BookletChart™

West End of Lake Erie
NOAA Chart 14830

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

- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA’s Office of Coast Survey, the nation’s chartmaker
What are Nautical Charts?
Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America’s commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

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

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

Notice to Mariners Correction Status
This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14830

(Selected Excerpts from Coast Pilot)
Vermilion, about 34 miles W of Cleveland, has a harbor used mainly by fishing and recreational craft. The harbor comprises the lower 3,000 feet of the Vermilion River, and an approach channel from the lake. About 0.6 mile SE of the river entrance, a lighted tank with the name VERMILION on the side is prominent. Huron Harbor is about 44 miles W of Cleveland inside the mouth of the Huron River at the city of Huron, Ohio. Huron Harbor Light (41°24.3’N, 82°32.6’W), 80 feet above the water, is shown from a white square pyramidal tower on the W pierhead. A fog signal is at the light.

From Huron, the wooded shoreline trends NW for 9.7 miles to Cedar Point (41°29.5’N, 82°41.3’W), the SE entrance point to Sandusky Bay. In this stretch, deep water is about 0.9 to 1.2 miles off except at Cedar Point where the shallow depths widen to 1.5 miles.

Sandusky Harbor, serving the city of Sandusky, Ohio, is in the SE part of Sandusky Bay about 50 miles W of Cleveland. The harbor is a major shipping point for coal. Sand, gypsum, and fish are also handled. The harbor is an excellent natural harbor of refuge for small craft.

Sandusky Bay extends W from its entrance between Cedar Point and Bay Point for about 15 miles to Muddy Creek Bay. Sandusky River flows into the S side of Muddy Creek Bay. Small craft can navigate through Sandusky Bay, Muddy Creek Bay, and upstream in the Sandusky River for about 15 miles to the Norfolk Southern Railway Bridge at the town of Fremont, Ohio. Depths of about 5 feet can be carried through Sandusky Bay, thence 2 to 4 feet through Muddy Creek Bay, and 2 to 19 feet in the river. The channels through the bays are indefinite and not marked. The entrances to Muddy Creek Bay and the Sandusky River are marked by uncharted buoys that are frequently moved to mark the best water.

Marblehead Coast Guard Station is close W of Marblehead Stone Docks. A small sheltered basin at the station has depths of 8 feet decreasing to 6 feet at the edges.

Between Catawba Island and Locust Point (41°36.2’N, 83°05.0’W), a rounding projection 12 miles W, a broad open bight has depths less than 24 feet. The Portage River empties into the S side of the bight. A large shallow bank with depths less than 14 feet extends about 5.5 miles N and NE off Locust Point. A least depth of 2 feet, marked on the E side by a buoy, is about 4.7 miles NE of the point, and there are scattered patches of 3 to 10 feet elsewhere. Niagara Reef, a detached shoal with a least depth of 3 feet, is 6.8 miles NE of the point and is marked on the N side by a lighted buoy.

Huron Harbor Dangers.—An extensive area of fish net stakes is off the entrance to Huron Harbor. Huron is within the Sandusky customs port of entry.

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Harbor Regulations.—A speed limit of 6 mph (5.2 knots) is enforced in the harbor except in the outer harbor where the speed limit is 10 mph (8.7 knots). (See 33 CFR 162.155 and 207.570, chapter 2, for regulations.)

Sandusky Harbor Dangers.—In 1977, it was reported that the jetty extending NE from Cedar Point is partially submerged during periodic high water conditions.

Caution.—A submarine cable crosses the inner end of Moseley Channel; vessels are cautioned not to drag anchor in this area.

Sandusky is a customs port of entry.

Toledo is a customs port of entry.

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Harbor regulations.—Speed in harbor. In Maumee Bay, lakeward of Maumee River Lighted Buoy 49, no vessel greater than 100 feet long shall exceed 12 mph (10.4 knots). No person shall operate any vessel over 40 feet long in the harbor at a speed greater than 6 mph (5.2 knots). Vessels greater than 100 feet long shall not overtake another vessel in the harbor. (See 33 CFR 162.150, chapter 2, for speed limits and regulations.)

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

RCC Cleveland
Commander
9th CG District (216) 902-6117
Cleveland, OH
NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers.

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry. To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward
on navigable waters except Western Rivers

<table>
<thead>
<tr>
<th>PORT SIDE</th>
<th>ODD NUMBERED AIDS</th>
<th>PREFERRED CHANNEL</th>
<th>EVEN NUMBERED AIDS</th>
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<td>GREEN LIGHT ONLY</td>
<td>NO NUMBERS — MAY BE LETTERED</td>
<td>RED LIGHT ONLY</td>
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<tr>
<td></td>
<td>FLASHING (2)</td>
<td>PREFERRED CHANNEL TO STARBOARD</td>
<td>FLASHING</td>
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<td>TOPMOST BAND GREEN</td>
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<tr>
<td></td>
<td>QUICK FLASHING</td>
<td>COMPOSITE GROUP FLASHING (2+1)</td>
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<td>ISO</td>
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</tbody>
</table>

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry. To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at http://www.navcen.uscg.gov.
United States - Great Lakes
Lake Erie - Michigan - Ohio

West End of Lake Erie

Polyconic Projection
Scale 1:100,000

North American Datum of 1963
(World Geodetic System 1984)

SOUNDINGS IN FEET
Additional information can be obtained at nauticalcharts.noaa.gov.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additional or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Comptroller, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan and Buffalo, NY. Refer to charted regulation section numbers.

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

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

For more detail see Charts Nos. 14830, 14846, 14847.

Joins page 10

Printed at reduced scale. See Note on page 5.
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:133333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.
Note: Chart grid lines are aligned with true north.
NO DISCHARGE ZONE
(see note 2)

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

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

Additional unmarked submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be marked and those that are originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to these draft areas where pipelines and cables may exist and when anchoring, mooring, or towing.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.173 north and 0.271 west to agree with this chart.

CAUTION
Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

Gas pipelines and wells contain natural gas under pressure, and damage to these installations would create an immediate fire hazard. Vessels anchoring in Lake Erie should do so with caution after noting the underwater and therefore concealed positions of all oil and gas wells, pipelines, submarine cables and other installations.

NOTE D
Mariners are warned that numerous uncharted stakel and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/Contact.html.
VHF Marine Radio channels for use on the waterways:
Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

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

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References
Nautical chart related products and information — http://www.nauticalcharts.noaa.gov
Interactive chart catalog — http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNМ and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents — http://tidesandcurrents.noaa.gov
Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center — http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/
National Hurricane Center — http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center — http://ptwc.weather.gov/
Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm

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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.