D portion of the Delaware River Deepening was awarded to Dutra Dredging Company for \$18,454,044. The dredging operation began on 09February2013. It is estimated that 1.2 mcy of dredge material is going to be placed into the government owned facility known as Artificial Island. The contractor is scheduled to complete in late May and has dredged approximately 250,000cy to date. The contract consists of new work dredging within the Delaware River which will include dredging of Reedy, Baker, and Liston Ranges of the Delaware River main channel. The dredging is required to a depth of 45 feet MLLW plus 1-foot allowable over depth.

The FY13 annual maintenance dredging contract is scheduled for bid opening of 25July2013 and a Notice to Proceed (NTP) of 30August2013. The dredging operation will consist of New Castle Range to a depth of 44 feet MLLW plus 1-foot allowable over depth, Marcus Hook Range to a depth of 43 feet MLLW plus 1-foot allowable over depth, and Cherry Island Range to a depth of 45 feet MLLW plus 1-foot allowable over depth. Approximately 3.0 million cubic yards of material is estimated to be dredged and placed into upland disposal areas known as Killcohook CDF and Pedricktown North CDF.

The Dredge McFarland is scheduled to begin dredging in late April in Philadelphia Harbor in the vicinity of buoy R52.

The Reach E portion of the Delaware River Deepening is scheduled for bid opening on 21May2013 with a NTP of 24June2013. This contract will consist of new work dredging within the Delaware River, specifically Brandywine and Miah Maull Ranges of the Delaware River main channel. It is estimated that 2.0 mcy of dredged material will be placed on Broadkill Beach. Dredging will be to a depth of 45 feet MLLW plus 1-foot allowable over depth.

Wilmington Harbor

A contract for "Special Maintenance Dredging" of the 38-foot channel was advertised on 25 February 2013. Bid opening is scheduled for 26 March 2013. This work is being accomplished by Operation and Maintenance Emergency Supplemental funding provided to repair and restore projects damaged by Super Storm Sandy. The estimated quantity of shoaling to be removed is 323,000 cubic yards. Notice to Proceed should be issued on or about 16 April 2013. The government-owned Wilmington Harbor North disposal area (Cherry Island) will be used for the containment of the dredge material. It is anticipated all dredging work will be completed within 30-days.

The regular summer maintenance cycle will be postponed until December 2013. This work will be advertised on 26 July 2013 with bids being accepted 27 August 2013. It is anticipated Notice to proceed will be issued on or about 15 November 2013.

Delaware River, Philadelphia to Trenton

A contract for maintenance dredging of the Upper Delaware River 40-foot channel including the Fairless Turning Basin and Duck Island Range will be advertised on 02 July 2013. Although this project is in the early planning stages we anticipate the contract limits for the 40-foot portion of the proposed dredging work to extend from the Pennsylvania/New Jersey Turnpike Bridge to the upper end of Newbold Range. This work is also being accomplished by Operation and Maintenance Emergency Supplemental funding provided to repair and restore

projects damaged by Super Storm Sandy. Bids will be accepted on 06 August 2013. Notice to Proceed is set for 26 August 2013.

Salem River

This fiscal year funds were appropriated for Salem River Project under the Disaster Relief Appropriations Act of 2012, P.L. 112-77. The contract consists of maintenance dredging of the 16-foot project from 3+400 to 15+500. The contract was awarded to Cottrell Contracting for \$3,800,000. The Contractor completed the project placing 225,000 cy into the Government-furnished disposal area available for this contract is Killcohook, Area 3.

Schuylkill River

This fiscal year funds were appropriated for Schuylkill River under the Disaster Relief Appropriations Act of 2012, P.L. 112-77. The contract consists of maintenance dredging of the 33-foot project from 0+600 to 16+023. Great Lakes Dredge and Dock Company began dredging on 23 November 2012. The Contractor completed dredging operations on 18 December 2012 placing 294,000 cy of material into the Government-furnished disposal area available for this contract is Fort Mifflin Containment Site, Area A.

Chesapeake and Delaware Canal

Summit Bridge and Reedy Point Bridge Painting and Miscellaneous Steel Repairs will be on-going through the Summer of 2013.