LOCAL NOTICE TO MARINERS

District: 9  Week: 29/22

Issued by: Commander (dpw)
Ninth Coast Guard District
1240 East Ninth Street,
Cleveland, OH 44199-2060
Telephone: (216) 902-6069

Direct questions about this LNM to the above address.

All distances in this publication are STATUTE MILES unless otherwise noted.*

*District Nine Internet Address*  https://www.atlanticarea.uscg.mil/Our-Organization/District-9/
*District Nine Local Notice to Mariners email Address* D09-DG-District-D9-LocalNoticeToMariners@uscg.mil
** Navigation Information Service watchstander, 24 hours a day at (703) 313-5900 **
**Internet Address**  https://www.navcen.uscg.gov/


The Local Notice to Mariners is available on the Internet at https://www.navcen.uscg.gov/local-notices-to-mariners-by-cg-district. You will also have links to other government agencies- web pages including the US Army Corps of Engineers and the National Ocean Service.

REPORT DISCREPANCIES IN AIDS TO NAVIGATION TO THE NEAREST COAST GUARD UNIT

The Ninth District and all Sector offices for their areas of responsibility issue a BROADCAST NOTICE TO MARINERS.

The following Broadcast Notice to Mariners have been incorporated into this week's Local Notice to Mariners:

- Sector Buffalo, NY - B105-22 through B113-22
- Ninth District - C111-22 through C112-22
- Sector Detroit, MI - D053-22 through D054-22
- Sector Lake Michigan, WI - M188-22 through M198-22
- Sector Sault Ste Marie, MI - S093-22 through S096-22

The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, is staffed 24 hours a day, 7 days a week. The NIS provides information on the current operational status, effective policies, and general information for GPS and DGPS. The NIS also disseminates Safety Broadcasts (BNM), Local Notice to Mariners (LNM), and the latest Notice Advisory to Navstar Users (NANU). NANU notices can be obtained via email subscription through the USCG Navigation Center website: https://cgls.uscg.mil/mailman/listinfo/nanu. In addition, the NIS investigates all reports of degradation or loss of GPS, DGPS or AIS service. Users are encouraged to report all degradation or loss of radio navigation services to the NIS via any of the following: Phone: (703) 313-5900, mail to: webmaster@smtp.navcen.uscg.mil, or on the internet at: https://www.navcen.uscg.gov

ABBREVIATIONS

<table>
<thead>
<tr>
<th>A through H</th>
<th>I through O</th>
<th>P through Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADRIFT - Buoy Adrift</td>
<td>I - Interrupted</td>
<td>PRIV - Private Aid</td>
</tr>
<tr>
<td>AICW - Atlantic Intracoastal Waterway</td>
<td>ICW - Intracoastal Waterway</td>
<td>Q - Quick</td>
</tr>
<tr>
<td>AI - Alternating</td>
<td>IMCH - Improper Characteristic</td>
<td>R - Red</td>
</tr>
<tr>
<td>B - Buoy</td>
<td>INL - Inlet</td>
<td>RACON - Radar Transponder Beacon</td>
</tr>
<tr>
<td>BKW - Breakwater</td>
<td>INOP - Not Operating</td>
<td>Ra ref - Radar reflector</td>
</tr>
<tr>
<td>bl - Blast</td>
<td>INT - Intensity</td>
<td>RBN - Radio Beacon</td>
</tr>
<tr>
<td>BNM - Broadcast Notice to Mariner</td>
<td>ISL - Islet</td>
<td>REBUILT - Aid Rebuilt</td>
</tr>
<tr>
<td>bu - Blue</td>
<td>Iso - Isophase</td>
<td>RECOVERED - Aid Recovered</td>
</tr>
<tr>
<td>C - Canadian</td>
<td>kHz - Kilohertz</td>
<td>RED - Red Buoy</td>
</tr>
<tr>
<td>CHAN - Channel</td>
<td>LAT - Latitude</td>
<td>REFLECT - Reflective</td>
</tr>
<tr>
<td>CGD - Coast Guard District</td>
<td>LB - Lighted Buoy</td>
<td>RRL - Range Rear Light</td>
</tr>
<tr>
<td>C/O - Cut Off</td>
<td>LBB - Lighted Bell Buoy</td>
<td>RELIGHTED - Aid Relit</td>
</tr>
<tr>
<td>CONT - Contour</td>
<td>LHB - Lighted Horn Buoy</td>
<td>RELOC - Relocated</td>
</tr>
<tr>
<td>CRK - Creek</td>
<td>LGB - Lighted Gong Buoy</td>
<td>RESET ON STATION - Aid Reset on Station</td>
</tr>
<tr>
<td>CONST - Construction</td>
<td>LONG - Longitude</td>
<td>RFL - Range Front Light</td>
</tr>
<tr>
<td>DAYMK/Daymk - Daymark</td>
<td>LNM - Local Notice to Mariners</td>
<td>RIV - River</td>
</tr>
<tr>
<td>DBN/Dbn - Daybeacon</td>
<td>LT CONT - Light Continuous</td>
<td>RRASS - Remote Radio Activated Sound Signal</td>
</tr>
<tr>
<td>DBD/DYBD - Dayboard</td>
<td>LT - Light</td>
<td>s - seconds</td>
</tr>
<tr>
<td>DEFAC - Defaced</td>
<td>LTR - Letter</td>
<td>SEC - Section</td>
</tr>
<tr>
<td>DEST - Destroyed</td>
<td>LWB - Lighted Whistle Buoy</td>
<td>SHL - Shoaling</td>
</tr>
</tbody>
</table>
SECTION I - SPECIAL NOTICES
This section contains information of special concern to the Mariner.

Cancellation of NOAA Paper and Raster Nautical Charts
The National Oceanic and Atmospheric Administration (NOAA) is undertaking a multi-year program to end production and maintenance of its suite of over 1,000 traditional paper nautical charts and all associated raster chart products and services, including: Print-on-Demand (POD) paper nautical charts, Full-size chart PDF files, BookletChart™ PDF files, NOAA raster navigational charts (NOAA RNC®), the NOAA RNC tile service, and the online RNC viewer.

Six months notice of the intent to cancel a specific chart is provided in a “Last Edition” notice. The final cancellation of a chart is made in a “Canceled” notice. Both types of notices will appear in LNM Section IV, “Chart Correction.” A comprehensive list of all canceled NOAA charts is available at: http://www.charts.noaa.gov/MCD/Dole.shtml.

Traditional paper nautical chart production is ending to enable the creation and maintenance of larger scale, more up-to-date, higher quality coverage of NOAA’s electronic navigational chart (NOAA ENC®) product. This will significantly enhance the amount of charted detail available to mariners. More information about NOAA’s program to sunset traditional paper charts is on the NOAA Coast Survey website at: https://nauticalcharts.noaa.gov/charts/farewell-to-traditional-nautical-charts.html

An online NOAA Custom Chart application at: https://devgis.charttools.noaa.gov/pod is available to create chart images from ENC data, which may then be printed. Notices to Mariners will not be issued for NOAA Custom Charts.

LNM: 04/20

USACE NOTICE TO NAVIGATION INTERESTS
Current Federal Channel conditions, shoaling, and the most recent channel surveys are available at the following Army Corps of Engineers web sites:

Buffalo: http://www.lrb.usace.army.mil/
Detroit: http://www.lre.usace.army.mil/
Chicago: http://www.lrc.usace.army.mil/
Rock Island: http://www.mvr.usace.army.mil/

LNM: 28/12

Navigation Center Website Transition
The U.S. Coast Guard Navigation Center is going to transition the Navigation Center website to a new, enhanced version in the first quarter of 2022. As part of this transition, URLs will be updated across the site including URLs linked to PDFs. Therefore, once the transition is complete, legacy site URLS will no longer function, including bookmarked URLs and URLs used in automatic downloading of data and/or products. Outdated URLs will automatically redirect to the home page of the site, and from there you will be able to easily navigate to your preferred page.

Below are a few of the “old/new URL pairs listed for your convenience. Please note that the new URLs will not be active until we launch the new website. Of course, once it is launched, the new URLs will be available for re-bookmarking. As a reminder, these are top level URLs that may contain additional links that you use.

This notice will be updated when the final launch date is determined and another notice will be issued to notify you when the site goes live. Questions/concerns may be directed to the NAVCENWebTEAM@uscg.mil.

LNM: 29/22
Local Notices to Mariners (LNMs)
Current URLs: https://www.navcen.uscg.gov/?pageName=lnmMain
Replacement: https://www.navcen.uscg.gov/local-notices-to-mariners-by-cg-district

Light Lists Annual Publication
Current URLs: https://navcen.uscg.gov/?pageName=lightLists
Replacement: https://www.navcen.uscg.gov/light-list-annual-publication

Light List - Weekly
Current URLs: https://navcen.uscg.gov/?pageName=lightListWeeklyUpdates
Replacement: https://www.navcen.uscg.gov/weekly-light-lists

Light List - Corrections
Current URLs: https://navcen.uscg.gov/?pageName=lightListCorrections
Replacement: https://www.navcen.uscg.gov/light-list-summary-of-corrections

---

**GREAT LAKES - Great Lakes Water Levels**

See Enclosure 1

The current and four week expected water level table for the Great Lakes, Connecting Channels and the St. Lawrence River, will be published in Enclosure 1 following SECTION VIII - LIGHT LIST CORRECTIONS of the Local Notice to Mariner or by visiting the link below:


**LNM: 05/22**

**Lake Erie – NY - Barcelona Harbor – Chart 14823**

Due to significant shoaling in the Barcelona Harbor Main Entrance, vessels are no longer able to transit the channel. All mariners are requested to transit the area with caution. The following Aids to Navigation have been temporary discontinued until dredging operations are complete.

Barcelona Harbor East Breakwater Light (LLNR 3480)
Barcelona Harbor West Breakwater Light (LLNR 3485)

**LNM: 32/20**

**ST. MARYS RIVER SYSTEM - DE TOUR PASSAGE TO WHITEFISH BAY - Charts 14882,14883,14884**

Due to unusually high water levels, SOO Traffic requests all mariners transiting the St. Marys River System to monitor their speed and corresponding wake to protect the shoreline.

**LNM: 14/20**

**ST. MARYS RIVER - AMERICAN CANAL - CHART 14884**

Northeast Pierhead Light (LLNR 14205) The U. S. Army Corps of Engineers will be relocating this light to the top of their new camera tower. As soon as the position and height of the light's new location is confirmed it will be advertised in Section VIII - Light List Corrections of the LNM.

**LNM: 10/21**

**LAKE ERIE - BUFFALO HARBOR - Chart 14833**

North Entrance Light "7" (LLNR 2720) The light has been temporarily discontinued due to construction on the breakwater. A temporary light without day marks and lowered focal plane has been established in position 42-52'50.220"N / 078-53'45.474"W. The characteristic is FL G 2.5s. Another lantern was mounted on the Northwest end of the breakwater in position 42-53'04.590"N / 078-54'05.880"W. The characteristic of this light is QW.

**LNM: 51/19**

**LAKE HURON - MI – Alpena - Chart – 14869**

From 19 July 2022 to 26 July 2022 USCGC SPAR will be assisting Thunder Bay National Marine Sanctuary (TBNMS) in the deployment of 12 wreck mooring buoys to include subsurface mooring buoys. Operations for positioning wreck moorings approximately in the vicinity of Alpena, MI (North PT: Lat: 45-32-03.268N / Long: 083-30-32.446W to Southern PT: Lat: 45-14-03.480N / Long: 083-16-42.420W. Underwater ROV deployment will be used while positioning wreck mooring buoys and subsurface buoys.

USCGC SPAR can be contacted on VHF channel 16. All mariners are requested to remain 1000 yards from the vessels while operations are being conducted and to transit the area with caution.

**LNM: 28/22**
LAKE MICHIGAN – New Buffalo Harbor - Chart 14905
Shoaling has been reported near the middle of the channel immediately inside the break wall in New Buffalo Harbor, MI. The actual water depth is currently significantly below the charted depth. Mariners are urged to use caution when transiting the area. For further details, contact Sector Lake Michigan at (414) 747-7182 or VHF channel 16.

LAKE MICHIGAN – WAUKEGON TO SOUTH HAVEN – CHART 14905
Michigan City – Two red nun unlighted buoys have been established in the following positions to best mark shoaling in Michigan City Harbor. The buoys are located across the channel from the Michigan City Outer Basin Light (LLNR 19570). The buoys positions may change as the shoaling changes.

Michigan City Buoy "2" 41-43-30.719N / 086-54-32.796W
Michigan City Buoy "4" 41-43-28.625N / 086-54-31.842W

LAKE MICHIGAN - WAUGOSHANCE POINT TO SEUL CHOIX POINT - CHART 14911
The abandoned Waugoshance Lighthouse located in approximate position 45-47-20N / 085-05-28W has become structurally unsafe. Landing and embarking on the light should not be attempted because of failing structural condition and it's in danger of collapsing. Mariners are advised to remain at least 300’ from the structure at all times.

LAKE MICHIGAN – Sheboygan River – Chart 14922
Shoaling has been reported in entrance of the Sheboygan River in the vicinity of 43-44.928N, 087-42.170W AND 43-44.936N, 087-42.110W. The actual water depth is currently significantly below the charted depth. Mariners are urged to use caution when transiting the area. For further details, contact Sector Lake Michigan at (414) 747-7182 or VHF channel 16.

LAKE MICHIGAN – Muskegon Harbor – Chart 14934
Shoaling has been reported in entrance of Muskegon Harbor. The actual water depth is currently significantly below the charted depth. Mariners are urged to use caution when transiting the area. For further details, contact Sector Lake Michigan at (414) 747-7182 or VHF channel 16.

LAKE SUPERIOR
The following NOAA Weather buoys have been commissioned for the season. Due to electronic positioning issues the buoys have been placed in their approximate position advertised in the light list.

A. NOAA LIGHTED WEATHER BUOY 45001 (LLNR 16880).
B. NOAA LIGHTED WEATHER BUOY 45004 (LLNR 16850).

SECTION II - DISCREPANCIES
This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

DISCREPANCIES (FEDERAL AIDS)

<table>
<thead>
<tr>
<th>LLNR</th>
<th>Aid Name</th>
<th>Status</th>
<th>Chart No.</th>
<th>BNM Ref.</th>
<th>LNM St</th>
<th>LNM End</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>St. Lawrence Seaway Lighted Buoy 5</td>
<td>LT EXT</td>
<td>14813-22</td>
<td>29/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5815</td>
<td>Erie Proving Ground Buoy H</td>
<td>OFF STA</td>
<td>14842</td>
<td>24/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8400</td>
<td>Peche Island Range Front Light</td>
<td>LT EXT</td>
<td>14853</td>
<td>26/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8410</td>
<td>Peche Island Range Rear Light</td>
<td>LT EXT/DAYMK MISSING</td>
<td>14853</td>
<td>D017-22</td>
<td>13/22</td>
<td></td>
</tr>
<tr>
<td>13025</td>
<td>Winter Point Range Rear Light</td>
<td>DAYMK MISSING</td>
<td>14887</td>
<td>S105-21</td>
<td>46/21</td>
<td></td>
</tr>
<tr>
<td>13205</td>
<td>Harwood Point West Range Rear Light</td>
<td>LT EXT</td>
<td>14887</td>
<td>SO96-22</td>
<td>29/22</td>
<td></td>
</tr>
<tr>
<td>13475</td>
<td>West Neebish Channel (Downbound)</td>
<td>DAYMK MISSING</td>
<td>14887</td>
<td>S113-21</td>
<td>51/21</td>
<td></td>
</tr>
<tr>
<td>13515</td>
<td>West Neebish Channel (Downbound)</td>
<td>DAYMK MISSING</td>
<td>14887</td>
<td>S56-21</td>
<td>25/21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Range Rear Light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LLNR</td>
<td>Aid Name</td>
<td>Status</td>
<td>Chart No.</td>
<td>BNM Ref.</td>
<td>LNM St</td>
<td>LNM End</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------</td>
<td>-------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>West Neebish Channel (Downbound) Oak Ridge Range Front Light</td>
<td>LT EXT</td>
<td>14887</td>
<td>S029-22</td>
<td>14/22</td>
<td></td>
</tr>
<tr>
<td>14050</td>
<td>Six Mile Point Range Rear Light</td>
<td>DAYMK MISSING</td>
<td>14883</td>
<td>S016-21</td>
<td>10/21</td>
<td></td>
</tr>
<tr>
<td>14465</td>
<td>Point Iroquois Shoal Lighted Buoy 33</td>
<td>LT EXT/TRUB</td>
<td>14884</td>
<td>S084-22</td>
<td>24/22</td>
<td></td>
</tr>
<tr>
<td>16650</td>
<td>Hat Point Lighted Bell Buoy 1</td>
<td>LT EXT</td>
<td>S075-22</td>
<td>23/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16660</td>
<td>Isle Royale West End Buoy 2</td>
<td>OFF STA</td>
<td>S071-22</td>
<td>23/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16965</td>
<td>Flag Island Lighted Buoy 4</td>
<td>OFF STA</td>
<td>14999</td>
<td>S95-21</td>
<td>43/21</td>
<td></td>
</tr>
<tr>
<td>17015</td>
<td>Warroad Range Front Light</td>
<td>LT EXT</td>
<td></td>
<td></td>
<td>43/21</td>
<td></td>
</tr>
<tr>
<td>17020</td>
<td>Warroad Range Rear Light</td>
<td>DAYMK MISSING</td>
<td></td>
<td></td>
<td>43/21</td>
<td></td>
</tr>
<tr>
<td>17210</td>
<td>Canoe Channel Daybeacon 8</td>
<td>STRUCT DEST/TRUB</td>
<td>14998</td>
<td></td>
<td>23/22</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>West Arm Buoy 6</strong></td>
<td>OFF STA</td>
<td>14913</td>
<td>S095-22</td>
<td>29/22</td>
<td></td>
</tr>
<tr>
<td>18405</td>
<td>Arcadia Harbor Light 1</td>
<td>LT EXT</td>
<td>14907</td>
<td></td>
<td>29/22</td>
<td></td>
</tr>
<tr>
<td>21275</td>
<td>Rowley Bay Buoy 2</td>
<td>MISSING</td>
<td>14909</td>
<td>M111-22</td>
<td>21/22</td>
<td></td>
</tr>
<tr>
<td>21455</td>
<td>Gravelly Island Shoal Buoy 4</td>
<td>MISSING</td>
<td>14909</td>
<td>M110-22</td>
<td>21/22</td>
<td></td>
</tr>
<tr>
<td>22180</td>
<td>Green Bay Harbor Entrance Channel Range Front Light</td>
<td>DAYMK DMGD</td>
<td>14918</td>
<td></td>
<td>24/21</td>
<td></td>
</tr>
<tr>
<td>22185</td>
<td>Green Bay Harbor Entrance Channel Range Rear Light</td>
<td>DAYMK MISSING</td>
<td>14918</td>
<td></td>
<td>44/20</td>
<td></td>
</tr>
</tbody>
</table>

**DISCREPANCIES (FEDERAL AIDS) CORRECTED**

**DISCREPANCIES (PRIVATE AIDS)**

<table>
<thead>
<tr>
<th>LLNR</th>
<th>Aid Name</th>
<th>Status</th>
<th>Chart No.</th>
<th>BNM Ref.</th>
<th>LNM St</th>
<th>LNM End</th>
</tr>
</thead>
<tbody>
<tr>
<td>2517</td>
<td>Youngstown Safe Boating Zone Lighted Float C</td>
<td>LT EXT</td>
<td>14816</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>2525</td>
<td>Lewiston Ski Jump Light</td>
<td>LT EXT</td>
<td>14816</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>2670</td>
<td>Buffalo Intake Crib Light</td>
<td>LT EXT</td>
<td>14833</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>2740</td>
<td>Buffalo River Light 5</td>
<td>LT EXT</td>
<td>14833</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>2790</td>
<td>State Breakwater Light 2</td>
<td>LT EXT</td>
<td>14833</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>3505</td>
<td>International Paper East Crib Light</td>
<td>LT EXT</td>
<td>14835</td>
<td></td>
<td>18/22</td>
<td></td>
</tr>
<tr>
<td>3890</td>
<td>Fairport Harbor Port Authority Boat Ramp Light</td>
<td>LT EXT</td>
<td>14837</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>3905</td>
<td>Painesville Inner Intake Crib Lighted Buoy 1</td>
<td>MISSING</td>
<td>14837</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>3910</td>
<td>Mentor Harbor Light 1</td>
<td>LT IMCH</td>
<td>14825</td>
<td>B045-22</td>
<td>20/22</td>
<td></td>
</tr>
<tr>
<td>3930</td>
<td>Mentor Harbor Yacht Club Range Front Light</td>
<td>LT EXT</td>
<td>14825</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>3935</td>
<td>Mentor Harbor Yacht Club Range Rear Light</td>
<td>LT EXT</td>
<td>14825</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>4021</td>
<td>Newport Harbor Entrance Light 1</td>
<td>LT EXT</td>
<td>14826</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>4022</td>
<td>Newport Harbor Entrance Light 2</td>
<td>LT EXT</td>
<td>14826</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>4030</td>
<td>Cleveland Waterworks Intake Crib Light</td>
<td>SS INOP</td>
<td>14826</td>
<td></td>
<td>22/22</td>
<td></td>
</tr>
<tr>
<td>4104</td>
<td>Bkl Regulated Navigation Area Light</td>
<td>LT EXT</td>
<td>14839</td>
<td></td>
<td>25/22</td>
<td></td>
</tr>
<tr>
<td>4105</td>
<td>Lakeside Yacht Club Entrance North Light</td>
<td>LT IMCH</td>
<td>14839</td>
<td>B029-22</td>
<td>17/22</td>
<td></td>
</tr>
<tr>
<td>4110</td>
<td>Lakeside Yacht Club Entrance South Light</td>
<td>LT EXT</td>
<td>14839</td>
<td>B029-22</td>
<td>17/22</td>
<td></td>
</tr>
<tr>
<td>4150</td>
<td>North Coast Harbor Light 2</td>
<td>LT EXT</td>
<td>14839</td>
<td></td>
<td>20/22</td>
<td></td>
</tr>
<tr>
<td>4240</td>
<td>Cuyahoga River Abutment Light</td>
<td>LT EXT</td>
<td>14839</td>
<td></td>
<td>27/22</td>
<td></td>
</tr>
<tr>
<td>4255</td>
<td>Bradstreet Landing Dock Light</td>
<td>LT EXT</td>
<td>14826</td>
<td></td>
<td>18/22</td>
<td></td>
</tr>
</tbody>
</table>
This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

### Temporary Changes

<table>
<thead>
<tr>
<th>LLNR</th>
<th>Aid Name</th>
<th>Status</th>
<th>Chart No.</th>
<th>BNM Ref.</th>
<th>LNM St</th>
<th>LNM End</th>
</tr>
</thead>
<tbody>
<tr>
<td>2105</td>
<td>Oswego Harbor West Channel Light 2</td>
<td>TRLB</td>
<td>14813</td>
<td></td>
<td>17/19</td>
<td></td>
</tr>
<tr>
<td>2720</td>
<td>Buffalo Harbor North Entrance Light 7</td>
<td>DISCONTINUED</td>
<td>14833</td>
<td></td>
<td>33/19</td>
<td></td>
</tr>
<tr>
<td>3480</td>
<td>Barcelona Harbor East Breakwater Light</td>
<td>DISCONTINUED</td>
<td>14823</td>
<td></td>
<td>23/22</td>
<td></td>
</tr>
<tr>
<td>3485</td>
<td>Barcelona Harbor West Breakwater Light</td>
<td>DISCONTINUED FOR DREDGING</td>
<td>14823</td>
<td></td>
<td>23/22</td>
<td></td>
</tr>
<tr>
<td>5435</td>
<td>West Harbor Inner Channel Daybeacon 12</td>
<td>TRUB</td>
<td>14842</td>
<td></td>
<td>33/21</td>
<td></td>
</tr>
<tr>
<td>5470</td>
<td>West Harbor Inner Channel Daybeacon 14</td>
<td>TRUB</td>
<td>14842</td>
<td></td>
<td>48/20</td>
<td></td>
</tr>
<tr>
<td>8240</td>
<td>William Livingstone Memorial Light</td>
<td>Reduced Intensity</td>
<td>14853</td>
<td></td>
<td>33/21</td>
<td></td>
</tr>
<tr>
<td>9690</td>
<td>Grande Pointe Light 23</td>
<td>TRLT</td>
<td>14853</td>
<td></td>
<td>47/20</td>
<td></td>
</tr>
<tr>
<td>14020</td>
<td>Frechette Point Range Rear Light</td>
<td>Reduced Intensity</td>
<td>14883</td>
<td></td>
<td>21/22</td>
<td></td>
</tr>
<tr>
<td>15220</td>
<td>Ontonagon Harbor East Breakwater Light</td>
<td>DISCONTINUED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION IV - CHART CORRECTIONS

This section contains corrections to federally and privately maintained Aids to Navigation, as well as NOS corrections. This section contains corrective actions affecting chart(s). Corrections appear numerically by chart number, and pertain to that chart only. It is up to the mariner to decide which chart(s) are to be corrected. The following example explains individual elements of a typical chart correction.

<table>
<thead>
<tr>
<th>Chart Number</th>
<th>Chart Edition</th>
<th>Last Local Notice to Mariners</th>
<th>Horizontal Datum Reference</th>
<th>Source of Correction</th>
<th>Current Local Notice to Mariners</th>
<th>BNM Ref.</th>
<th>LNM St</th>
<th>LNM End</th>
</tr>
</thead>
<tbody>
<tr>
<td>12327</td>
<td>91st Ed.</td>
<td>19-APR-97</td>
<td>NAD 83</td>
<td>CGD01</td>
<td>27/97</td>
<td>29/22</td>
<td>N/A</td>
<td>29/22</td>
</tr>
<tr>
<td>Chart Title: NY-NJ-NEW YORK HARBOR - RARITAN RIVER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Panel 2245 NEW YORK HARBOR</td>
<td>(Temp) ADD NATIONAL DOCK CHANNEL BUOY 3</td>
<td>at 40-41-09.001N 074-02-48.001W</td>
<td>Corrective Action Green can</td>
<td>Chart No. 1: K41 (NOS NW-31295)</td>
<td>from 42-15-01.630N to 42-15-00.000N</td>
<td>083-06-57.726W 083-07-05.520W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Temp) indicates that the chart correction action is temporary in nature. Courses and bearings are given in degrees clockwise from 000 true. Bearings of light sectors are toward the light from seaward. The nominal range of lights is expressed in nautical miles (NM) unless otherwise noted.

11485 39th Ed. 01-SEP-20 Last LNM: 24/22 NAD 83 29/22

Chart Title: Intracoastal Waterway Tomatoma River to Palm Shores

RELOCATE Fighting Island North Lighted Buoy 104D (C) CGD09

from 42-15-01.630N to 42-15-00.000N

083-06-57.726W 083-07-05.520W

14820 22nd Ed. 01-MAY-20 Last LNM: 48/19 NAD 83 29/22

Chart Title: Lake Erie

Main Panel 1134 LAKE ERIE - -. Page/Side: - NOS

ADD Obstruction in Meters; 5_5 Obstn Chart No. 1: K41 (NOS NW-31295) 41-37-36.119N 082-45-36.092W

14830 34th Ed. 01-FEB-19 Last LNM: 38/18 NAD 83 29/22

Chart Title: West End of Lake Erie; Port Clinton Harbor; Monroe Harbor; Lorain to Detroit River; Vermilion

Main Panel 1151 WEST END OF LAKE ERIE - -. Page/Side: - NOS

ADD Obstruction in Feet; 13 Obstn Chart No. 1: K41 (NOS NW-31295) 41-36-31.204N 082-45-14.894W

NOS

ADD Obstruction in Feet; 18 Obstn Chart No. 1: K41 (NOS NW-31295) 41-37-36.119N 082-45-36.092W

14842 17th Ed. 01-NOV-18 Last LNM: 38/17 NAD 83 29/22

Chart Title: SMALL-CRAFT BOOK CHART - Port Clinton to Sandusky, including the Islands (book of 35 charts)

Extension 1189 ISLANDS IN LAKE ERIE 28 - -. Page/Side: -
SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

SUMMARY OF ADVANCED APPROVED PROJECTS

<table>
<thead>
<tr>
<th>Approved Project(s)</th>
<th>Project Date</th>
<th>Ref. LNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advance Notice(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LAKE ERIE – SOUTH SHORE OF LAKE ERIE – CHART 14842</strong></td>
<td></td>
</tr>
<tr>
<td>Squaw Island Light (LLNR 5085) Change the name of the aid to Muddy Creek Light (LLNR 5085)</td>
<td>LNM: 18/22</td>
</tr>
<tr>
<td><strong>ST. MARYS RIVER – DE TOUR PASSAGE TO MUNUSCING LAKE – CHART 14882</strong></td>
<td></td>
</tr>
<tr>
<td>Squaw Island Light &quot;4&quot; (LLNR 12895) Change the name to St Marys River Light &quot;4&quot; (LLNR 12895)</td>
<td>LNM: 18/22</td>
</tr>
</tbody>
</table>
LAKE MICHIGAN – WAUGOSHANCE POINT TO CHOIX POINT – CHART 14911
Squaw Island Shoal Buoy "2" (LLNR 21560) Change the name to Garden Island Buoy "2" (LLNR 21560)
Squaw Island Shoal Buoy "1" (LLNR 21565) Change the name to Garden Island Buoy "1" (LLNR 21565)

GREEN BAY – LITTLE BAY DE NOC – CHART 14915
Squaw Point Lighted Buoy "12" (LLNR 14915) Change the name to Little Bay De Noc Lighted Buoy "12" (LLNR 21690)

LAKE SUPERIOR – DULUTH SUPERIOR HARBOR - Chart 14975
Duluth Harbor Basin Traffic Lighted Buoy (LLNR 15870)  Permanently discontinue the physical and continue the aid as a Virtual AIS MMSI 993672226.

MINNESOTA-ONTARIO BORDER LAKES – NAMAKAN LAKE – CHART 14994
Squaw Narrows Daybeacon "4" (LLNR 17460) Change the name to Namakan Lake Light "4" (LLNR 17460)

SECTION VI - PROPOSED CHANGES
Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office unless otherwise noted (see banner page for address).

PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENT

<table>
<thead>
<tr>
<th>Proposed Project(s)</th>
<th>Closing</th>
<th>Docket No.</th>
<th>Ref. LNM</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Proposed Change Notice(s)
For any comments or questions on these proposed changes please contact:
The Ninth District Aids to Navigation office at D09-DG-District-D9-LocalNoticetoMariners@uscg.mil or call (216) 902-6078

SECTION VII - GENERAL
This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

Waterways Analysis and Management System
The Ninth Coast Guard District will be reviewing the following waterways beginning in 2022. The study focuses primarily on aids to navigation in the waterway. Public comments are an important tool in this process so that we can provide the adequate markings and the right mix of signals to a waterway for safe navigation. Comments on the below listed waterways can be sent to Brian.A.Smicklas@uscg.mil or by calling (216) 902-6054. You may also complete the survey attached to the Local Notice to Mariner and either email it or mail it to: Commander (dpw), Ninth Coast Guard District, 1240 East Ninth St., Cleveland, Ohio 44199.

<table>
<thead>
<tr>
<th>Waterway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sackets Harbor</td>
</tr>
<tr>
<td>(LLNR 1755-2024.9)</td>
</tr>
<tr>
<td>Buffalo Harbor/Black Rock Canal</td>
</tr>
<tr>
<td>(LLNR 2665-3360)</td>
</tr>
<tr>
<td>Dunkirk Harbor</td>
</tr>
<tr>
<td>(LLNR 3365-3492)</td>
</tr>
<tr>
<td>Erie Harbor</td>
</tr>
<tr>
<td>(LLNR 3495-3696)</td>
</tr>
<tr>
<td>Conneaut Harbor</td>
</tr>
<tr>
<td>(LLNR 3700-3735)</td>
</tr>
<tr>
<td>Ashtabula Harbor</td>
</tr>
<tr>
<td>(LLNR 3740-3830)</td>
</tr>
<tr>
<td>Fairport Harbor</td>
</tr>
<tr>
<td>(LLNR 3835-3955)</td>
</tr>
<tr>
<td>Cleveland Harbor</td>
</tr>
<tr>
<td>(LLNR 3975-4260)</td>
</tr>
<tr>
<td>Huron Harbor</td>
</tr>
<tr>
<td>(LLNR 4430-5455)</td>
</tr>
<tr>
<td>Erie Islands</td>
</tr>
<tr>
<td>(LLNR 5520-6025)</td>
</tr>
<tr>
<td>Detroit River / East Outer Channel</td>
</tr>
<tr>
<td>(LLNR 6885-8270)</td>
</tr>
<tr>
<td>St. Clair Rec/Belle Isle Channel</td>
</tr>
</tbody>
</table>
**Waterways Analysis and Management System**

(LLNR 8280-8396)

Lake St. Clair  (LLNR 8665-9300)

Anchor Bay  (LLNR 9305-9565)

Toledo / Maumee Channel  (LLNR 6030-6455)

Monroe Harbor  (LLNR 6460-6680)

St. Clair River / Huron Cut  (LLNR 9570-10090)

St. Mary's River  (LLNR 12765-13755)

Lake Nicolet / Bayfield Channel  (LLNR 13955-14192)

Keweenaw Waterway  (LLNR 14725-15250)

Knife River / Two Harbors  (LLNR 16495-16580)

Straits of Mackinaw Western Section  (LLNR 17720-17850)

Sturgeon Bay Ship Canal  (LLNR 20990-21225)

Green Bay Entrance  (LLNR 21985-22360)

M.I.R.  (LLNR 11780-12170)

Marquette Harbor  (LLNR 14620-14720)

Apostle Islands  (LLNR 15255-15590)

St. Joseph / Benton Harbor  (LLNR 19515-19534.4)

Milwaukee  (LLNR 20635-20765)

---

**Great Lakes - Marine Events**

Marine events such as races, parades, regattas, and fireworks displays are frequently held in the Great Lakes region. Advance information on specific events is contained in enclosure (2) of this publication. The public is reminded to listen to the local broadcast notice to mariners for the most up-to-date information on a marine event. Mariners are advised that some events may require temporary aids to navigation that are not displayed on a chart or in the Light List, and that they should exercise additional caution while operating in the vicinity of a scheduled marine event.

**Lake Ontario** - NY - Little Sodus Bay – Chart 14811

From 20 Jun 2022 to 21 Dec 2022 the Crane-Hogan Structural Systems, Inc will be conducting pier repair in the vicinity of West side of the channel from Little Sodus Bay to Lake Ontario (Fair Haven, NY). Hours of operation are from 0600 to 1730 Monday through Friday. All mariners are requested to transit the area with caution.

**Lake Ontario - Rochester Harbor-Chart 14815**

From 23 May 2022 to 15 Sep 2022 Great Lakes Dock and Materials LLC will be conducting pier repairs at the Rochester Harbor East Pier in Charlotte NY. Hours of operation is 24 hours a day 7 days a week. Tug Duluth, Barge Jacquelyn, Barge Hannah Avery, and GLDM can be contacted on VHF channels 7 and 16. All traffic should stay clear of the Operations if possible. Please have positive contact with equipment, marine equipment shall be located near east pier in Rochester Harbor, both channel and Lake Ontario sides of pier. Marine equipment will traverse in and out of the harbor daily.

**Lake Erie - OH - Ashtabula Harbor – Chart 14836**

Construction of submerged breakwater in Ashtabula Harbor remains partial unfinished. Buys are unlighted marking the hazard of the breakwater. Buys may change position as seasonal weather changes. Current positions as follows:

Buoy "1" 41-55-07.841N / 080-47-25.303W
Buoy "2" 41-54-58.921N / 080-47-16.850W
Buoy "3" 41-54-58.281N / 080-47-14.290W
Buoy "4" 41-54-56.304N / 080-47-14.726W
Buoy "5" 41-54-56.307N / 080-47-11.234W
Buoy "6" 41-54-58.474N / 080-47-02.054W

Mariners are advised to remain at least 300' from the breakwater. All mariners are requested to transit the area with caution.
LAKE ERIE – OH – Ashtabula – Chart 14836
From 20 Jun 2022 to 14 Sep 2022 the Geo Gradel Co. will be conducting dredging in the Ashtabula River and Harbor. Hours of operation are from 0700 to 1900 7 days a week, Tug John Francis and Barge Crow can be contacted on VHF channels 10, 16, and 18. All mariners are requested to transit the area with caution.

LNM: 23/22

LAKE ERIE – Fairport Harbor – Chart 14837
From 25 Jul 2022 to 31 Aug 2022 Ryba Marine Construction Co. will be conducting dredging in the Fairport Harbor. Hours of operation are 24 hours a day 7 days a week. Tug Kathy Lynn can be contacted on VHF channels 13 and 16. All mariners are requested to transit the area with caution.

LNM: 29/22

LAKE ERIE – OH – Cleveland Harbor – Chart 14839
From 27 Jun 2022 to 30 Sep 2022 Dean Marine and Excavating will be conducting breakwater repairs on the Cleveland Harbor West Basin Cuyahoga River channel. Hours of operation are from 0700 to 1900 7 days a week. Tug Madison R and Paige Noel can be contacted on VHF channel 16. Request 2 hour notice of arrival for commercial traffic. All mariners are requested to transit the area with caution.

LNM: 28/22

LAKE ERIE – Lake Erie Islands - Chart 14844
From 15 Jul 2022 to 01 Aug 2022 Nerone and Sins Inc. will be installing Sub-Aqueous power lines in the vicinity of Middle Bass Island (41°40'53.29"N / 82°48'9.58"W) to Ballast Island (41°40'44.13"N / 82°47'9.87"W). Hours of operation from 0700 to 1700 Monday through Friday. Tug Theresa can be contacted on VHF channels 16 and 69. Vessels are requested to remain 200 yards in all directions and to transit the area with caution.

LNM: 28/22

LAKE ERIE – Western Basin – Chart 14839
From 02 May 2022 to 30 Sep 2022 NOAA Ship Thomas Jefferson will be conducting hydrographic survey operations in the vicinity of Cleveland, Erie, and South Passage. Hours of operation are 24 hours a day 7 days a week. Gear may be towed astern. The ship and TJ small boats (TJ2903 and TJ2904) can be contacted on VHF channels 13 and 16. All mariners are requested to transit the area with caution.

LNM: 18/22

LAKE ST. CLAIR - MI - St. Clair Shores, MI - Chart 14850
E. C. Kosneffes Co. will be installing boardwalks and piers into Lake St. Clair at Blassom and Heath Park from 13 Sep. 21 to 01 Dec 22 from 0700 to 1900 Monday through Saturday. Tug Captain Dave and barge Comanche can be contacted on VHF channels 13 & 16. All mariners are requested to transit the area with caution.

LNM: 37/21

LAKE HURON – MI – Saginaw River – Chart 14867
From 15 July 2022 to 31 Sep 2022 Luedtke Engineering Co. will be conducting maintenance dredging near the mouth of the Saginaw River. Hours of operation are 24 hours a day 7 days a week. Tug Paul Luedtke can be contacted on VHF channels 10, 16, and 19. All mariners are requested to transit the area with caution.

LNM: 13/22

ST. Mary's River – MI – Saint Mary's SOO Locks – Chart 14887
Kokosing-Alberici LLC will commence construction on the New Soo Lock Upstream Approach Walls April of 2021. Construction activities will be generally limited to the upstream north channel approach to the decommissioned Sabin and Davis Locks. Delivery by barge and boat of materials, equipment and crew will cross the upstream approach to the Soo Locks navigation channel throughout construction. Operations will commence from 25 Mar 21 to 15 Oct 23 Monday through Saturday 24 hours a day.

LNM: 09/21

STRAITS OF MACKINAW - Point LaBarbe to Point Emmet - Chart 14881
From 15 Apr 2022 to 31 Dec 2022 Kokosing Industrial Durocher Marine Division will be conducting backfill operations to protect new American Transmission Company 138kv submarine power cables installed in 2021. Hours of operation are 24 hours a day 7 days a week. Tugs Valerie B, Nancy Anne, Champion, General, Barges Kokosing I, Kokosing III, Kokosing IV, D-2002, D-2006, crew boat Timmy V and 24’ work boat will be on scene and monitoring VHF channels 13 and 16. All vessels are requested to remain 1500’ (500-yard safety zone) away from construction vessels and transit the area with caution.

LNM: 06/22

STRAITS OF MACKINAC - Chart 14881
From 18 July 2022 to 09 Aug 2022 Collins Engineers Inc will be conducting hydrographic survey and underwater bridge inspection of the Mackinac Bridge. Hours of operation are from 0700 to 1900 7 days a week. Dive vessel Bottom Bouncer can be contacted on VHF channel 16. A white 28 ft cabin boat marked “Collins Engineers” will be on the water and conducting multi-beam sonar survey operations and underwater dive operations with surface supplied air dive gear. All vessels are requested to transit the area with caution.

LNM: 28/22

LAKE MICHIGAN – Western Lake Michigan- CHART 14903, 14906
From 02 May 2022 to 31 Aug 2022 Geodynamics will be conducting hydrographic survey in support of nautical chart updates 14nm offshore of Fox Point up to 14nm offshore of Kewaunee Nuclear Power Plant. Survey operations will begin near Port Washington and transition north to Sheboygan and Manitowoc area in June 2022. Surveys will be conducted 24 hours a day, 7 days a week, on the RV Substantial is a 65 ft steel hull survey vessel operating multibeam sonar. The RV Substantial is a 65 ft steel hull survey vessel operating multibeam sonar and towing sound speed equipment. Please provide .5 nautical mile distance when possible. Mariners are urged to transit at their slowest safe speed in the vicinity of the survey vessels to minimize wake. All survey vessels have AIS and will monitor VHF channels 16/13.

LNM: 18/22
LAKE MICHIGAN – Michigan City – Chart 14926
From 01 June 2022 to 31 July 2022 Roen Salvage Company will be conducting breakwater repairs in Michigan City Harbor outer breakwater. Hours of operation are 24 hours a day 7 days a week. Tug Stephan Asher can be contacted on VHF channels 7 and 16. All mariners are requested to keep clear of the operations and pass with no wake.

LNM: 20/22

LAKE MICHIGAN – Burns Harbor – Chart 14926
From 5 Jul 2022 to 15 Aug 2022 Ryba Marine Construction Co will be conducting maintenance dredging in Burns Harbor, IN. Hours of operation are 24 hours a day 7 days a week. Tug Kristin Joelle can be contacted on VHF channels 13 and 16. All mariners are requested to transit the area with caution.

LNM: 27/22

Lake Michigan – IL – Whiting – Chart 14929
From 1 Jul 2022 to 30 Nov 2022 Kokosing Industrial, Great Lakes Marine Division will be conducting intake replacement offshore from the BP Whiting Refinery in position 41°40'49.325N, 087°28'24.272W. Hours of operation are 0700 to 1900 Monday through Saturday. Tug Nancy can be contacted on VHF channels 13 and 16. Crane and diving barges will be spudded down within 200 feet of the intake cribbing. All mariners are requested to transit the area with caution.

LNM: 23/22

LAKE MICHIGAN – IL – Calumet Harbor – Chart 14972
From 23 May 2022 to 31 July 2022 Luedtke Engineering Co. will be conducting maintenance dredging in the Calumet Harbor and River. Hours of operation are 24 hours a day 7 days a week. Tug Ann Marie and Tug Kurt can be contacted on VHF channels 10, 16, and 19. Crane and diving barges will be spudded down within 200 feet of the intake cribbing. All mariners are requested to transit the area with caution.

LNM: 19/22

LAKE MICHIGAN – Port Washington – Chart 14904
From 5 Jul 2022 to 30 Jul 2022 Roen Salvage Company will be conducting breakwater repairs on the Port Washington Breakwater. Hours of operation are 24 hours a day 7 days a week. Tug Stephan Asher can be contacted on VHF 7 and 16. All mariners are requested to transit the area with caution.

LNM: 27/22

Lake Michigan – IL – Waukegan Harbor – Chart 14905
From 7 Jun 2022 to 15 Aug 2022 the Great Lakes Dock and Material, LLC will be conducting breakwater repair work on the Waukegan Harbor Breakwater. Hours of operation are 24 hours a day 7 days a week. Barge Justin Avery and Tug Duluth can be contacted on VHF channels 16 and 18. Please have positive contact with equipment, marine equipment will be located along the north breakwater of Waukegan Harbor and shall travel in and out of the harbor. Equipment include crane barge, material barges and tug boats. All mariners are requested to transit the area with caution.

LNM: 23/22

LAKE MICHIGAN – Muskegon Harbor – Chart 14934
From 15 Jun 2022 to 30 Jul 2022 The King Company, Inc will be conducting hydraulic dredging in the outer channel in Muskegon, MI. Hours of operation are 24 hours a day 7 days a week. Dredge Buxton II can be contacted on VHF channels 16, 18, and 73. Submerged pipe laying on the lake floor marked by orange round buoys every 500 feet. Disposal area starts 3,500 feet south of the breakwater and runs for an additional 2,000’. All mariners are requested to transit the area with caution.

LNM: 24/22

LAKE MICHIGAN – St. Joseph River - Chart 14905
From 23 Jul 2022 to 05 Aug 2022 Roen Salvage Company will be conducting dredging in the St. Joseph River MI. Hours of operation are from 0700 to 1900 7 days a week. Tug Stephen Asher can be contacted on VHF channels 7 and 16. All mariners are requested to transit the area with caution.

LNM: 29/22

LAKE SUPERIOR - Apostle Islands - Chart 14966
The University of Wisconsin (Madison) is commissioning 8 water environment monitoring buoys around the Apostle Islands from 15 June 2022, to 30 September 2022. The buoys are yellow in color and are 2’ in diameter with sensor equipment. All mariners are advised to use caution while transiting Apostle Islands during this timeframe.

LNM: 18/22

LAKE SUPERIOR – DULUTH SUPERIOR HARBOR - Chart 14975
From 11 Jul 2022 to 15 Sep 2022 Roen Salvage Company will be conducting maintenance dredging in the federal navigation channel in the Duluth-Superior Harbor. Hours of operation are 24 hours a day 7 days a week. Tug John Asher can be contacted on VHF channels 7 and 16. All mariners are requested to transit the area with caution.

LNM: 26/22

LAKE SUPERIOR – MN – Spirit Lake – Chart 14975
From 09 May 2022 to 15 Sept 2022 the J.F. Brennan Company will be conducting dredging and capping operations. Operations will be in the vicinity of 46°41'35.0"N 92°12’11.4"W out to 46°41’37.7"N 92°11’54.4"W and down to 46°41’12.8"N 92°11’46.2"W and in the vicinity of from shoreline out to 46°40’37.9"N 92°11’50.4"W then north up to 46°40’50.9”N 92°11’54.9”W and back into the shoreline. HDPE pipeline will be running from the dredges and exiting the water in the vicinity of 46°41’03.8”N, 92°12’18.4”W. Hours of operation will be 24 hours a day Monday through Saturday. Dredge Mark Anthony, Dredge Calumet and Spreader Barge Neenah can be contacted on VHF channels 16. All mariners are requested to transit the area with caution.
From July 2022 to November 2023 J.F. Brennan Company, Inc will be conducting Hydraulic Dredging operations in this area, with a sunken dredge pipeline running north from near the Spirit Lake Marina to Hallett Dock #7 along the western shoreline of the St. Louis River. The pipeline will be demarcated with buoys along the entirety of the pipe, approximately every 500 FT. Floating booster pump platforms will be between Hallett Dock #7 and Spirit Lake Marina, with construction signage upstream and downstream of the work zone. The work zone will mainly be between Munger Landing and the island just to the east of the landing. Within the work zone, there will be several pieces of equipment along with floating dredge pipelines.

From 6 Jul 2022 to 3 Sep 2022 J.F. Brennan Company will be conducting dredging and cover replacement behind the Erie Pier along the St. Louis River in the vicinity of 46-44-24.42N, 092-09-08.68W. Hours of operation are 24 hours a day Monday through Saturday. All mariners are requested to transit the area with caution.

SECTION VIII - LIGHT LIST CORRECTIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Name and Location</th>
<th>Position</th>
<th>Characteristic</th>
<th>Height</th>
<th>Range</th>
<th>Structure</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>8115</td>
<td>Fighting Island North Lighted Buoy 104D (C)</td>
<td>42-15-00.000N 083-07-05.520W</td>
<td>Fl R 4s</td>
<td>Red.</td>
<td></td>
<td></td>
<td>Spar; winter marker. Seasonal.</td>
</tr>
<tr>
<td>16665</td>
<td>West Isle Royale Weather Wave Buoy 2</td>
<td>47-54-51.300N 089-20-20.800W</td>
<td>Fl W 2.5s</td>
<td></td>
<td></td>
<td></td>
<td>Maintained from May 1 to Nov. 31. Private Aid.</td>
</tr>
<tr>
<td>20635</td>
<td>Milwaukee Breakwater Light</td>
<td>43-01-37.021N 087-52-54.959W</td>
<td>F R</td>
<td>61 15</td>
<td>Black lantern on white square structure.</td>
<td>Light Characteristic is FL R (2) 10s. Two Red Flashes in 10 seconds. HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si). Operates by keying the microphone five times on channel 83A.</td>
<td></td>
</tr>
</tbody>
</table>

ENCLOSURES

(1) LNM Section I - Special Notices

1-Great Lakes Water Levels

(2) LNM Section II - Discrepancies

N/A

(3) LNM Section III - Temporary Changes and Temporary Changes Corrected

N/A

(4) LNM Section IV - Chart Corrections

N/A

(5) LNM Section V - Advance Notices

N/A
(6) LNM Section VI - Proposed Changes
N/A

(7) LNM Section VII - General
1-Marine Events
2-Current Ninth District Bridge Maintenance/Activities
3-Waterway Analysis and Management System Survey
4-R/V Lake Char operations in Lake Superior, April-June 2022
5-Solo Chicago to Mackinac Challenge
6-Solo Port Huron to Mackinac Challenge

(8) LNM Section VIII - Light List Corrections
N/A

M. J. Johnston, RADM
U. S. Coast Guard
Commander, Ninth Coast Guard District
### GREAT LAKES, CONNECTING CHANNELS AND ST. LAWRENCE RIVER

**WATER LEVELS AND DEPTHS**

Expected water levels on the Great Lakes, Connecting Channels and the St. Lawrence River are given in inches above (+,0) or below (-,0) Low-Water Datum (LWD,0). LWD is a plane of reference on a navigation chart, also known as Chart Datum. LWD elevations shown below are given in International Great Lakes Datum, 1985 (IGLD 1985,0).

<table>
<thead>
<tr>
<th>Forecast Point</th>
<th>Low Water Datum</th>
<th>Expected Levels (inches above or below Low Water Datum,0)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GREAT LAKES</strong></td>
<td>IGLD 1985</td>
<td>Current</td>
</tr>
<tr>
<td>Lake Ontario</td>
<td>243.3</td>
<td>31</td>
</tr>
<tr>
<td>Lake Erie</td>
<td>569.2</td>
<td>44</td>
</tr>
<tr>
<td>Lake St. Clair</td>
<td>572.3</td>
<td>43</td>
</tr>
<tr>
<td>Lake Michigan-Huron</td>
<td>577.5</td>
<td>31</td>
</tr>
<tr>
<td>Lake Superior</td>
<td>601.1</td>
<td>16</td>
</tr>
<tr>
<td><strong>ST. LAWRENCE RIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above Long Sault Dam</td>
<td>0</td>
<td>237.9</td>
</tr>
<tr>
<td>Above Iroquois Dam</td>
<td>1</td>
<td>240.3</td>
</tr>
<tr>
<td>Ogdensburg</td>
<td>2</td>
<td>242.4</td>
</tr>
<tr>
<td>Alexandria Bay</td>
<td>2.1</td>
<td>243.0</td>
</tr>
<tr>
<td>Head of river at Cape Vincent</td>
<td>3</td>
<td>243.3</td>
</tr>
<tr>
<td><strong>DETROIT RIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Erie at Pelee Passage</td>
<td>4</td>
<td>569.2</td>
</tr>
<tr>
<td>Mouth of River at Gibraltar</td>
<td>5</td>
<td>569.5</td>
</tr>
<tr>
<td>Fort Wayne</td>
<td>5.1</td>
<td>571.1</td>
</tr>
<tr>
<td>Head of River above Belle Isle</td>
<td>6</td>
<td>572.0</td>
</tr>
<tr>
<td><strong>ST. CLAIR RIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouth of River at St. Clair Flats</td>
<td>7</td>
<td>572.3</td>
</tr>
<tr>
<td>Algonac</td>
<td>8</td>
<td>572.8</td>
</tr>
<tr>
<td>St. Clair</td>
<td>9</td>
<td>574.4</td>
</tr>
<tr>
<td>Blue Water Bridge</td>
<td>10</td>
<td>576.2</td>
</tr>
<tr>
<td>Head of River at Fort Gratiot</td>
<td>11</td>
<td>577.2</td>
</tr>
<tr>
<td>Lake Huron Approach Channel</td>
<td>12</td>
<td>577.5</td>
</tr>
<tr>
<td><strong>ST. MARYS RIVER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouth of River at Detour</td>
<td>13</td>
<td>577.5</td>
</tr>
<tr>
<td>West and Middle Neebish</td>
<td>14</td>
<td>577.8</td>
</tr>
<tr>
<td>Head of Little Rapids</td>
<td>15</td>
<td>578.4</td>
</tr>
<tr>
<td>U.S. Slip</td>
<td>16</td>
<td>578.7</td>
</tr>
<tr>
<td>Above Locks</td>
<td>17</td>
<td>600.4</td>
</tr>
<tr>
<td>Head of River at Point Iroquois</td>
<td>18</td>
<td>601.1</td>
</tr>
</tbody>
</table>

**UNDERSTANDING THE FORECAST**

Available water depth is determined for a location by adding (+,0) or subtracting (-,0) the amount from the above table to the appropriate channel depth shown in the profile Connecting Channel Depths Graphic or to water depths shown on National Oceanic and Atmospheric Administration (NOAA) navigational charts.

**CAUTION**

Depths so determined are representative of a still water surface elevation, disturbed by neither wind nor other causes. Depths, however, may be reduced or increased as much as several feet for short periods due to these disturbances, or when sections of channels develop shoals. Vessel masters should refer to “Local Notice to Mariners” for extent of shoaling and scattered bedrock projections in all channels. Ice conditions can have a dramatic impact on actual channel depth and can lead to large short-term water level fluctuations. Ice information can be found at the National Ice Center’s website.

**FOR FURTHER INFORMATION CONTACT:**

Detroit District Corps of Engineers  
477 Michigan Avenue  
Detroit MI, 48226  
1-888-694-8318 ex. 1  
sent: hhpm@usace.army.mil

**FOR MORE INFORMATION VISIT:**

Detroit District Great Lakes Homepage  
International Joint Commission  
Great Lakes Information Network  
NOAA Tides and Currents  
U.S. Coast Guard - District 9

**WATER LEVEL INFORMATION SUPPLIED BY:**

Detroit District Corps of Engineers  
International Joint Commission  
SSMC4, STATION 7523  
Great Lakes Information Network  
NOAA Tides and Currents  
U.S. Coast Guard - District 9  
1305 East-West Hwy  
Silver Spring, MD 20910-3233  
(301) 713-2902
Events listed below are those events that may have accompanying special local regulations.

<table>
<thead>
<tr>
<th>Location</th>
<th>Name of Event</th>
<th>Date / Time</th>
<th>POC</th>
<th>Tel #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clayton, NY</td>
<td>Bassmaster Elite</td>
<td>14-17 Jul 22</td>
<td>Lisa Talmadge</td>
<td>505.550.4765</td>
</tr>
<tr>
<td>Clayton, NY</td>
<td>1000 Islands Charity Poker Run</td>
<td>16-Jul-22</td>
<td>Robert Cantwell</td>
<td>315.882.3145</td>
</tr>
<tr>
<td>Alexandria Bay, NY</td>
<td>Paddle for Betterment</td>
<td>23-Jul-22</td>
<td>Trevor Garlock</td>
<td>315.486.4900</td>
</tr>
<tr>
<td>Morristown, NY</td>
<td>Shark 24 Eastern Championship</td>
<td>23 and 24 Jul-22</td>
<td>Michael Henson</td>
<td>613.213.3933</td>
</tr>
<tr>
<td>Rochester, NY</td>
<td>Newport Yacht Club Sunday Afternoon Racing</td>
<td>6/26/2022 to 10/16/2022</td>
<td>Kenny Fourspring/</td>
<td>1585-902-2183</td>
</tr>
<tr>
<td>Tonawanda, NY</td>
<td>Canal Fest of the Tonawanda's (Rubber Duck Race)</td>
<td>23-Jul-22</td>
<td>Peter Chenier</td>
<td>716-846-4296</td>
</tr>
<tr>
<td>Tonawanda, NY</td>
<td>Canal Fest of the Tonawanda's (Sika Cup Challenge)</td>
<td>24-Jul-22</td>
<td>Peter Chenier</td>
<td>716-846-4296</td>
</tr>
<tr>
<td>Rochester, NY</td>
<td>JY15 Regatta</td>
<td>22-Jul-22</td>
<td>Mary Ellen Brown</td>
<td>703-408-7298</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td>Water Lantern Festival</td>
<td>23-Jul-22</td>
<td>Dylan Gallup</td>
<td>801-895-0990</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>Whiskey Island Parade Of Lights</td>
<td>23-Jul-22</td>
<td>Denny Prochaska</td>
<td>440 390 8228</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>Blazing Paddles Paddlefest</td>
<td>23-Jul-22</td>
<td>James Ridge</td>
<td>216-496-3763</td>
</tr>
<tr>
<td>Conneaut, OH</td>
<td>D-Day Conneaut (Reenactment event)</td>
<td>18-20AUG 2022</td>
<td>Betsy Bashore</td>
<td>419-350-6354</td>
</tr>
<tr>
<td>Cleveland</td>
<td>Tall Ships</td>
<td>6JUL2022-29AUG2022</td>
<td>Steve Such</td>
<td>814-450-2561</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>Whiskey Island Parade Of Lights</td>
<td>23-Jul-22</td>
<td>Denny Prochaska</td>
<td>440 390 8228</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>Blazing Paddles Paddlefest</td>
<td>23-Jul-22</td>
<td>James Ridge</td>
<td>216-496-3763</td>
</tr>
<tr>
<td>Sandusky</td>
<td>Ironman 70.3 Ohio Triathlon</td>
<td>7/24/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Sandusky</td>
<td>I-LYA Optimist Championships</td>
<td>7/23/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Buffalo, NY</td>
<td>Buffalo Harbor Sailing Club-Racing Season</td>
<td>5/17/2022 to 9/28/2022</td>
<td>Gregory Toole</td>
<td>917-993-2976</td>
</tr>
<tr>
<td>St. Clair</td>
<td>St. Clair River Classic Offshore Race Set Up &amp; testing</td>
<td>7/25/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Harrison Twp</td>
<td>Top Gun Twilight Races #21</td>
<td>7/21/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>St. Clair</td>
<td>St. Clair River Classic Offshore Race Set Up &amp; testing</td>
<td>7/26/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Bay City</td>
<td>Bay City Yacht Club Wednesday Night Racing - Summer</td>
<td>7/20/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Tawas</td>
<td>Taws Bay Yacht Club Sailboat Races</td>
<td>7/24/2022</td>
<td>Tracy Girard</td>
<td>313.568-9564</td>
</tr>
<tr>
<td>Location</td>
<td>Event</td>
<td>Dates</td>
<td>Time</td>
<td>Contact</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------</td>
<td>---------------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>Muskegon, MI</td>
<td>Muskegon Yacht Club - Wednesday Night Racing Series</td>
<td>each Wed. May 5 - Oct 12, 2022</td>
<td>1730-2200</td>
<td>MSTC Sherrill</td>
</tr>
<tr>
<td>Arcadia, MI</td>
<td>Arcadia Days Firworks</td>
<td>July 22, 2022</td>
<td>2100-2300</td>
<td>MSTC Sherrill</td>
</tr>
<tr>
<td>Lake Leelanau, MI</td>
<td>Great Lakes Coastal Beach Sprints</td>
<td>July 23, 2022</td>
<td>0700-1800</td>
<td>MSTC Sherrill</td>
</tr>
<tr>
<td>Milwaukee, WI</td>
<td>Northwestern Mutual Fireworks</td>
<td>July 24, 2022</td>
<td>2100-2300</td>
<td>MSTC Sherrill</td>
</tr>
<tr>
<td>Saugatuck, MI</td>
<td>Saugatuck Venetian Festival FW</td>
<td>July 30, 2022</td>
<td>2100-2300</td>
<td>MSTC Sherrill</td>
</tr>
</tbody>
</table>
CURRENT NINTH DISTRICT BRIDGE MAINTENANCE/ACTIVITIES
Week [28/22]

Note: Short-term bridge maintenance closures and various activities may only be published through Broadcast Notice to Mariners and may not be included in the Local Notice to Mariners. Mariners should both listen to Broadcast Notice to Mariners (BNM) and read Coast Guard Local Notice to Mariners (LNM) available by clicking HERE for the most recent and complete marine information.

PUBLIC NOTICES FOR 9th District BRIDGES: https://www.navcen.uscg.gov/D9BN

Please contact us with any questions or concerns:
Blair Stanifer (216) 902-6086 or William.B.Stanifer@uscg.mil
Lee Soule (216) 902-6085 or Lee.D.Soule@uscg.mil
Michael Walker (216) 902-6087 or Michael.O.Walker2@uscg.mil
FAX: (216) 902-6088

Commander (dpb)
Ninth Coast Guard District
1240 E. 9th St. Room 2047B
Cleveland, Ohio 44199-2001

NOTES:

ACTIVE BROADCAST NOTICE TO MARINERS (BNM)

SAFETY BCST PLUS SKED BCST UNTIL 180600Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C090-22
WI - LAKE MICHIGAN - MILWAUKEE HARBOR
FROM JULY 15 THROUGH JULY 17, 2022 BETWEEN THE HOURS OF 2300 AND 0100 ALL BRIDGES FROM MILE 0.79 TO MILE 1.46 OVER THE MILWAUKEE RIVER WILL BE SECURED TO RECREATIONAL MASTED NAVIGATION, EXCEPT AT THE DISCRETION OF THE POLICE DEPARTMENT, IN CONJUNCTION WITH THE FESTA ITALIANA. VESSELS ABLE TO PASS UNDER THE BRIDGES WITHOUT AN OPENING MAY DO SO AT ANY TIME.

SAFETY BCST PLUS SKED BCST UNTIL 122200Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C091-22
NY - NEW YORK BARGE CANAL SYSTEM
FROM JULY 11, 2022 THROUGH APRIL 30, 2023 SCAFFOLDING WILL BE INSTALLED UNDER ONE HALF OF THE E-99A FORGHAM STREET BRIDGE AT MILE 220.27 OVER THE ERIE CANAL THAT HANGS APPROXIMATELY 4- FEET BELOW LOW STEEL.
SAFETY BCST PLUS SKED BCST UNTIL 142200Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C098-22
OH- LAKE ERIE - CLEVELAND HARBOR
FROM JULY 12 THROUGH JULY 14, 2022 FROM 0600 TO 1800 DAILY, THE NORFOLK SOUTHERN
RAILROAD BRIDGE AT MILE 0.76 OVER THE CUYAHOGA RIVER WILL REQUIRE A 2-HOUR
ADVANCE NOTICE FOR OPENINGS. MARINERS SHOULD PROVIDE ADVANCE NOTICE
DIRECTLY
TO THE DRAWTENDER.

SAFETY BCST PLUS SKED BCST UNTIL 142100Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C100-22
WI- LAKE MICHIGAN – GREEN BAY
FROM 0700 ON JULY 11 TO 1600 ON JULY 14, 2022, THE WALNUT STREET BRIDGE AT MILE 1.81
OVER THE FOX RIVER WILL BE SECURED TO MASTED NAVIGATION FOR EMERGENCY
REPAIRS. VESSELS ABLE TO PASS UNDER THE BRIDGE WITHOUT AN OPENING MAY DO SO AT
ANY TIME.

SAFETY BCST PLUS SKED BCST UNTIL 132200Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C101-22
FROM JULY 6, THROUGH AUGUST 12, 2022 BETWEEN THE HOURS OF 0700 AND 1730, MONDAY
THROUGH SATURDAY CONTRACTORS WILL UTILIZE SNOOPER TRUCKS UNDER THE JOHN A.
BLATNIK, I-535 BRIDGE AT MILE 2.74 OVER THE ST. LOUIS BAY AND RIVER. SPOTTERS WILL
WARN OF APPROACHING VESSELS AND MOVE THE MAN LIFT TO ALLOW VESSELS TO PASS.

SAFETY BCST PLUS SKED BCST UNTIL 192200Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C102-22
NY - NEW YORK BARGE CANAL SYSTEM
FROM JULY 11 THROUGH AUGUST 12, 2022, BETWEEN THE HOURS OF 0730 AND 1700, MONDAY
THROUGH FRIDAY A 35-FOOT HARCON VESSEL WILL BE UNDER THE S1 US 20 FREE BRIDGE
AT MILE 0.54, THE S3 STATE ROUTE 89 BRIDGE AT MILE 5.70, AND S6 OVID STREET
BRIDGE AT MILE 8.65 OVER THE CAYUGA-SENeca CANAL, INCLUDING THE BRIDGES
BETWEEN
THE E73 COLD SPRINGS ROAD AT MILE 167.10 AND THE E92 ARMITAGE ROAD BRIDGE AT
MILE 205.59 OVER THE ERIE CANAL. THE HARCON WILL MOVE IF A 30-MINUTE ADVANCE
NOTICE OF ARRIVAL IS PROVIDED DIRECTLY TO THE HARCON ON VHF-FM MARINE CHANNEL
16.
IL - LAKE MICHIGAN - CHICAGO SANITARY AND SHIP CANAL
FROM JULY 11, THROUGH JULY 15 BETWEEN THE HOURS OF 0700 AND 1900 EACH DAY, A 110-FOOT BY 35-FOOT BARGE WILL BE TAKING BORE SAMPLES NEAR THE OUTER EDGE OF THE CHANNEL AT THE SOUTH WESTERN AVENUE BRIDGE AT MILE 6.7 (CORPS MILE 320.6) OVER THE CHICAGO SANITARY AND SHIP CANAL. THE BARGE WILL MONITOR VHF-FM MARINE CHANNEL 16 AND WILL NOT BE ABLE TO MOVE ONCE DRILLING STARTS.

WI - LAKE MICHIGAN - STURGEON BAY SHIP CANAL
ON JULY 20, 2022, BETWEEN THE HOURS OF 0700 AND 1600, THE BAYVIEW BRIDGE AT MILE 3.0 OVER THE STURGEON BAY SHIP CANAL WILL BE SECURED TO MASTED NAVIGATION FOR MAINTENANCE. VESSELS ABLE TO PASS UNDER THE BRIDGE WITHOUT AN OPENING MAY DO SO AT ANY TIME.

IL - LAKE MICHIGAN - CHICAGO HARBOR
FROM JULY 18 THROUGH JULY 28, 2022 BETWEEN THE HOURS OF 0900 AND 1500 EACH DAY INSPECTORS WILL USE SNOOPER TRUCKS UNDER THE EISENHOWER EXPRESSWAY BRIDGE (I-290) AT MILE 2.94 (CORPS MILE 324.87) OVER THE SOUTH BRANCH OF THE CHICAGO RIVER. SPOTTERS WILL WARN OF APPROACHING VESSELS AND MOVE THE MAN LIFT TO ALLOW VESSELS TO PASS. THE BRIDGE OPERATING SCHEDULE WILL NOT BE CHANGED.

MI - LAKE HURON - SAGINAW RIVER
FROM JULY 11 THROUGH JULY 13, 2022 BETWEEN THE HOURS OF 0700 AND 1900 FROM
MONDAY THROUGH WEDNESDAY THE INDEPENDENCE BRIDGE AT MILE 3.88 WILL REQUIRE A 2-HOUR ADVANCE NOTICE FOR OPENINGS DUE TO INSPECTIONS ON THE BRIDGE. MARINERS SHOULD PROVIDE ADVANCE NOTICE BY CALLING 989-892-2351. THE DRAWTENDER WILL BE MONITORING THAT NUMBER AND VHF-FM MARINE CHANNEL 16.

SAFETY BCST PLUS SKED BCST UNTIL 262200Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C108-22
IL - LAKE MICHIGAN - CHICAGO HARBOR
FROM JULY 25, THROUGH AUGUST 19, 2022 BETWEEN THE HOURS OF 0600 AND 1800, MONDAY THROUGH SATURDAY A 30-FOOT HARCON BRIDGE INSPECTION VESSEL WILL BE INSPECTING ALL BRIDGES BETWEEN: WILSON AVENUE AT MILE 8.35 (CORPS MILE 352.5) TO THE SOUTH DAMEN AVENUE BRIDGE AT MILE 6.14 (CORPS MILE 321.2) OVER THE CHICAGO RIVER AND FROM THE SOUTH WESTERN AVENUE BRIDGE AT MILE 6.7 (CORPS MILE 320.6) TO THE SOUTH CICERO AVENUE BRIDGE AT MILE 10 (CORPS MILE 317.3) OVER THE CHICAGO SANITARY AND SHIP CANAL AND FROM THE 95TH STREET BRIDGE AT MILE 1.09 (CORPS MILE 332.1) OVER THE CALUMET RIVER TO THE INDIANA AVENUE BRIDGE AT MILE 1.80 (CORPS MILE 322.3) OVER THE LITTLE CALUMET RIVER. THE HARCON WILL MONITOR VHF-FM MARINE CHANNEL 16 AND WILL MOVE IF A 30-MINUIT ADVANCE NOTICE IS PROVIDED DIRECTLY TO THE HARCON.

SAFETY BCST PLUS SKED BCST UNTIL 272300Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C109-22
IL- LAKE MICHIGAN – CALUMET SAG CHANNEL

SAFETY BCST PLUS SKED BCST UNTIL 152359Z JUL 22
U.S.C.G. NINTH DISTRICT NOTICE TO MARINERS C110-22
2021 FEDERAL REGULATIONS DOCKET STATUS

USCG-2021-0336 – NPRM – Oshkosh – FR Pending
USCG-2022-0237 - TD – Keweenaw Waterway – open for public comments until November 1, 2022
USCG-2022-0465-TFR- Erie Canal-pending internal review

ACTIVE LOCAL NOTICE TO MARINERS (LNM)

GREAT LAKES REGION

GREAT LAKES, Drawbridge Delay Reports, Chart 14500
Mariners are requested to submit Reports of Drawbridge Signal/Operations Delays directly to the Ninth Coast Guard District Bridge Branch using the attached form. Reports of signal or drawbridge delays have been processed by Coast Guard Marine Safety Offices in recent years, but will now be processed and traced by the Bridge Branch. Reports may be sent by mail, e-mail, or by fax. The mailing address and fax number are on the form. The updated form is printed and also attached on the last page of this list. [08/05] [34/12]

ST. LAWRENCE SEAWAY

NY STATE CANAL SYSTEM
(Everything West of St. Johnsville, NY)

NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Maintenance
From May 11 through August 17, 2022 between the hours of 0700 and 1730, Monday through Saturday, a 50-foot by 20-foot barge will be working under the E-138, Main Street SR 96 at Mile 253.50 over the Erie Canal. The barge will monitor VHF-FM Marine Channel 16 and will move to accommodate vessels as needed. [11/22]

NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Maintenance
From April 25 through August 31, 2022 between the hours of 0700 and 1700, Monday through Friday, contractors will be washing the E234 Transit Road Bridge at Mile 320.82, the E233 Main Street Bridge at Mile 320.82, the E236A Lockport Bypass Road Bridge at Mile 322.16, and the E248, Webster Street Bridge at Mile 338.44 over the Erie Canal. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass. Mariners should avoid passing under any falling water from the bridge. [15/22]

NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Maintenance
From October 1, 2022 through April 1, 2024 snooper trucks will be working under the E-200 North Main Street Bridge, mile 293.15, over the Erie Canal to rehabilitate the bridge in the fully open position. The permitted navigation lights will be removed and temporarily replaced with steady burning yellow lights on the bottom and four-corners of the drawspan. Spotters will warn of approaching vessels and move the man lift to allow vessels...
NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Maintenance
From May 31 through August 31, 2022 between the hours of 0800 and 1700 daily workers will be using snooper trucks to wash the underside of all bridges from the E-93 CSX Railroad Bridge at Mile 209.36 to the E-212 Marshall Road Bridge at Mile 305.63 over the Erie Canal. Spotters will warn of approaching vessels and will move the man lift to allow vessels to pass. Mariners should avoid passing under the clean water falling from the bridge.

NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Inspection
From July 11 through August 12, 2022, between the hours of 0730 and 1700, Monday through Friday a 35-foot Harcon Vessel will be under the S1 US 20 Free Bridge at Mile 0.54, the S3 State Route 89 Bridge at Mile 5.70, and S6 Ovid Street Bridge at Mile 8.65 over the Cayuga-Seneca Canal, including the bridges between the E73 Cold Springs Road at Mile 167.10 and the E92 Armitage Road Bridge at Mile 205.59 over the Erie Canal. The Harcon will move if a 30-minute advance notice of arrival is provided directly to the Harcon on VHF-FM Marine Channel 16.

NEW YORK STATE CANAL SYSTEM – NY - Erie Canal – Chart 14786 – Bridge Inspection
From July 11, 2022 through April 30, 2023 scaffolding will be installed under one half of the E-99a Forgham Street Bridge at Mile 220.27 over the Erie Canal.

LAKE ONTARIO

LAKE ERIE - MAHONING RIVER - NIAGARA RIVER- ALLEGHENY RIVER

*****REVISED*****
LAKE ERIE – OH – Toledo Harbor – Chart 14847 – Bridge Construction/Demolition
From July 1, 2019 through July 23, 2023 a temporary causeway will be constructed between mile 6.73 and 6.76 for the construction of the new and demolition of the old Michael V. DiSalle Memorial (I-75) Bridge at Mile 6.73 over the Maumee River. The causeway will be marked with flashing yellow lights spaced approximately 10 meters apart with red over red lights marking the ends of the causeway. A 100 foot wide channel will be provided for vessels to pass through the construction area. Mariners are encouraged to pass through the area at a slow speed.

LAKE ERIE – OH – Ashtabula – Chart 14836 – Bridge Contacts
The Norfolk Southern Railroad Bridge at Mile 1.5 over the Ashtabula River is remotely operated and will open on horn signal, or by calling on VHF-FM Marine Channel 16, or by calling: 404-877-9698, or 404-877-9699, or texting 717-514-0643.

LAKE ERIE – OH – Cleveland Harbor – Chart 14839 - Bridge Special Event
On October 8, 2022 between the hours of 0700 and 1400 the Carter Road Bridge at Mile 2.43 over the Cuyahoga River will be secured to masted navigation in conjunction with the Towpath Marathon event. Vessels able to pass under the bridge without an opening may do so at any time.
LAKE ERIE – NY – Buffalo Harbor – Chart 14833 – Bridge Maintenance
From March 21 through August 30, 2022 between the hours of 0700 and 1600, Monday through Sunday, you are authorized to utilize two barges 40-foot by 10-foot at the Niagara Street Bridge at the mouth of Scajaquada Creek. A 20-foot navigation channel will be maintained for vessels to pass through the work area.
[06/22]

LAKE ERIE – OH – Toledo Harbor – Chart 14847 – Bridge Maintenance
From April 28 through August 31, 2022 between the hours of 0700 and 1700, Monday through Friday a 150-foot by 50-foot barge will be working at the Norfolk Southern Railroad Bridge at Mile 5.76 over the Maumee River. During this time the bridge will require a 2-hour advance notice for openings. Mariners should provide advance notice on VHF-FM Marine Channel 16 or by calling 419-254-1539.
[17/22]

LAKE ERIE – NY – Niagara River – Chart 14832 – Bridge Maintenance
From May 30 through July 15, 2022 between the hours of 0700 and 1600, Monday through Friday a 100 foot by 34-foot barge will be washing the South Grand Island Bridges at Mile 27.5 over the Niagara River. The barge will monitor VHF-FM Marine Channel 16 and will move to accommodate other vessels.
[18/22]

LAKE ERIE – OH – Cleveland Harbor – Chart 14839 - Bridge Maintenance
On July 18 and again on July 20, 2022 from 0700 to 1700 each day, the Norfolk Southern Railroad Bridge at Mile 0.76 over the Cuyahoga River will be secured to masted navigation. Vessels able to pass under the bridge without an opening may do so at any time.
[24/22]

LAKE ERIE – OH – Cleveland Harbor – Chart 14839 - Bridge Inspection
From June 22 through October 28, 2022, inspectors will be utilizing Bosun Chairs and Snooper vehicles under the Main Avenue Viaduct at Mile 1.01, the Detroit Superior Bridge at Mile 1.42, and the Hope Memorial Bridge at Mile 3.14, over the Cuyahoga River. Spotters will warn of approaching vessels and move the inspectors to allow vessels to pass.
[25/22]

LAKE ERIE – OH – Cleveland Harbor – Chart 14839 - Bridge Special Event
On July 23, 2022 between the hours of 1000 and 1030 the Carter Road Bridge at Mile 2.43 over the Cuyahoga River will be secured to masted navigation in conjunction with the Parrot Head Race. Vessels able to pass under the bridge without an opening may do so at any time.
[27/22]

DETROIT RIVER - LAKE ST. CLAIR - ST. CLAIR RIVER – RIVER ROUGE

*****REVISED****

DETROIT RIVER – MI – Main Channel – Chart 14848 – Bridge Construction.
From November 1, 2022 through August 30, 2024, contractors will be constructing the Gordie Howe International Bridge at mile 16.7 over the Detroit River. No equipment will be placed in the water. Overhead work will have temporary steady burning yellow lights to mark new construction. A moving platform with quick flashing red lights and orange or red ball fenders on the bottom four corners with a safety net that hangs
approximately 15-feet below low steel will be constructing the bridge. Mariners should avoid passing directly under the platform at any time. Snoopers type vehicles will be utilized on the bridge throughout construction. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass. When construction is completed and all equipment removed, the final vertical clearances for the bridge will be 152-feet for the center 100-feet of the navigation channel. No less than 137-feet of vertical clearance will be available at the channel limits. Vertical clearances are based on IGLD85.

[47/20] [07/22]

ST. CLAIR RIVER – MI – Pine River – Chart 14853 – Bridge Maintenance
From January 1, 2023 through March 17, 2023, the Riverside Avenue, State Route 29 Bridge at Mile 0.10 over the Pine River will be secured to masted navigation. Vessels able to pass under the bridge without an opening may do so at any time.
[18/22]

LAKE HURON

LAKE HURON – MI – Port Huron – Chart 14852- Bridge Special Event
On July 13, 2022 between the hours of 0615 and 0900 the Military Street Bridge at Mile 0.33, the 7th Street Bridge at Mile 0.50, and 10th Street Bridge at Mile 0.94, all over the Black River will be secured to masted navigation in conjunction with the Annual Rotary International Day Parade.
[27/22]

LAKE HURON – MI – Port Huron – Chart 14852- Bridge Special Event
On July 16, 2022 between the hours of 0900 and noon the Military Street Bridge at Mile 0.33, the 7th Street Bridge at Mile 0.50, and 10th Street Bridge at Mile 0.94, all over the Black River will operate on an intermediate schedule to accommodate the annual Mackinac Race.
[27/22]

LAKE HURON – MI – Saginaw River – Chart 14867- Bridge Maintenance
From January 1 through February 28, 2023, the Lafayette Street Bridge at Mile 6.78 over the Saginaw River will be secured to masted navigation. Vessels able to pass under the bridge without an opening may do so at any time.
[28/22]

LAKE HURON - MI - Saginaw River - Chart 14867- Bridge Inspection
From July 11 through July 13, 2022 between the hours of 0700 and 1900 from Monday through Wednesday the Independence Bridge at Mile 3.88 will require a 2-hour advance notice for openings due to inspections on the bridge. Mariners should provide advance notice by calling 989-892-2351. The drawtender will be monitoring that number and VHF-FM Marine Channel 16.
[27/22]
LAKE MICHIGAN – EAST

LAKE MICHIGAN – MI – Grand Haven – Chart 14933 - Bridge Maintenance
From November 1, 2022 through April 30, 2023, the U.S. Route 31 Bridge at Mile 2.89 over the Grand River will be secured to masted navigation. From May 1, 2023 through May 26, 2023, one leaf of the bridge will be secured to masted navigation and the other leaf will operate normally.
[42/20]

LAKE MICHIGAN – MI – Grand Haven – Chart 14933 - Bridge Maintenance
From September 6, 2022 through October 30, 2022, one leaf of the U.S. Route 31 Bridge at Mile 2.89 over the Grand River will be secured to masted navigation and the other leaf will operate normally.
[43/20]

LAKE MICHIGAN – MI – Charlevoix Harbor – Chart 14942 – Bridge Maintenance
From 0700 on January 16, 2023 through 0700 on April 1, 2023 the US 31 Bridge Street Bridge, over the Pine River will be secured to masted navigation. Vessels able to pass under the bridge without an opening may do so at any time.
[05/22]

LAKE MICHIGAN – MI – Grand Haven – Chart 14933 – Bridge Maintenance
From May 1 through September 30, 2022, scaffolding will be installed under the U.S. Route 31 Bridge at Mile 2.89 over the Grand River that hangs approximately 4-feet below low steel. Between the hours of 0600 and 2000 Monday through Saturday, four barges 80-feet by 40-feet or smaller will be utilized under the approach spans. The barges will monitor VHF-FM marine Channel 16 and move to accommodate vessels if provided a 20-minute advance notice of arrival. No equipment will be used in the navigation draw of the bridge and the bridge operating schedule will not be changed.
[12/22]

LAKE MICHIGAN – MI – Grand Haven – Chart 14933 - Bridge Special Event
From 2200 on August 6 until 0200 on August 7, 2022, the U.S. 31 Bridge at Mile 2.89 over the Grand River will be secured to masted navigation in conjunction with the Annual Coast Guard Day Celebration. Vessels able to pass under the bridge without an opening may do so at any time.
[14/22]

LAKE MICHIGAN – IN – Michigan City – Chart 14926 - Bridge Inspection
On August 30, 2022 between the hours of 0700 and 1900, the Franklin Street Bridge at Mile 0.5 over Trail Creek will require a 1-hour advance notice for openings. Mariners should provide advance notice directly to the drawtender. Inspectors will utilize snooper trucks under the bridge. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass under the bridge.
[27/22]

LAKE MICHIGAN – MICHIGAN CITY & INDIANA HARBOR & GARY HARBOR

LAKE MICHIGAN – IN – Michigan City – Chart 14927 - Bridge Regulation
The Coast Guard proposes to modify the operating schedule that governs the Amtrak Railroad Bridge, mile 0.9, over Trail Creek, in Michigan City, Indiana, to allow it to operate remotely. The bridge has operated remotely since 2003 without inclusion in the CFR and without incident or public complaint. We invite your comments on this proposed rulemaking. If you have questions on this proposed rule, call or e-mail Mr. Lee D. Soule, Bridge Management Specialist, Ninth Coast Guard District; telephone 216-902-6085, e-mail
LAKE MICHIGAN – IN – Michigan City – Chart 14926 - Bridge Inspection
On August 30, 2022 between the hours of 0700 and 1900, the Franklin Street Bridge at Mile 0.5 over Trail Creek will require a 1-hour advance notice for openings. Mariners should provide advance notice directly to the drawtender. Inspectors will utilize snooper trucks under the bridge. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass under the bridge.

[27/22]

LAKE MICHIGAN – IN – Indiana Harbor – Chart 14927 - Bridge Inspection
On August 31, 2022 between the hours of 0700 and 1900, the Dickey Road Bridge at Mile 1.21 over the Indiana Harbor Canal will require a 1-hour advance notice for openings. Mariners should provide advance notice directly to the drawtender. Inspectors will utilize snooper trucks under the bridge. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass under the bridge.

[27/22]

LAKE MICHIGAN – IN – Indiana Harbor – Chart 14927 - Bridge Inspection
On September 1, and September 2, 2022 between the hours of 0700 and 1900, the Indianapolis Boulevard Bridge at Mile 2.59 over the Indiana Harbor Canal will continue to require a 12-hour advance notice for openings. Mariners should provide advance notice directly to the drawtender. Inspectors will utilize snooper trucks under the bridge. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass under the bridge.

[27/22]

LAKE MICHIGAN – IN – Michigan City – Chart 14926 - Bridge Special Event
On August 6, 2022 between the hours of 1800 and 1900 the Franklin Street Bridge at Mile 0.50 over Trail Creek will be secured to masted navigation in conjunction with the Great Lakes Grand Prix boat parade. Vessels able to pass under the bridge without an opening may do so at any time.

[27/22]

LAKE MICHIGAN – CALUMET RIVER & LITTLE CALUMET RIVER

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Inspections
From July 25, through August 19, 2022 between the hours of 0600 and 1800, Monday through Saturday a 30-foot Harcon bridge inspection vessel will be inspecting all bridges between: Wilson Avenue at mile 8.35 (CORPS MILE 352.5) to the South Damen Avenue Bridge at Mile 6.14 (CORPS MILE 321.2) over the Chicago River and From the South Western Avenue Bridge at Mile 6.7 (CORPS MILE 320.6) to the South Cicero Avenue Bridge at Mile 10 (CORPS MILE 317.3) over the Chicago Sanitary and Ship Canal and From the 95th Street Bridge at Mile 1.09 (CORPS MILE 332.1) over the Calumet River to the Indiana Avenue Bridge at Mile 1.80 (CORPS MILE 322.3) over the Little Calumet River. The Harcon will monitor VHF-FM Marine Channel 16 and will move if a 30-munit advance notice is provided directly to the Harcon.

[27/22]
LAKE MICHIGAN – IL – Chicago River – Chart 14927 – Bridge Discrepancy
The Coast Guard has received a report that the protection cells of the Fullerton Avenue Bridge at Mile 5.30 (CORPS MILE 329.1) over the North Branch of the Chicago River are leaning away from the channel. [23/20]

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Maintenance
From midnight on February 13 through noon on November 1, 2022, one leaf of the Dearborn Street Bridge at Mile 1.13 over the Main Branch of the Chicago River will be secured to masted navigation. The other leaf will operate normally. Monday through Friday between the hours of 0700 and 1530, a 125-foot by 35-foot barge will be working under the secured leaf and will move to accommodate vessels if a 1-hour advance notice is provided directly to the barge on VHF-FM Marine Channel 16. [04/22]

*****REVISED*****

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Maintenance
From February 14 through July 29, 2022, between the hours of 0600 and 1800, Monday through Friday a 100-foot by 50-foot barge will be working under the Webster Avenue Bridge at Mile 4.85 (CORPS MILE 328.6) over the North Branch of the Chicago River. The barge will move if provided a 2-hour advance notice by calling the barge on VHF-FM Marine Channel 16 or 630-514-0695 or 773-842-7470-1570. [05/22] [16/22] [24/22]

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Inspections
From July 25, through August 19, 2022 between the hours of 0600 and 1800, Monday through Saturday a 30-foot Harcon bridge inspection vessel will be inspecting all bridges between: Wilson Avenue at mile 8.35 (CORPS MILE 352.5) to the South Damen Avenue Bridge at Mile 6.14 (CORPS MILE 321.2) over the Chicago River and From the South Western Avenue Bridge at Mile 6.7 (CORPS MILE 320.6) to the South Cicero Avenue Bridge at Mile 10 (CORPS MILE 317.3) over the Chicago Sanitary and Ship Canal and From the 95th Street Bridge at Mile 1.09 (CORPS MILE 332.1) over the Calumet River to the Indiana Avenue Bridge at Mile 1.80 (CORPS MILE 322.3) over the Little Calumet River. The Harcon will monitor VHF-FM Marine Channel 16 and will move if a 30-minute advance notice is provided directly to the Harcon. [27/22]

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Maintenance
From July 18 through November 12, 2022 between the hours of 0700 and 1600 daily a 100-foot by 80-foot barge will be working under the Grand Avenue Bridge at Mile 2.0 (CORPS MILE 325.9) over the North Branch of the Chicago River. The barge will move if a 2-hour advance notice is provided directly to the barge on VHF-FM Marine Channel 16 or by calling 708-253-5818. Snooper trucks will be used under the bridge. Spotters will warn of approaching vessels and move the man lifts to allow vessels to pass. [27/22]

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Inspection
From July 18 through July 28, 2022 between the hours of 0900 and 1500 each day inspectors will use snooper trucks under the Eisenhower Expressway Bridge (I-290) at Mile 2.94 (CORPS MILE 324.87) over the South Branch of the Chicago River. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass. The bridge operating schedule will not be changed. [27/22]

CALUMET SAG CHANNEL

LAKE MICHIGAN - IL – Calumet-SAG Channel - Chart 14926 - Bridge Maintenance
From March 1 through August 31, 2022 scaffolding that extends approximately 1-foot below low steel will be installed under one half of the 96th Avenue Bridge (LaGrange US 45) at Mile 24.56 (CORPS MILE 308.4) over
the Calumet-SAG Channel. The other half of the bridge the scaffolding will be pulled up tight against low steel. Steady burning yellow lights will warn mariners of the temporary reduction in vertical clearance.

[07/22]

 **LAKE MICHIGAN - IL – Calumet-SAG Channel - Chart 14926 - Bridge Maintenance**

From June 1 through **November 1, 2022** scaffolding that extends approximately 1-foot below low steel will be installed under one half of the Western Avenue Bridge at Mile 15.01 (CORPS MILE 318.0) over the Calumet-SAG Channel.

[07/22]

 **LAKE MICHIGAN – IL – Calumet-SAG Channel – Chart 14927 – Bridge Maintenance**

from April 4 through **November 18, 2022**, scaffolding that hangs approximately 1-foot below low steel will be installed under one-half of the Francisco Avenue at Mile 15.63 (CORPS MILE 317.4), the Crawford Avenue Bridge at Mile 17.01 (CORPS MILE 316.0), the Ridgeland Avenue at Mile 20.47 (CORPS MILE 312.5), 104th Avenue Bridge at Mile 25.56 (CORPS MILE 307.3) over the Calumet-SAG Channel.

[12/22]

 **LAKE MICHIGAN - IL – Calumet-SAG Channel - Chart 14926 - Bridge Maintenance**

From June 13 through **June 29, 2022** between the hours of 0700 and 1700, Monday through Saturday, a 120-foot by 40-foot barge will be working under the Sag Highway Bridge at Mile 28.76 (CORPS MILE 304.2) over the Calumet-SAG Channel. The barge will monitor VHF-FM Marine Channel 16 and will move if a 3-hour advance notice is provided by calling 630-739-2460. Containment that hangs approximately 3-feet below low steel will be installed under the bridge.

[21/22]

 **LAKE MICHIGAN - IL – Calumet-SAG Channel - Chart 14926 - Bridge Inspection**

On July 14 and **July 15, 2022** between the hours of 0700 and 1500 each day, Inspectors will utilize snooper trucks under the Cicero Avenue at Mile 18.08 (CORPS MILE 314.9) over the Calumet-SAG Channel. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass.

[27/22]

 **LAKE MICHIGAN - IL – Calumet-SAG Channel - Chart 14926 - Bridge Inspection**

From July 18 through **July 27, 2022** between the hours of 0600 and 1800, Monday through Friday, a 120-foot by 30-foot barge will be working under the Sag Highway Bridge at Mile 28.76 (CORP MILE 304.2) over the Calumet-SAG Channel. The barge will monitor VHF-FM Marine Channel 16 and will move to accommodate vessels if a 1-hour advance notice is provided directly to the barge.

[27/22]

 **CHICAGO SANITARY AND SHIP CANAL, KANKAKEE RIVER & ROCK RIVER**

(Lake Michigan to Mile 36.2/291.1)

 **LAKE MICHIGAN - IL – Chicago Sanitary and Ship Canal - Chart 14927 - Bridge Maintenance**

From July 11, through **July 15, 2022** between the hours of 0700 and 1900 each day, a 110-foot by 35-foot barge will be taking bore samples near the outer edge of the channel at the South Western Avenue Bridge at Mile 6.7 (CORPS MILE 320.6) over the Chicago Sanitary and Ship Canal. The barge will monitor VHF-FM Marine Channel 16 and will not be able to move once drilling starts.

[24/22]

****REVISED****

 **LAKE MICHIGAN – IL – Chicago Sanitary and Ship Canal – Chart 14927 - Bridge Maintenance**

From March 21 through **August 1, 2022**, between the hours of 0700 and 1530, Monday through Friday, a 125-foot by 35-foot barge will be working at the South Cicero Avenue Bridge at Mile 10.0 (CORPS MILE 317.3)
over the Chicago Sanitary and Ship Canal. The bare will monitor VHF-FM Marine Channel 16 and will move if a 1-hour advance notice is provided.

LAKE MICHIGAN – IL – Chicago Harbor – Chart 14927 – Bridge Inspections
From July 25, through August 19, 2022 between the hours of 0600 and 1800, Monday through Saturday a 30-foot Harcon bridge inspection vessel will be inspecting all bridges between: Wilson Avenue at mile 8.35 (CORPS MILE 352.5) to the South Damen Avenue Bridge at Mile 6.14 (CORPS MILE 321.2) over the Chicago River and From the South Western Avenue Bridge at Mile 6.7 (CORPS MILE 320.6) to the South Cicero Avenue Bridge at Mile 10 (CORPS MILE 317.3) over the Chicago Sanitary and Ship Canal and From the 95th Street Bridge at Mile 1.09 (CORPS MILE 332.1) over the Calumet River to the Indiana Avenue Bridge at Mile 1.80 (CORPS MILE 322.3) over the Little Calumet River. The Harcon will monitor VHF-FM Marine Channel 16 and will move if a 30-minute advance notice is provided directly to the Harcon.

LAKE MICHIGAN - IL – Chicago Sanitary and Ship Canal - Chart 14926 - Bridge Inspection
From July 18 through July 27, 2022 between the hours of 0600 and 1800, Monday through Friday, a 120-foot by 30-foot barge will be working under the Sag Highway Bridge at Mile 28.76 (CORP MILE 304.2) and the West Shore Aerial Pipeline at Mile 24.0 over the Chicago Sanitary and Ship Canal. The barge will monitor VHF-FM Marine Channel 16 and will move to accommodate vessels if a 1-hour advance notice is provided directly to the barge.

LAKE MICHIGAN – WEST

LAKE MICHIGAN – WI – Milwaukee Harbor – Chart 14924 – Bridge Special Event
From June 23 through July 9, 2022 from 2300 to 0100, Thursday through Saturday, all bridges from Mile 0.79 to Mile 1.46 over the Milwaukee River will be secured to recreational masted navigation, except at the discretion of the police department, in conjunction with the Summerfest event. Vessels able to pass under the bridges without an opening may do so at any time.

LAKE MICHIGAN – WI – Milwaukee Harbor – Chart 14924 – Bridge Special Event
From July 15 through July 17, 2022 between the hours of 2300 and 0100 all bridges from Mile 0.79 to Mile 1.46 over the Milwaukee River will be secured to recreational masted navigation, except at the discretion of the police department, in conjunction with the Festa Italiana. Vessels able to pass under the bridges without an opening may do so at any time.

LAKE MICHIGAN – Sturgeon Bay Ship Canal – Green Bay – Fox River – Wolf River

LAKE MICHIGAN – WI – Fox River – Chart 14972- Bridge Maintenance
From April 27, 2022 through October 7, 2022 the Tayco Street Bridge at Mile 37.52 over the Fox River at Menasha will require a 2-hour advance notice from 0800 to Midnight and a 6-hour advance at all other times, each day, for openings. Mariners should call 920-360-5792 to provide advance notice.

****REVISED****

LAKE MICHIGAN – WI – Fox River – Chart 14916- Bridge Construction
From October 29, 2020 through August 31, 2022, between the hours of 0700 to 2200, Monday through Friday, eight barges, 80-feet by 70-feet or smaller, will be used to construct the Racine Street Bridge at Mile 37.91 over the Fox River at Menasha. The old bridge has been removed. The temporary bridge over the slip near the George Banta Dock will continue to remain through the summer for temporary access. A 20-foot channel will be maintained for vessels through the construction area, between pier 4 and the south bascule pier until the bascule spans have been constructed and installed. Steady burning red lights will mark the temporary channel for vessels to pass through the construction area. Cranes in the drawspan will move if a 12-hour advance notice is provided by calling: 920-224-2068 or 920-450-4987

LAKE MICHIGAN – WI – Fox River – Chart 14972- Bridge Maintenance
From May 1, 2023 through September 1, 2023 scaffolding that hangs approximately 3-feet below low steel will be installed under the Tower Driver / Leo Figaro Bridge at Mile 0.41 over the Fox River.

LAKE MICHIGAN – WI – Green Bay – Chart 14918- Bridge Emergency Maintenance
From 0700 on July 11 to 1600 on July 14, 2022, the Walnut Street Bridge at Mile 1.81 over the Fox River will be secured to masted navigation for emergency repairs. Vessels able to pass under the bridge without an opening may do so at any time.

LAKE MICHIGAN – WI – Sturgeon Bay – Chart 14919- Bridge Maintenance
On July 20, 2022, between the hours of 0700 and 1600, the Bayview Bridge at Mile 3.0 over the Sturgeon Bay Ship Canal will be secured to masted navigation for maintenance. Vessels able to pass under the bridge without an opening may do so at any time.

LAKE SUPERIOR

LAKE SUPERIOR – MI – Keweenaw Waterway – Chart 14972- Bridge Test Schedule
The Coast Guard has issued a temporary deviation (87 FR 30418) from the operating schedule that governs the US41 Bridge, mile 16.0, over the Keweenaw Waterway between the towns of Houghton and Hancock, Michigan to test the effectiveness of a new bridge operating schedule.

From May 26, 2022 through September 6, 2022 the US41 Bridge, mile 16.0, over the Keweenaw Waterway, shall open on signal: except that from 0700 to 1900 Monday through Friday, less federal holidays, the draw only need to be opened on the hour and half hour for any vessel. Between midnight and 0400, the draw shall be placed in the intermediate position and opened if a 2-hour advance notice is given. The bridge shall be opened
on signal to pass any vessels over 300 feet in length or at any time 5 or more vessels gather at the bridge requesting an opening. All other provisions of 33 CFR 117.635 shall remain in effect.

If you have questions on this proposed rule, call or e-mail Mr. Lee D. Soule, Bridge Management Specialist, Ninth Coast Guard District, telephone 216-902-6085, e-mail Lee.D.Soule@uscg.mil. You may read the entire docket or submit comments identified by docket number USCG-2022-0237 using Federal Decision Making Portal at https://www.regulations.gov. Comments and relate material must reach the Coast Guard on or before November 1, 2022.

[20/22]

LAKE SUPERIOR – MN – Duluth – Chart 14975- Bridge Special Event

On July 8, 2022 between the hours of 1900 to 2330 of the Duluth Ship Canal Bridge at mile 0.24 over the Duluth Ship Canal will be secured to masted navigation and the Minnesota Slip Bridge will be secured to masted navigation from 1100 to 2330. Vessels able to pass under either bridge may do so at any time.

[27/22]

LAKE SUPERIOR – MI – Keweenaw Waterway – Chart 14972- Bridge Maintenance

From July 6 through July 8, 2022 the US 41 Bridge at Mile 16.0 over the Kewanee Waterway will only open on the top of the hour from 0800 to 1900 daily, instead of opening twice an hour as authorized by the test deviation, and from 1900 to 0300 the bridge will require a 3-hour advance notice for openings. Mariners should provide advance notice directly to the drawtender by calling 906-482-7552.

[27/22]

LAKE SUPERIOR – MN – Duluth – Chart 14975- Bridge Inspections

From July 11, through July 28, 2022 between the hours of 0900 and 1530, Monday through Thursday inspectors will utilize Snooper trucks under the John A. Blatnik, I-535 Bridge at mile 2.74 over the St. Louis Bay and River. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass.

[27/22]

LAKE SUPERIOR – MN – Duluth – Chart 14975- Bridge Maintenance

From July 6, through August 12, 2022 between the hours of 0700 and 1730, Monday through Saturday contractors will utilize Snooper trucks under the John A. Blatnik, I-535 Bridge at mile 2.74 over the St. Louis Bay and River. Spotters will warn of approaching vessels and move the man lift to allow vessels to pass.

[27/22]

LAKE SUPERIOR – MN – Duluth – Chart 14975- Bridge Maintenance

From June 27 through July 22, 2022 between the hours of 0700 and 1730 each day a 70-foot by 50-foot barge will be working under the John A. Blatnik, I-535 Bridge at mile 2.74 over the St. Louis Bay and River. The barge will monitor VHF-FM Marine Channel 16 and will move as needed to allow other vessels to pass.

[27/22]

RAINY LAKE, RAINY RIVER, LAKE OF THE WOODS, WISCONSIN RIVER, MISSISSIPPI RIVER, & RED RIVER OF THE NORTH
TO: Commander (dpb)  DATE: __________________________

Ninth Coast Guard District
1240 E. 9th Street – Room 2047b
Cleveland, Ohio 44199-2060
Phone: (216) 902-6087
Fax: (216) 902-6088
E-Mail: William.B.Stanifer@uscg.mil
        Lee.D.Soule@uscg.mil
        Michael.O.Walker2@uscg.mil

NOTE: Reports of Delay will be processed only when all items are fully addressed and reports submitted within 15 days of reported delay / difficulty. Attach additional sheets if necessary.

CONFIDENTIALITY: Please check here if you wish to keep names of vessels and persons confidential ☐

1. NAME OF VESSEL: ____________________________________________

2. PORT: _______________________________________________________

3. DATE OF DELAY: ______ ( ) INBOUND ( ) OUTBOUND

4. BRIDGE NAME: ______________________________________________

5. WATERWAY: __________________ MILE: __________________
   (Bridge name, waterway, and mile from Coast Pilot #6)

NOTE: IF DELAY IS AT RAILROAD BRIDGE, AND TRAINS ARE "CONTINUOUSLY" BEING RUN ACROSS OR STopped ON A DRAWBRIDGE, PLEASE INDICATE ON REVERSE SIDE OF FORM THE STARTING AND ENDING TIMES FOR EACH TRAIN, OR TIMES THAT TRAINS ARE STOPPED ON BRIDGE.

6. IF ADVANCE NOTICE IS PROVIDED, TIME NOTICE GIVEN: ________________

   ETA PROVIDED: _______ TO WHOM: ____________________________

7. TIME FIRST SIGNAL GIVEN FOR BRIDGE: _______ TIME ARRIVED AT BRIDGE: ________________

8. TIME FIRST SIGNAL RECEIVED FROM BRIDGE: ________________

9. DID RESPONSE INDICATE AN IMMEDIATE OPENING COULD BE EXPECTED OR THAT THERE COULD BE A DELAY?
   ______________________________________________________________________
   ______________________________________________________________________

10. NAME(S) AND PHONE NUMBER OF BRIDGE TENDER: ___________________________________________________________________

11. TIME BRIDGE OPENED: _______ TIME LOST: _______

12. WHAT WAS REASON PROVIDED FOR DELAY AND WHO PROVIDED IT?: ___________________________________________________________________

13. WHAT NAVIGATIONAL OR MANEUVERING DIFFICULTIES WERE CAUSED BY DELAY?: ___________________________________________________________________

14. PRINTED OR TYPED NAME(S) AND ADDRESS(ES) OF REPORTING SOURCE(S): ___________________________________________________________________

15. PHONE NUMBERS AND/OR E-MAIL FOR REPORTING SOURCE(S) (FOR ADDITIONAL QUESTIONS BY COAST GUARD AND FOR FINAL STATUS OF REPORT): ___________________________________________________________________
Waterway Analysis and Management System Survey

Name of Waterway: _________________________________________

User Information

___ Commercial User
___ Recreational User

Number of years in the maritime industry or number of years using this waterway:
___________________________________________________________

Number of transits in the waterway per year: ______________________

Number of night transits of waterway: _____________________________

Seasonal Dates: Start: __________ End: ________________________

Name of Vessel: _____________________________________________

Vessel Description: __________________________________________

Length: ___________ Beam:__________ Draft:_________ Gross Tons: _____

Net Tons: _________ Bridge Height of Eye:

Cargo Carried: _____________________________________________

Navigational tools used: (ECDIS/ECPINS, GPS, DGPS, VISUAL, RADAR)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What area do you believe is the most dangerous or difficult to navigate:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Are the floating aids to navigation (lighted and unlit buoys) adequate for this waterway:

________________________________________________________________________
Are the fixed aids to navigation (lights, ranges, lighthouses, daybeacons) adequate for this waterway: ________________________________

__________________________________________________________________________________________

Are the year round and lighted ice buoys adequate: ____________________________

__________________________________________________________________________________________

Are there buoys that you feel should be changed to fixed aids to navigation? 
__________________________________________________________________________________________

__________________________________________________________________________________________

Are there any buoys that could be eliminated from this waterway: _______
__________________________________________________________________________________________

__________________________________________________________________________________________

Are there any buoys with sound signals that the bell or gong could be removed: 
__________________________________________________________________________________________

__________________________________________________________________________________________

Are there any areas that require additional aids to navigation in this waterway: 
__________________________________________________________________________________________

__________________________________________________________________________________________

Do the nautical charts, Coast Pilot, and Light List meet your needs for this waterway: 
__________________________________________________________________________________________
Are there private Aids to Navigation that you find misleading or interfere with the current system in the waterway:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Any addition comments on this waterway:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you for taking time to comment on this waterway. Your input as a mariner very valuable to the U. S. Coast Guard in evaluating waterways to make them safe and as easily navigable as possible. Please feel free to contact D09-DG-District-D9-ATON-Support@uscg.mil with any other questions or concerns about any aids to navigation in the Great Lakes. The survey can be mailed to:

Commander (dpw-2)
Ninth Coast Guard District
1240 East Ninth Street
Cleveland, Ohio 44199
IN AN EMERGENCY. If an emergency occurs during the event, such as a person overboard, medical problem, taking on water, or disabling damage from storm, unaccounted for paddlers, and assistance from the Coast Guard is required, we recommend you contact us via VHF-FM channel 16. You do not need to know what the closest Coast Guard station is -- we will determine that -- simply call "Mayday, mayday, mayday, Coast Guard, this is [vessel name] on channel 16, over." During your initial contact, we ask that you provide the following information:

- **Location** (GPS coordinates and/or geographic reference),
- **Nature of distress**, 
- **Number of persons on board** and 
- **Description of your vessel**.

If you have an EPIRB or PLB (preferred over SPOT devices) on board, activate that as well because the SARSAT satellite system has global coverage beyond VHF-FM or cellular antenna range. Launching of flares or displaying of other visual signaling devices should also be considered. Use of cellular telephones should be considered a tertiary means of distress alerting.

WHAT TO EXPECT. Once the Coast Guard receives your distress call, we can decide what the closest response units are, what capabilities to bring and approximately how long it will take to get to your location. The Coast Guard communications watch stander on the other end of the radio may have additional questions for you to further ascertain your situation. For those accustomed to police or fire units responding within a few minutes in your city, be aware that Coast Guard boats and helicopters may take longer to reach your location because we may have to transit dozens or even hundreds of miles. Do your best to stabilize your situation in the meantime. The Coast Guard can also provide basic first responder medical care from our boats or helicopters, but paramedic-level (and greater) medical support must be provided from land-based resources. Please be aware that we do not have divers with subsurface or SCUBA capability. Our helicopters carry a rescue swimmer who can conduct rescues on or near the surface only. If subsurface rescue may be required, let us know that as soon as possible because SCUBA capability must come from other agencies and can take hours to coordinate and transport.

RESCUE 21. The Coast Guard recently installed the Rescue 21 communications system around the Great Lakes, greatly increasing our reception and transmission capability. For event participants, your procedure for contacting us remains unchanged - see the "Mayday" call guidance in the "In an emergency" paragraph above. For our part, Rescue 21 allows us to
rapidly obtain a line of bearing from our radio towers to the location of the VHF-FM caller. This helps us home in on your position more quickly and easily, and also helps us catch hoax callers. Again, you do not need to know where our towers or stations are - call us on VHF-FM channel 16 and we will work with you on a case-by-case basis. In addition, all participating members are required to monitor their VHF-FM radios.

**IN CASE OF STORMS.** If severe storms do occur, it is up to event participants to decide whether to continue their courses or to divert toward cover or safe harbors. The Coast Guard cannot make that decision for you, and we are prohibited from providing specific sailing directions (courses to steer, etc.) to you. The Coast Guard communications watch stander can, however, transmit to you published/charted navigational aids, hazards and information that may be helpful in making your decision.

**A WORD ABOUT HYPOTHERMIA.** Even if air temperatures during the event days are warm and seasonable, be advised that lake temperatures will likely be cold enough in many locations to cause moderate to severe hypothermia within hours. Participants should dress themselves with those water temperatures in mind - and of course, wear their personal flotation device. Hypothermia is an insidious killer that catches unprepared people in the water off guard, so you stack the deck in your favor by wearing a survival suit, dry suit, wet suit or anti-exposure coveralls.

**NINTH COAST GUARD DISTRICT "SAR ETHOS."** The men and women of the Ninth Coast Guard District take our search and rescue (SAR) responsibilities very, very seriously. In fact, our philosophy, or "SAR Ethos" is to treat every potential victim as we would our own family. So know that if you get in trouble out there, we will do our very best. Good luck!

**GREAT LAKES SEARCH AND RESCUE LINE - 1-800-321-4400.**

Joint Rescue Coordination Center Cleveland  
Ninth Coast Guard District  
1240 E. 9th Street  
Cleveland, OH 44199

1-216-902-6117/6118/6109  
ninthdistrictcommandcenter@uscg.mil
Your application for the following event is approved. Special services to be rendered by the Coast Guard are listed. You are reminded that your organization is primarily responsible for safety in the regatta area and that this permit does not relieve you of such responsibility. Participants shall be adequately briefed and their boats equipped as required by law. A permit may also be required by a state, county or municipal agency. This authorization grants no exemption from state or local ordinances. In the event of any change in the information furnished in your application you will notify this office.

- There will not be a Special Local Regulation issued. No restriction is placed on the use of any navigable waters by other parties. Your event shall not obstruct any channel or normal shipping lane, or interfere with any aid to navigation. The Committeeman in Charge shall control participants to prevent conditions hazardous to other craft in the area.

- There will be a Special Local Regulation issued establishing a restricted area and other controls. You will be provided a copy for guidance. The Committeeman in Charge shall control participants to prevent conditions hazardous to other craft in the area.

- Additional safety equipment is stipulated below.

The 113th 'Race to Mackinac' will begin on Friday, July 22, between 1400 and 1530 CDT with the departure of approx. 50 vessels in the 'Cruising Division'. The remaining divisions will depart Chicago, Saturday, July 23, between 1130 and 1500 CDT. The race will conclude on Wed. July 27th at or around 1300 near Mackinac Island. The sponsor organization anticipates approximately 300 participating vessels (26-110' in length), 10 race committee and up to 100 spectator boats on scene.

During this event, Skip Dieball (Person in Charge) will be at the Race Start then will drive up to Mackinac Island, mobile is (419) 392-4411. Chuck Nevel (Person in Charge) will be on Mackinac Island the entire race period, mobile (312) 617-2279.

The designated on-scene Coast Guard PATCOM has the authority to postpone, temporarily stop, or cancel the event because of violation(s) of permit stipulations, a loss of control over the participants, or hazardous conditions. Special Local Regulations, pursuant to 33 C.F.R Part 165.929, will be in effect for the start of this event.

The sponsor organization must comply with all existing Federal, State, Local laws, and other requirements that may impact your ability to hold your event as proposed. Specifically, I bring to your attention the two Inland Rules of the Road:

1. Compliance with rule 9: in all narrow channels, a vessel of less than 20 meters in length or a sailing vessel shall not impede the passage of a vessel that can safely navigate only within a narrow channel or fairway.

2. In the event of restricted visibility, race participants will navigate in accordance with Rule 35 of the Inland Navigation Rules as well as all other pertinent Rules of the Road applicable to the current conditions.

-Continued-
**PERMIT FOR MARINE EVENT**

<table>
<thead>
<tr>
<th>Name of Event</th>
<th>Location</th>
<th>Date Approved</th>
<th>Date of Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Yacht Club 113th Annual Race to Mackinac</td>
<td>Lake Michigan, Huron, Mackinac Island</td>
<td>04/21/2022</td>
<td>07/22/2022</td>
</tr>
</tbody>
</table>

**Sponsoring Organization**
Chicago Yacht Club

**Name of Representative (Last, First, MI)**
Dieball, Skip

**Title**
On Water Director

---

Your application for the following event is approved. Special services to be rendered by the Coast Guard are listed. You are reminded that your organization is primarily responsible for safety in the regatta area and that this permit does not relieve you of such responsibility. Participants shall be adequately briefed and their boats equipped as required by law. A permit may also be required by a state, county or municipal agency. This authorization grants no exemption from state or local ordinances. In the event of any change in the information furnished in your application you will notify this office.

- **There will not be** a Special Local Regulation issued. No restriction is placed on the use of any navigable waters by other parties. Your event shall not obstruct any channel or normal shipping lane, or interfere with any aid to navigation. The Committeeman in Charge shall control participants to prevent conditions hazardous to other craft in the area.

- **There will be** a Special Local Regulation issued establishing a restricted area and other controls. You will be provided a copy for guidance. The Committeeman in Charge shall control participants to prevent conditions hazardous to other craft in the area.

- **There will be** a Local Notice to Mariners issued to inform maritime interests and solicit their cooperation.

- **There will not be** a Regatta Patrol assigned by the Coast Guard.

- **There will be** a Regatta Patrol assigned by the Coast Guard. The attached instruction for Patrol Commanders outlines their responsibility and authority. You should work out specific details with the Patrol Commander.

- **Additional safety equipment** is stipulated below.

---

The Ninth Coast Guard District strongly recommends that all participants wear either an inherently buoyant or Inflatable Personal Flotation Device (PFD) with an affixed, registered Personal Locator Beacon (PLB) whenever underway, for the duration of this event.

As the event sponsor, you remain responsible for the overall safety of this event. This may include providing instructions to the participants, verifying crew qualifications, conducting equipment inspections, providing rescue and first aid facilities, and controlling obstructions or menaces to navigation as applicable. You are also responsible for obtaining any additional permits from other Federal, State, or local authorities that may be required.

Lastly, I have enclosed a copy of the Coast Guard District's "Cardinal Points" for Regattas. This document provides information concerning how to notify the Coast Guard Guard, should a distress situation develop during your event.

Jason A. Radcliffe
Lieutenant, U.S. Coast Guard
Waterways Management
Ninth Coast Guard District
by direction

---

CG-4424 (03/20)  
PREVIOUS EDITIONS ARE OBSOLETE
SAILDRONE, INC. will operate two Unmanned Surface Vehicles, called “Saildrones”, to study fish populations in Lake Superior waters. They will be launched from Ashland, WI on or about August 8th and transit through the central and western areas of Lake Superior through September 30, 2022. They will have track lines nearshore and offshore throughout the lake.

Saildrones are wind-powered Uncrewed Surface Vehicles that carry important oceanographic and fisheries acoustics research instrumentation and are controlled from shore through satellite communications.

- Color: Orange
- Light: white all-round light on top of mast
- Radar Reflector: Yes
- Notation: “Saildrone”
- Length: 23 ft & Width: 2 ft
- Height: 16 ft above water line
- Draft: 6 ft, Avg. speed: 3 kts
- GPS / AIS / Cameras: Yes
- AIS identifiers: “SD-1063”, “SD-1064”

SAILDRONE MISSION CONTROL
(510) 722-6070
missioncontrol@saildrone.com

SCIENCE CONTACTS
Pete Esselman pesselman@usgs.gov
mobile: 734-546-5698

Dan Yule dyule@usgs.gov
Research Vessel Kiyi mobile: 715-209-6468
Boeing Liquid Robotics SV2 WaveGlider, Autonomous Wave Driven Surface Vehicle

1. Characteristics:
   a. Size:
      i. Surface component - “Float” 82” x 24”
      ii. Sub-surface component - “Sub” 42” x 75”
      iii. Sub and Float joined by 6m (20ft) tether (Figure 1)
   b. Propulsion: Mechanical conversion of wave energy into forward propulsion, max speed 1.4 knots
   c. Draft: Float 12”. Sub when hanging below Float 20’
   d. Color: Float @ surface is Safety Yellow w/ Yellow Flag
   e. Lighting Configuration: Shore activated, LED, white, all around on 4’ mast

2. Capabilities:
   a. Communication: Real time Iridium Short Burst Data - Real time, on demand commands from Pilot in Charge, vehicle sends status updates every 5 minute or up to every 1 minute if an AIS equipped vessel approaches within 1km.
   b. Collision Avoidance: remotely commanded manual evasive action, as directed by Pilot in Charge/On Duty
   c. Means Of Lookout: Map based web interface displaying all control systems, charts, AIS targets, waypoints, path, etc. All updated at 5 or 1 minute intervals as listed in “Communication” above. A 24hr watch schedule will be instituted when the vehicle is deployed.

3. Contact Info:
   a. Stephen Constant, Physical Science Technician, Marine Instrumentation, Great Lakes Environmental Research Lab, NOAA, Ann Arbor, MI. Office 734-741-2336, Mobile 734-717-0205, steve.constant@noaa.gov

4. Location and Time of Deployment:
   a. Launch - 1300 July 5th, 2022. Thunder Bay, 14.86nm southeast of Alpena, MI Lighthouse
   b. Operational Area - Please see attached polygon boundaries for Thunder Bay, Outer Saginaw Bay, and Southern Basin.
   c. Recovery - Estimated to be between August 18th and 20th, 2022 depending on rate of travel/wave conditions. Exact time TBD. Retrieval at deployment location.

5. Ability to recover vessel: As needed in waves up to 1.5’. Launch and recovery via crane on R/V NOAA 5503 (55ft)

6. Other - Assessment
   a. Mission - The Wave Gliders will be placed in the water from an NOAA vessel and begin their mission near the outer Thunder Bay polygon. They will then split up and cover the other remaining polygons (Outer Saginaw Bay and Southern Basin) before returning to the deployment location on or around 8/18/22.
   b. Risk Mitigation - The Wave Glider is bright yellow in color (highly visible during daylight hours) and contains an all around white LED at the top of the mast for night navigation. The average speed is approximately 1 knot, giving ample time to maneuver as needed in the event a change of course is warranted. The Wave Glider will be monitored/piloted 24 hours/day using software that provides sufficient means of collision avoidance. It has an AIS receiver that will be programmed to give the
pilot early notification of an approaching vessel (equipped with AIS). If any malfunction occurs, the vessel will be programmed to enter a "holding pattern" until an NOAA vessel arrives on scene to troubleshoot. Above contact information will also be affixed to the vessel topsides. If all vessel power is lost, an attached stand-alone back-up satellite tracking device will be used for location and recovery.

Figure 1 - Simple schematic of vehicle and means of propulsion

Figure 2 - Example screenshot of the Wave Glider Management System (WGMS) use by remote pilots to control the WaveGlider during deployment
Outer Saginaw Bay Polygon Boundaries:

-83.2713, 44.2383
-83.2598, 44.1746
-83.0017, 44.4333
-82.8859, 44.2234
Thunder Bay Polygon Coordinates:

-83.1227, 44.9380
-83.1238, 44.7960
-82.9209, 44.9204
-82.8387, 44.7488
Southern Basin Lake Huron Polygon:

-82.5318, 43.9187
-82.2484, 43.9590
-82.4933, 43.8157
-82.2744, 43.8372