NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

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Formerly LS 53, 1st Ed., 1914 KAPP 1322

SOUNDINGS IN FEET

14864

83° 50′ 83° 40′ 83° 30′ 83° 20′ 83° 10′ 83° 82° 50′

45° 40′ 45° 30′ 45° 20′ 45° 10′ 45° 44° 50′ 44° 40′

CONTINUED ON CANADIAN CHART 2297

CONTINUED ON CANADIAN CHART 2298

CONTINUED ON CHART 14860

JOINS CHART 14863

JOINS CHART 14880

SCALE 1:120,000
Nautical Miles
Statute Miles
Yards
Meters

MAGNETIC VAR 8° 15′ W (2013) ANNUAL INCREASE 2′

Latitude and Longitude Plotting Interpolator

MIDDLE DUCK ISLAND
GREAT DUCK ISLAND
DUCK ISLAND
OUTER DUCK ISLAND
Horseshoe Bay
GREAT DUCK ISLAND Fl 10s 108ft
Jennie Graham Shoal
LOCAL MAGNETIC DISTURBANCE (see note E)
CANADA
ONTARIO

NO-DISCHARGE ZONE (see note Z)

THUNDER BAY NATIONAL MARINE SANCTUARY AND UNDERWATER PRESERVE (protected area: 15 CFR 922; see note A)

DANGER AREA (see note B)

FORTY MILE PT LT Iso 6s 66ft 16 St M
MAST
RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.
WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.
ROGERS CITY
SPIRE
TANK
AERO
R MAST 3 Vert Lts Oc R 2 F R (WHAR) 460 kHz
Pump-out facilities
SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.
SOURCE
A 1990-2011 NOS Surveys full bottom coverage
B2 1970-1989 NOS Surveys partial bottom coverage
NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.
Refer to charted regulation section numbers.
NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ⊙(Approximate location)
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Alpena, MI	KIG-83	162.550 MHz
Gaylord, MI	WWF-70	162.500 MHz

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.
LAKE MICHIGAN - HURON
JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC
Elevation in feet
Low Water Datum
Average levels (2003-2012)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.
NOTE E
LOCAL MAGNETIC DISTURBANCE
Differences from normal variation of as much as 8° have been observed near Great Duck Island in the vicinity of Lat. 45°32′ , Long. 83°03′.
For more detail see Chart No. 14869
PRESQUE ISLE LT Fl 15s 123ft 22 St M
PRESQUE ISLE HARBOR
Presque Isle Lt
Presque Isle Coast Guard Station
Presque Isle Wreck Pt
Presque Isle Corp
Lotus Lake
Lake Esau
STONEPORT Al WR 10s 55ft 25 St M
Stoneport
Quarry
FALSE PRESQUE ISLE
Bell
Rockport
Ferron Pt
Middle Island Fl 10s 78ft 14 St M
Submerged net stakes
Devils Lake
Grass Lake
Crow Creek
South Nowemis Pt
MARINER ACTIVATED SOUND SIGNAL
ALPENA LIGHT - (MRASS) Horn is activated by keying mic 5 times on VHF-FM Ch 83A.
CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.
ALPENA
R MAST Fl R
ALPENA LT Fl R 4s 44ft 12 St M HORN (MRASS)
Thunder Bay River
Detroit & Mackinac Ry
Mud Lake
Bare Pt Harbor
Partridge Pt Marina
Isaacson Bay
Misery Bay
Crooked
Whitefish Pt
Sugar I
Potter Pt
Round I
Stoneycroft Point
Sturgeon Pt
Fl 6s 69ft 9 St M
Thunder Bay Island
Fl G 10s 63ft 16 St M
THUNDER BAY
Squaw Bay
Sulphur I
Scarecrow Island
Bird I
South Point
Hardwood Pt
Ossineke
State Forest Campground
North Branch Devils River
Devils Lake
HARRISVILLE
Harrisville State Park
Disposal Area
Black River I
Black River
Cedar Lake
Cedar Creek
Greenbush
Ellen Creek
Mapleton Creek
Long Lake
Lake Huron
ALPENA
LAKE HURON
MICHIGAN
THUNDER BAY NATIONAL MARINE SANCTUARY AND UNDERWATER PRESERVE (protected area: 15 CFR 922; see note A)
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.673″ southward and 0.964″ westward to agree with this chart.
CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:
Pipeline Area Cable Area
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.
NOTE D
Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.
CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.
CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.
NOTE B
WARNING
Unexploded ordnance may exist in this area. Anyone finding unexploded ordnance should notify the nearest U.S. Coast Guard or law enforcement facility.
Latitude and Longitude Plotting Interpolator
ODAS 45002 Fl (4) Y 20s PA
Obstn PA
DANGER AREA (see note B)
NO-DISCHARGE ZONE (see note Z)
THUNDER BAY NATIONAL MARINE SANCTUARY AND UNDERWATER PRESERVE (protected area: 15 CFR 922; see note A)
NOTES
PLANE OF REFERENCE for THIS CHART (Low Water Datum)..... 577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).
SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.
Additional information can be obtained at nauticalcharts.noaa.gov.
POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).
CAUTION
POTABLE WATER INTAKE
Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.
Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.
Vessel Traffic Services calling-in point; arrow indicates direction of vessel movement. Mandatory calling-in points are identified numerically. Voluntary calling-in points are identified alphabetically. For additional information see U.S. Coast Pilot 6 and the U.S. and Canadian Notice to Mariners.
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.
SCALE 1:120,000
Nautical Miles
Statute Miles
Yards
Meters
THE NATION'S CHARTMAKER SINCE 1807
UNITED STATES - GREAT LAKES
LAKE HURON - MICHIGAN
HARRISVILLE TO FORTY MILE POINT
Polyconic Projection
Scale 1:120,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET
3117.6 X 6311.4 mm

KAPP 1324
HARRISVILLE HARBOR MICHIGAN
Scale 1:12,000
SOUNDINGS IN FEET
Statute Mile
Yards
HARRISVILLE
Mill Creek
Pond
Ramp
City Dock
County Bldg
Post Office
Fl R 4s 33ft 5 St M
Fl G 2.5s 20ft 7 St M
R "2"
Blds
Cy
Obstn
Wk
Ldg Lts 180°
Ldg Lts 225°
NO-DISCHARGE ZONE (see note Z)
THUNDER BAY NATIONAL MARINE SANCTUARY (protected area: 15 CFR 922; see note A)

KAPP 1325
ALPENA HARBOR MICHIGAN
Scale 1:15,000
SOUNDINGS IN FEET
Statute Mile
Yards
LAKE BESSER
Besser Co
Alpena Steel & Wire Inc
Marsh
Thunder Bay River
Standard Oil
FIXED BRIDGE HOR CL 75 FT VERT CL 21 FT
FIXED BRIDGE HOR CL 75 FT VERT CL 14.5 FT
Tank Farm
Sewage Treatment Plant
Alpena Marina, Inc
Alpena Yacht Club
Ramp
Boat Ramp
Lighted Buoy
Waterworks
Michekewis Park
Depth over crib 4 ft
Depth over crib 5 feet
Depth over crib 6 feet
Depth over crib 11 feet
Stone Quarry
Conveyor Belt
STACKS
STACK 2 VERT LTS OC R F R
Huron Cement Div Lafarge Corp
Log Boom
F R 109ft Priv
F G 38ft Priv
F G 22ft Priv
Abitibi Corporation Alpena Plant
Cable Area
Pipeline
Submarine Pipeline Area
BASCULE BRIDGE HOR CL 80 FT VERT CL 50 FT
CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.
ALPENA LT Fl R 4s 44ft 12 St M HORN (MRASS)
Fl G 2.5s 29ft 5 St M
Fl R 4s 33ft 5 St M
RG "TB"
RG "AL"
Fl (2+1) R 6s
Ldg Lts 180°
Ldg Lts 225°
NO-DISCHARGE ZONE (see note Z)
THUNDER BAY NATIONAL MARINE SANCTUARY AND UNDERWATER PRESERVE (protected area: 15 CFR 922; see note A)
MARINER ACTIVATED SOUND SIGNAL
ALPENA LIGHT - (MRASS) Horn is activated by keying mic 5 times on VHF-FM Ch 83A.

28th Ed., Nov. 2013
14864
CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.
Last Correction: 11/30/2015. Cleared through:
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)
To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.
SOUNDINGS IN FEET
Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY
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PATHOMS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
FEET 6 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102
METERS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Harrisville to Forty Mile Pt
SOUNDINGS IN FEET - SCALE 1:120,000
14864