

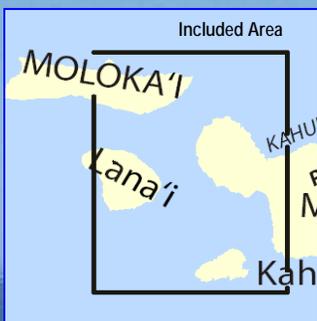
BookletChart™

Channels between Moloka'i, Maui, Lana'i, and Kaho'olawe

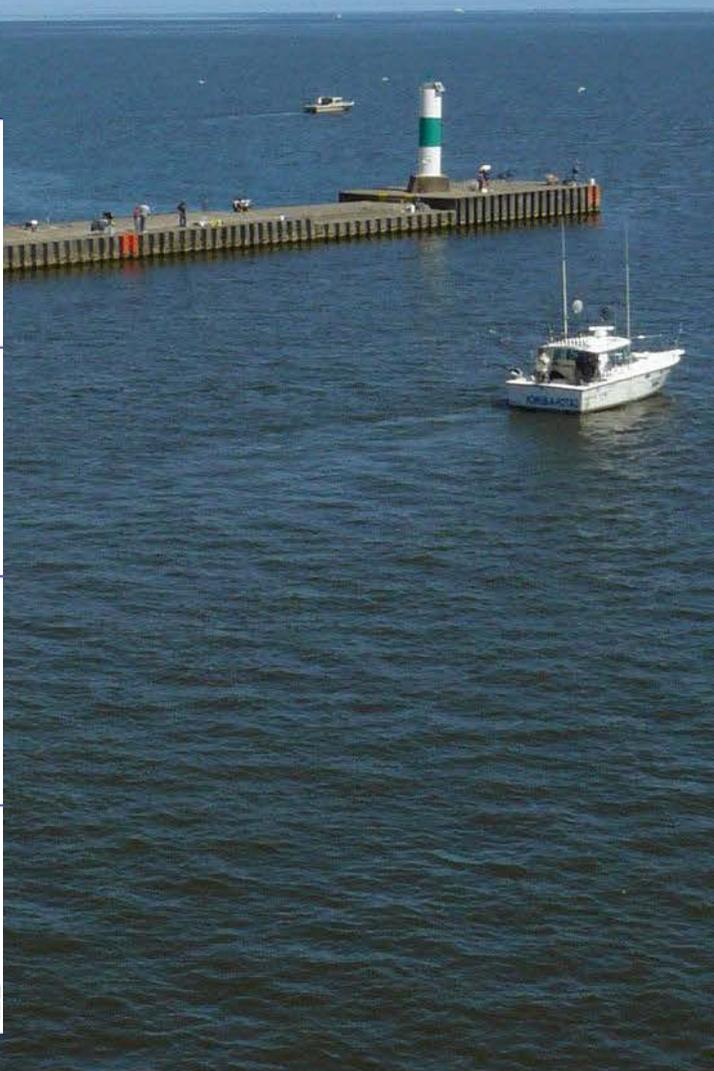
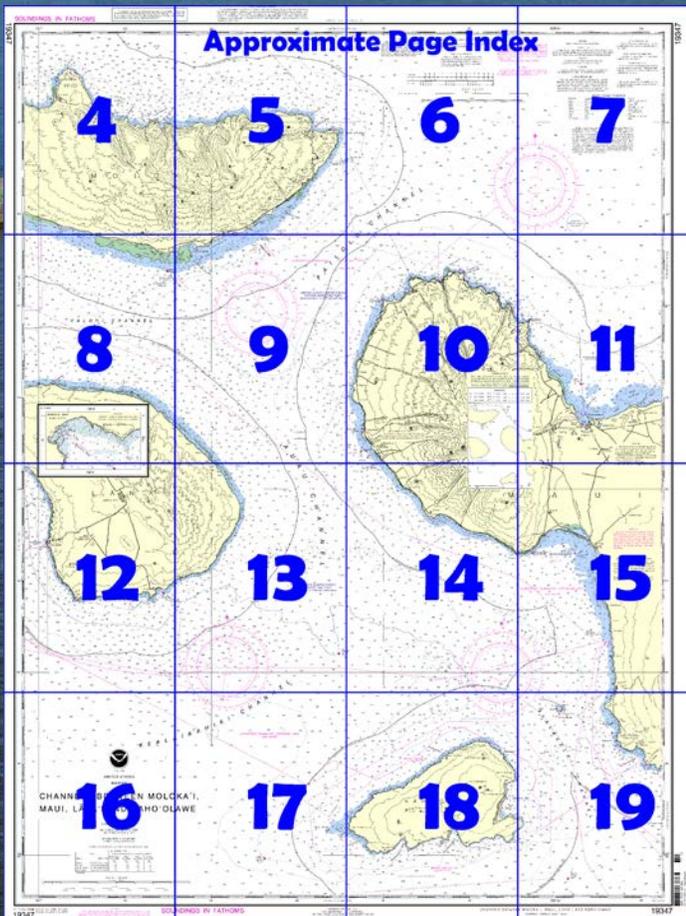
NOAA Chart 19347

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



**Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA**

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

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

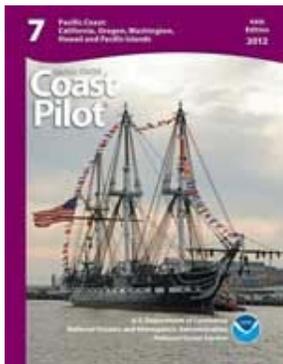
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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

Notice to Mariners Correction Status

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

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=19347>.



(Selected Excerpts from Coast Pilot)
Cape Hanamanioa, the SW extremity of Maui, is a black lava mass. **Hanamanioa Point Light** (20°35'00"N., 156°24'43"W.), 73 feet above the water, is shown from a 21-foot post with a black and white diamond-shaped dayboard on the cape. A current is reported to set constantly NW past the cape; however, a short series of observations a mile SE of the light indicates a tidal current with a velocity of 0.8 knot at strength.

La Perouse Bay, between Cape Hanamanioa and Cape Kinau, is about 0.7 mile wide and indents the coast about 0.5 mile. On the NW side of the bay is **Puu o Kanaloa**, a low

yellowish-brown cone at the water's edge, with its seaward side blown out. The crater is surrounded by a lava flow from **Kalua o Lapa**, a small, black cone about 1 mile N of the bay. A rock covered 10 feet is in the middle of the entrance to the bay. A rocky outcrop is on the NW side of the bay. Strangers are advised to exercise extreme caution in the bay.

Cape Kinau, 1.5 miles NW of Cape Hanamanioa, is a broad, low, black, lava point and a **protected area** of a Natural Area Reserve. A rock with 4½ feet of water over it is 400 yards offshore near the N end of the cape.

Puu Olai, about 2.5 miles N of Cape Kinau, is the most prominent landmark in this vicinity. The hill is brown in color, 367 feet high, and consists of three bare knolls, of which the southernmost is the highest.

Molokini, 5.5 miles NW of Cape Hanamanioa, is a small crescent-shaped islet about 0.3 mile long and 156 feet high. **Molokini Island Light** (20°37'50"N., 156°29'51"W.) is shown from a 30-foot pole with a red and white diamond-shaped dayboard. A reef extends 300 yards N from the NW end of the islet; there is deep water close to the S side. Vessels pass on either side of the islet. In 1984, unexploded ordnance was reported in the vicinity of the islet; caution is advised.

Makena Anchorage, 1 mile N of Puu Olai, is exposed to kona weather, but affords good holding ground during the trades. Anchorage can be had in depths of 12 to 15 fathoms off **Nahuna Point**, with a fairly prominent church bearing 100°. A few houses may be seen among the trees on the rocky point at the N side of the bight, and a prominent house is at the S end of the sand beach. The strong trade winds that are felt farther N in Maalaea Bay are not pronounced at Makena. Secondary roads lead along the coast and inland from the village. Anchorage can also be found in **Ahihi Bay**, just S of Puu Olai.

The country back of Makena rises gently to the mountains. The lower slopes are covered with cactus, while the slopes higher up are wooded in places. From Makena to Kihei the coast has a general N trend and is heavily developed with beach homes and hotels. The country back of the coast is like that in the vicinity of Makena.

McGregor Point Light (20°46'39"N., 156°31'22"W.), 72 feet above the water, is shown from a 20-foot white tower on McGregor Point on the W side of Maalea Bay. The coast between McGregor Point and Olowalu is broken by low bluffs rising from the water's edge, behind which the country presents a barren appearance. The mountains have sharp jagged peaks and are cut by deep gorges.

Papawai Point, 0.9 mile W of McGregor Point, is the southernmost point of W Maui. Deep water is close inshore at the point.

Olowalu is on **Hekili Point**, 18 miles NW of Cape Hanamanioa. The deep gulch of **Olowalu Stream** appears as a gap in the mountains when abreast of the point and is an excellent night mark.

Launiupoko Point, about 2 miles NW of Olowalu, is low and rounding. About 0.8 mile inland from the point is an 808-foot hill that has a mottled, grayish-brown appearance. Shoal water extends about 0.2 mile offshore from the point NW to Lahaina. The highway skirts the shore between these points, and automobile lights along the road are usually the only lights seen along the coast.

Kekaa Point (20°55.8'N., 156°42.0'W.), 26 miles NW of Cape Hanamanioa, is the westernmost extremity of Maui and is known locally as Black Point. The point is a dark, rocky promontory, 85 feet high, which appears detached from a distance; there are no offshore dangers. A hotel is on the point.

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

RCC Honolulu Commander
14th CG District (808) 535-3333
Honolulu, HI

Table of Selected Chart Notes

Corrected through NM Nov. 05/05
Corrected through LNM Oct. 25/05

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:80,000 at Lat. 20°51'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

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

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

NOTE
Fish Aggregating Devices (FADS) are established along the coastal waters of the main Hawaiian Islands.

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.

NOTE B
Submerged submarine operations are conducted at various times in the waters contained on this chart. Proceed with caution.

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

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

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)

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).

For Symbols and Abbreviations see Chart No. 1

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.
Hawaii Kai, HI KBA-99 162.40 MHz
Mt. Haleakala, HI KBA-99 162.40 MHz

LAHAINA BOAT BASIN
The entrance channel is marked by private/maintained buoys. In August 2009, the reported depths in the basin range from 6 to 8 feet.

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.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. 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, 14th Coast Guard District in Honolulu, Hawaii or at the Office of the District Engineer, Corps of Engineers in Honolulu, Hawaii.
Refer to charted regulation section numbers.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

HORIZONTAL DATUM
The horizontal reference datum of this chart is World Geodetic System 1984 (WGS 84), which for charting purposes is considered equivalent to the North American Datum of 1983 (NAD 83). Geographic positions referred to the Old Hawaiian Datum must be corrected an average of 11.462" southward and 10.145" eastward to agree with this chart.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

NOTE X
Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: - - - - -

HAWAIIAN — ENGLISH TRANSLATIONS

Hawaiian	English	Hawaiian	English
Akau	north	Kowa	channel, strait, sound
Awa	bay, cove	Lae	point, cape
Hana	bay	Lua	crater, pit
Heiau	place of worship, temple	Mauna	mountain, hill, peak
Hema	south	Moku	island, islet, rock
Hikina	east	Pali	cliff, peak, point
Hono	cove, bay	Pohaku	rock
Kau	sea	Puu	mountain, hill(s), peak
Komohana	west	Wai	water

TIDAL INFORMATION

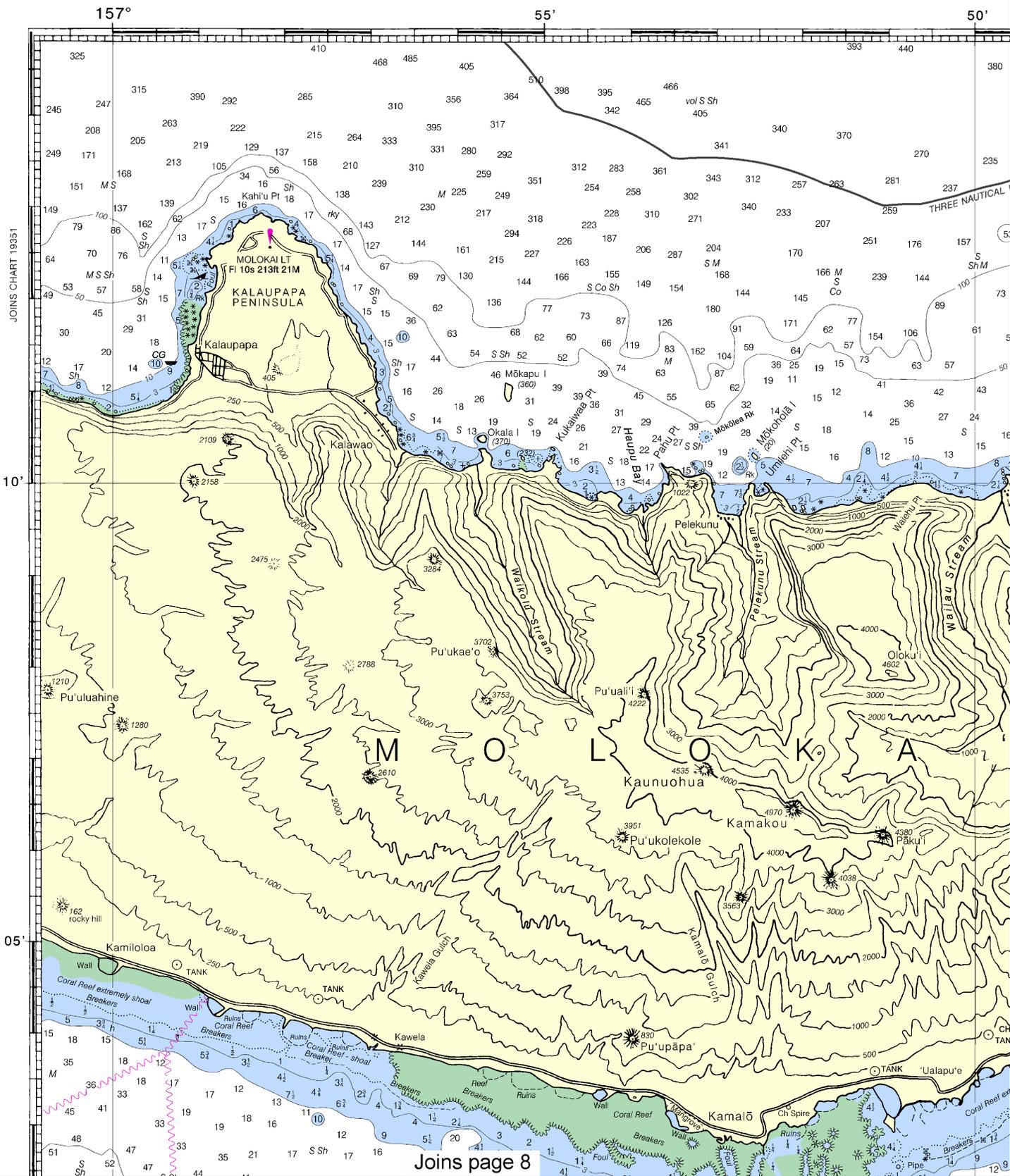
Place	Name (LAT/LONG)	Height referred to datum of soundings (MLLW)			
		Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Lahaina	(20°53.0'N/156°41.0'W)	2.2	1.7	0.3	-1.0
Kahului	(20°53.9'N/156°28.3'W)	2.3	1.9	0.3	--
Kamalo Harbor	(21°3.0'N/156°53.0'W)	2.1	1.6	0.2	-1.0
Kaunapali	(20°47.0'N/157°0.0'W)	2.2	1.7	0.2	-1.0

(Aug 2005)

SOUNDINGS IN FATHOMS

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

19347



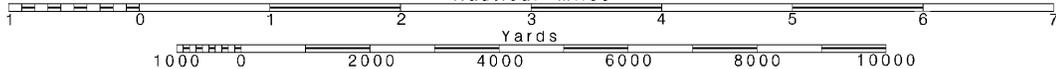
4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



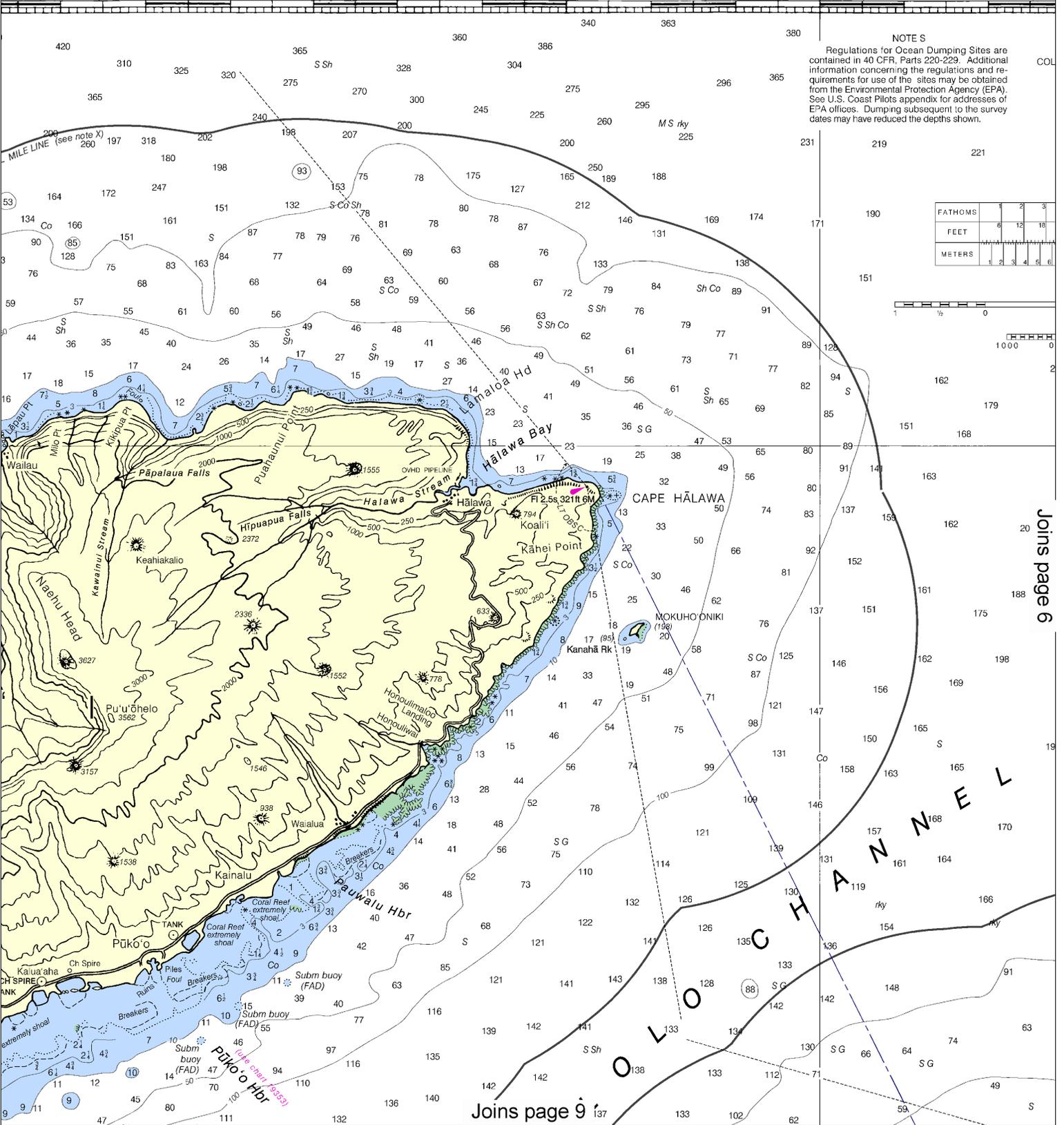
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

Formerly C&GS 4130, 1st Ed., May 1928 KAPP 2790

45'

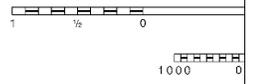
CONTINUED ON CHART 19340

40'



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

FATHOMS	1	2	3
FEET	6	12	18
METERS	1	2	3



Joins page 6

Joins page 9

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:106667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



DEMAND CHARTS

chart updated weekly by NOAA for Notices to Mariners in ordered using Print-on-Demand technology. New sea as traditional NOAA charts. Ask your chart agent AA at 1-800-584-4683, http://NauticalCharts.gov, at 1-877-56CHART, http://OceanGrafix.com, or

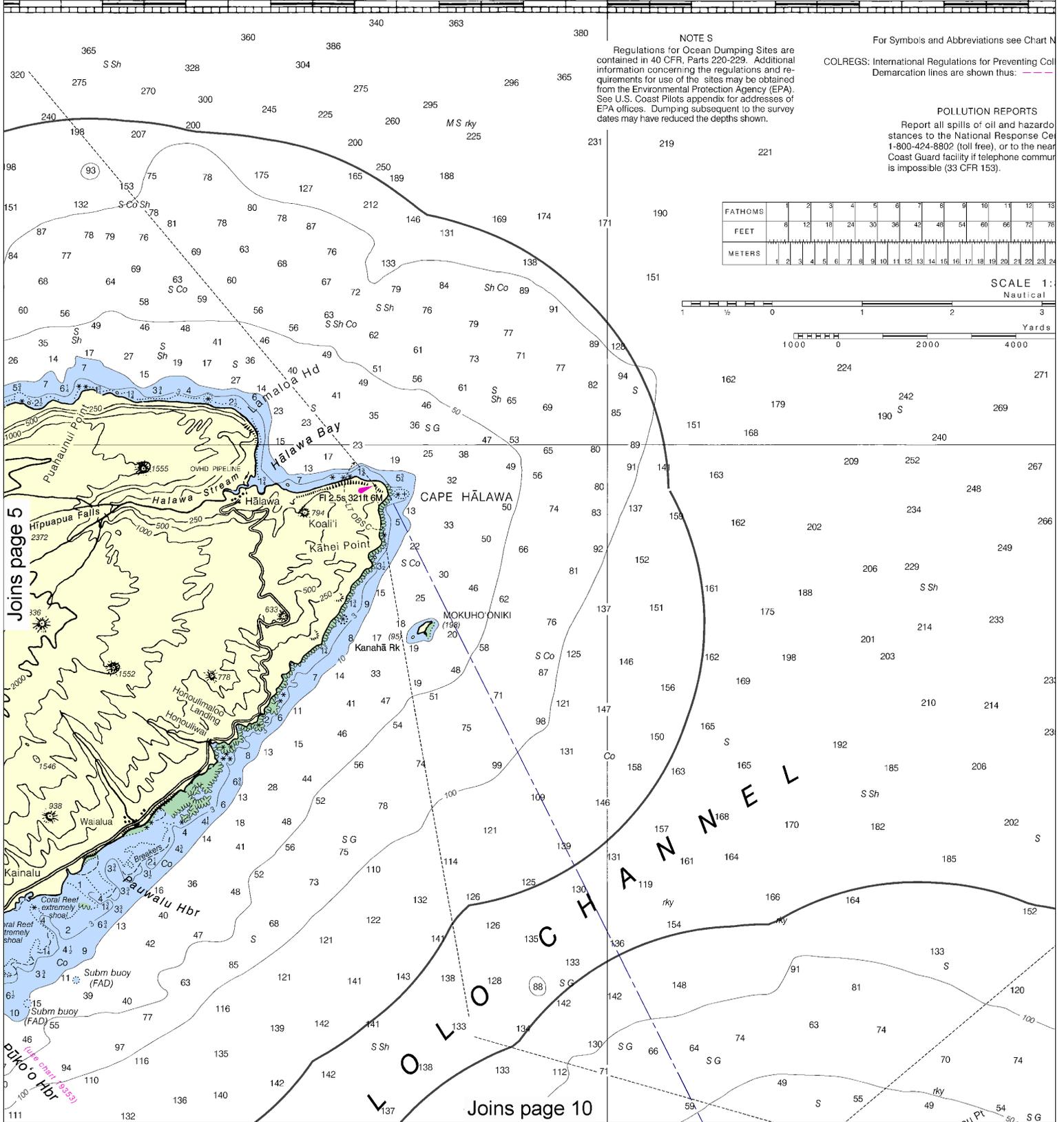
Formerly C&GS 4130, 1st Ed., May 1928 KAPP 2790

45'

CONTINUED ON CHART 19340

40'

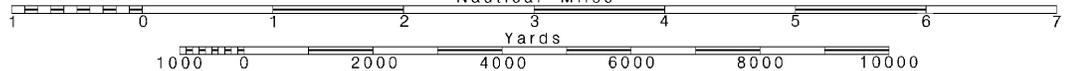
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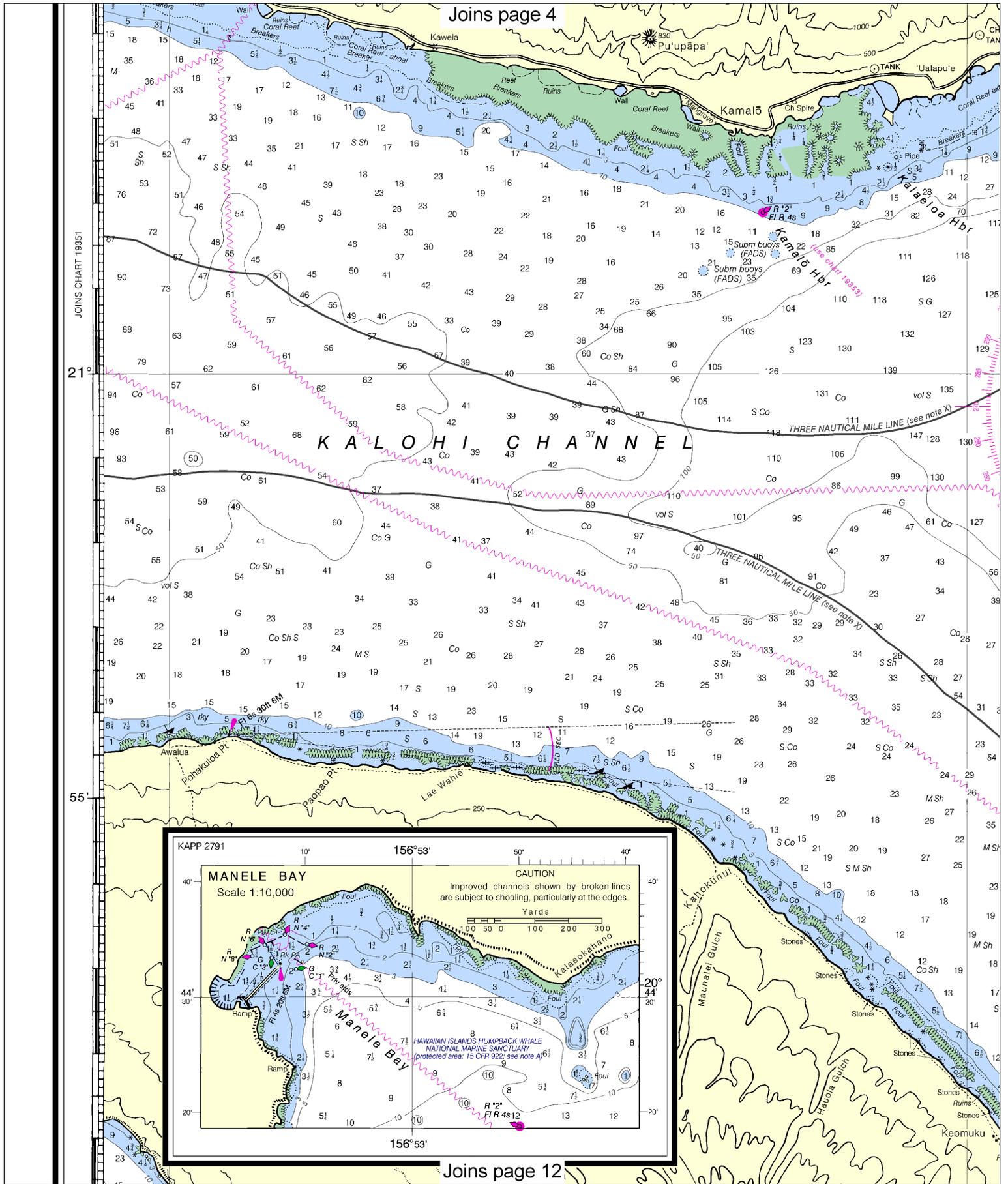
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SCALE 1:80,000
Nautical Miles

See Note on page 5.



Note: Chart grid lines are aligned with true north.

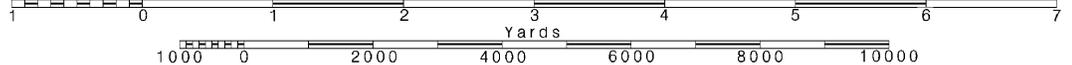


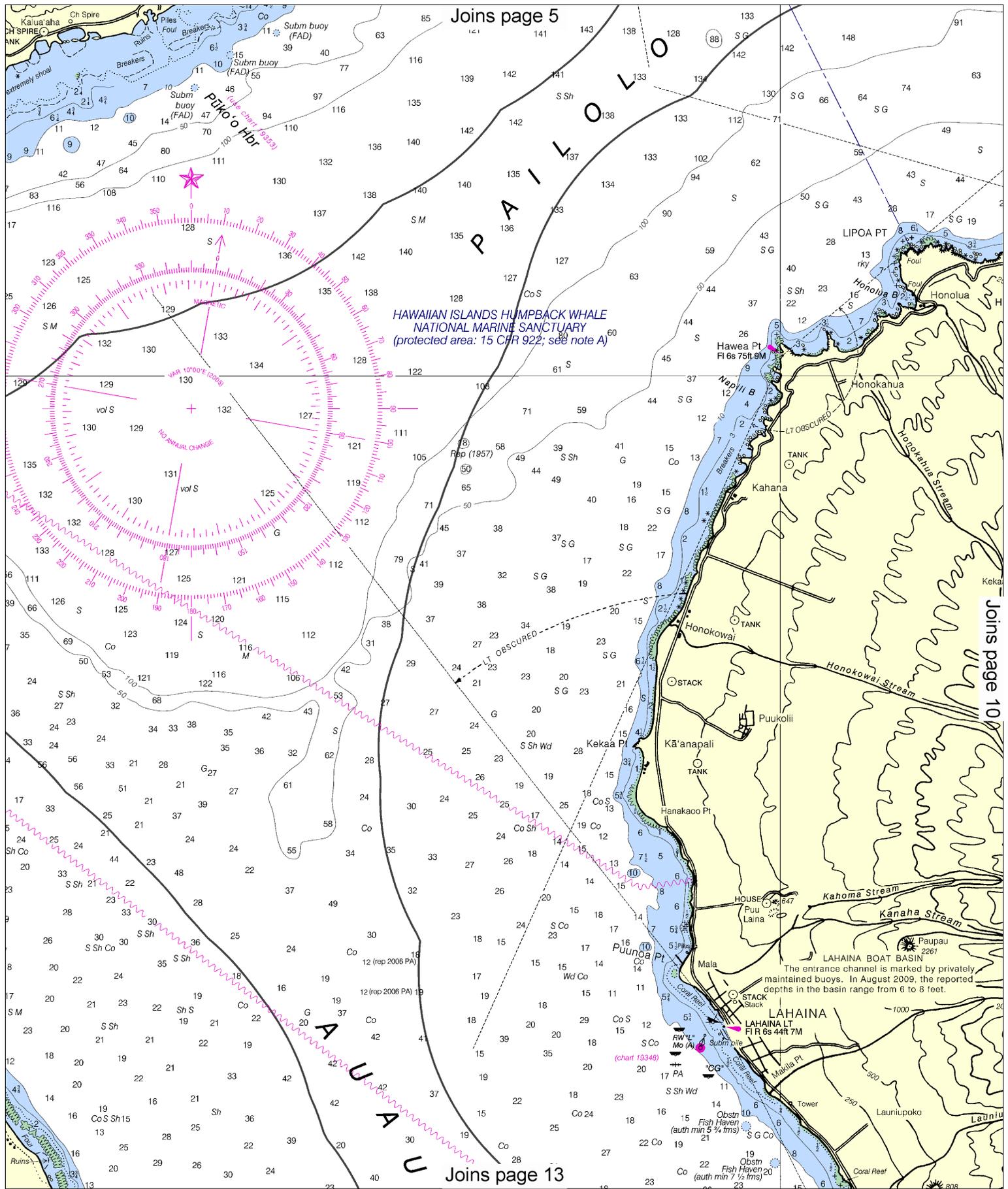
Note: Chart grid lines are aligned with true north.

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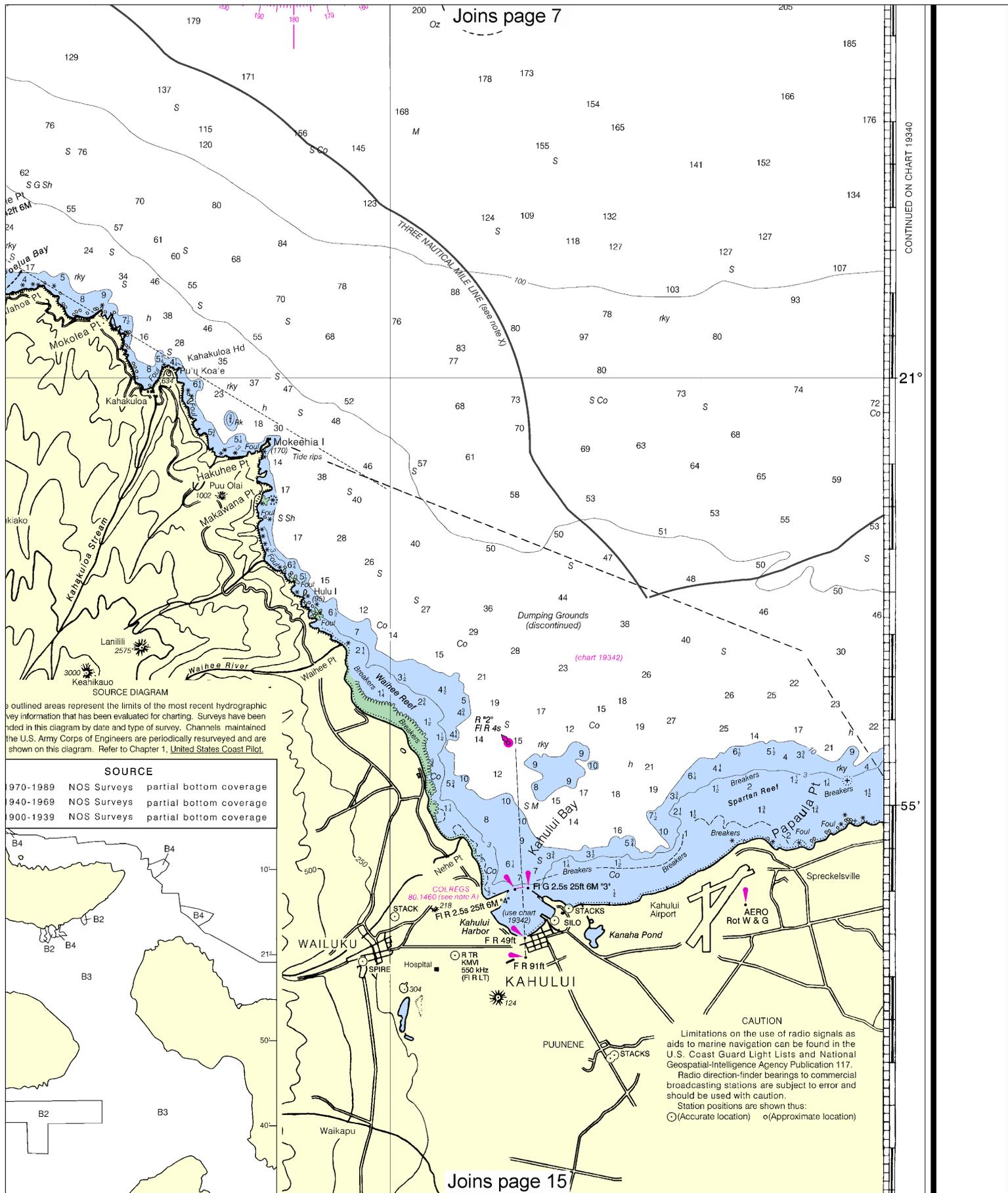
SCALE 1:80,000
Nautical Miles

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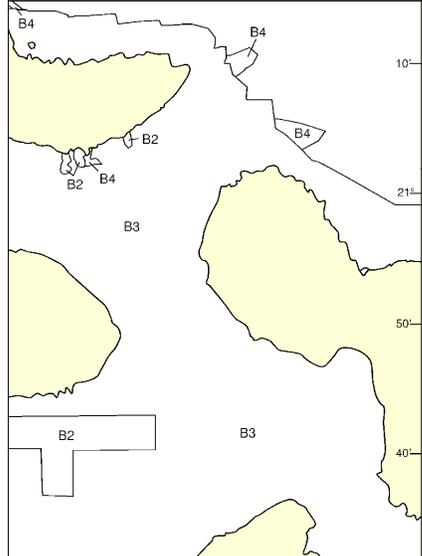
CONTINUED ON CHART 19340



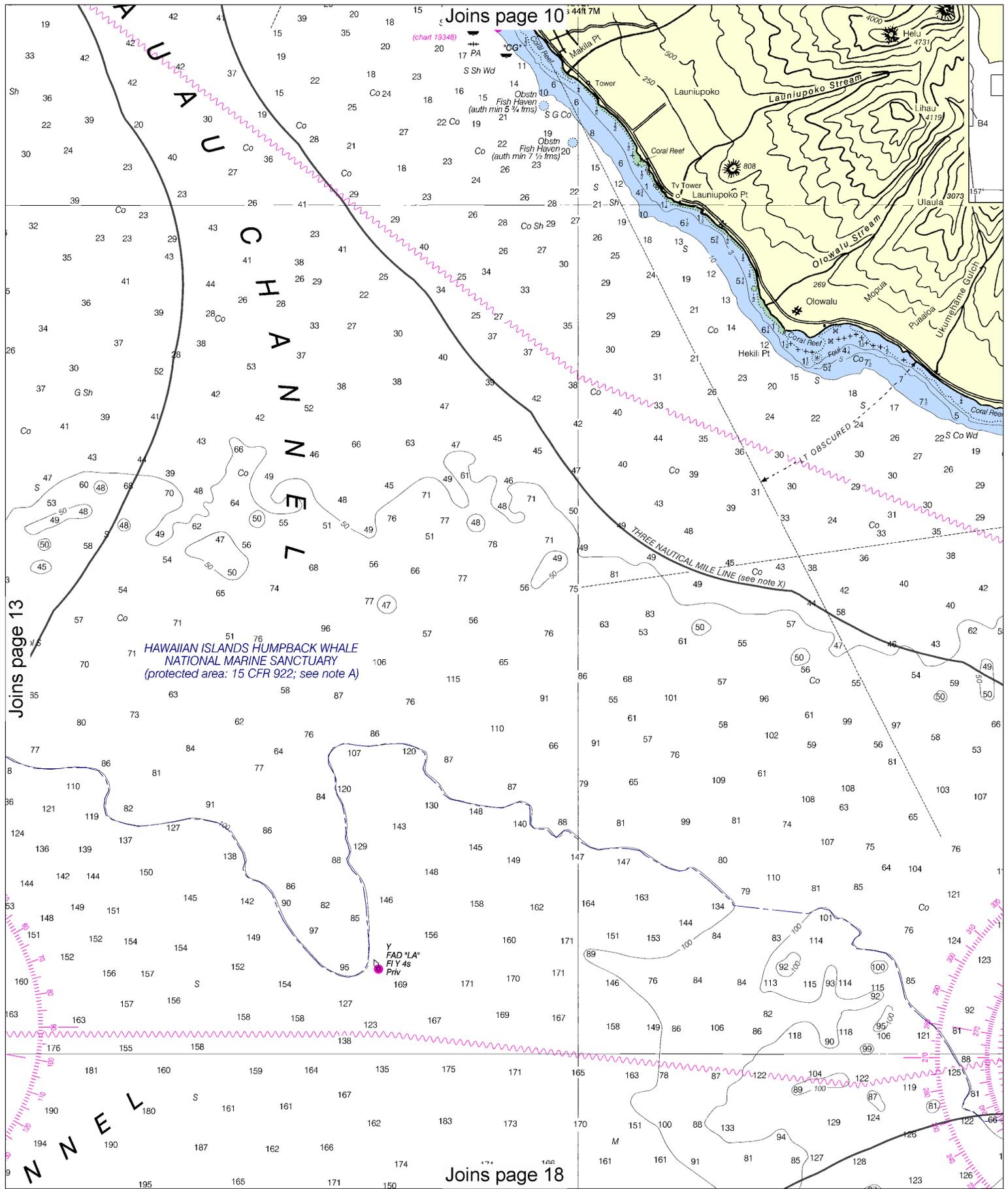
outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been indicated in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

1970-1989	NOS Surveys	partial bottom coverage
1940-1969	NOS Surveys	partial bottom coverage
1900-1939	NOS Surveys	partial bottom coverage



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)



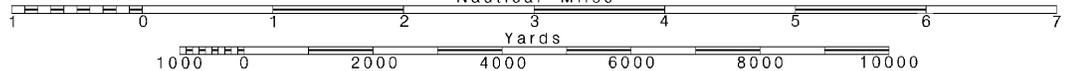
14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

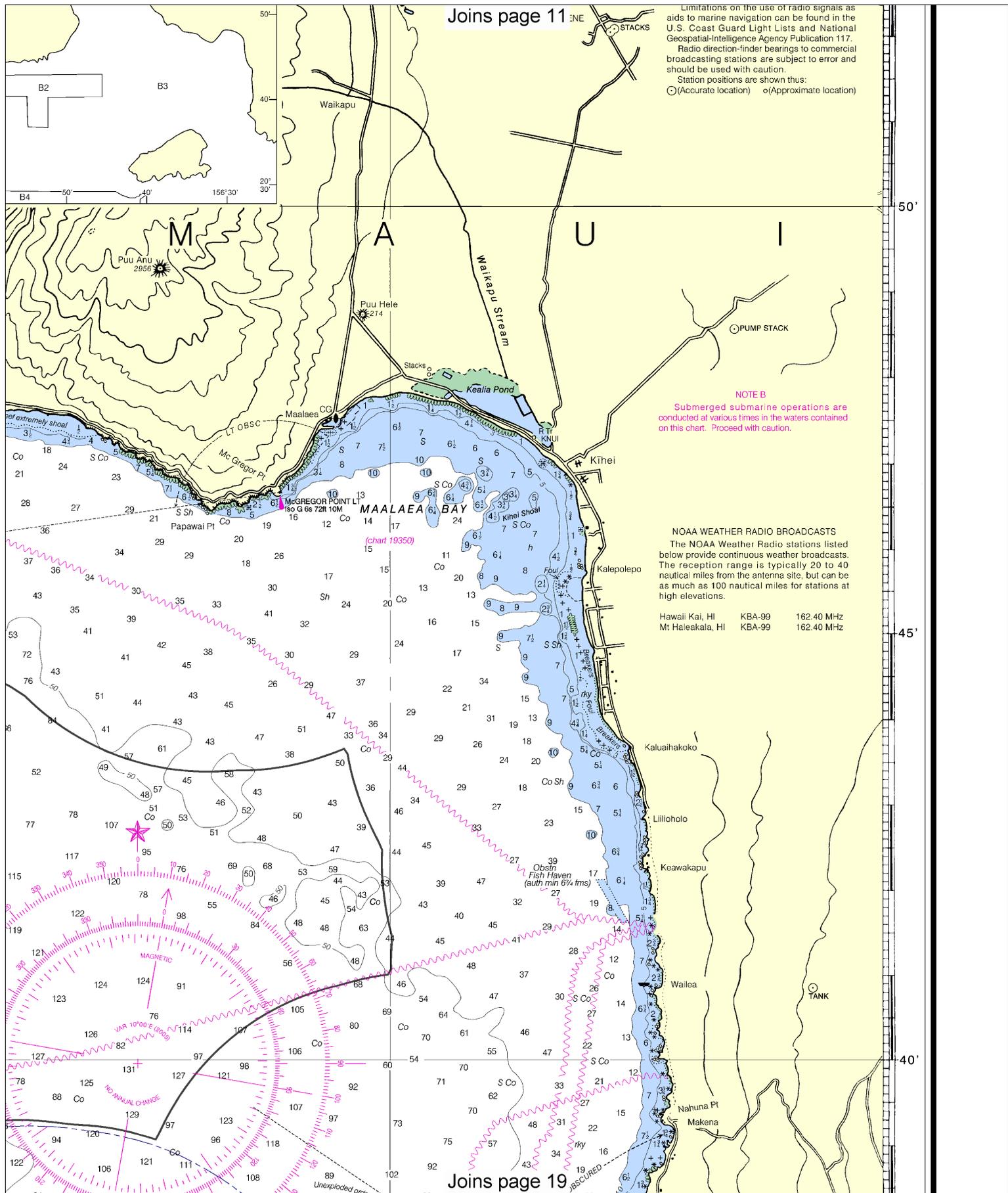
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NOAA WEATHER RADIO BROADCASTS
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Mt Haleakala, HI	KBA-99	162.40 M-Hz

Joins page 12



UNITED STATES
HAWAII

CHANNELS BETWEEN MOLOKA'I, MAUI, LĀNA'I AND KAHO'OLAWÉ

Mercator Projection
Scale 1:80,000 at Lat. 20°51'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

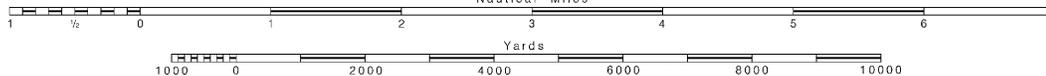
TIDAL INFORMATION

Name	Place (LAT/LONG)	Height referred to datum of soundings (MLLW)			
		Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet	Extreme Low Water feet
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Kaunapau	(20°47.0'N/157°0.0'W)	2.2	1.7	0.2	-1.0

(Aug 2005)

SCALE 1:80,000

Nautical Miles



18th Ed., Nov. /05 ■ Corrected through NM Nov. 05/05
Corrected through LNM Oct. 25/05

19347

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.

SOUNDINGS IN FATHOMS

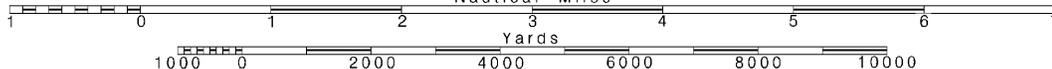
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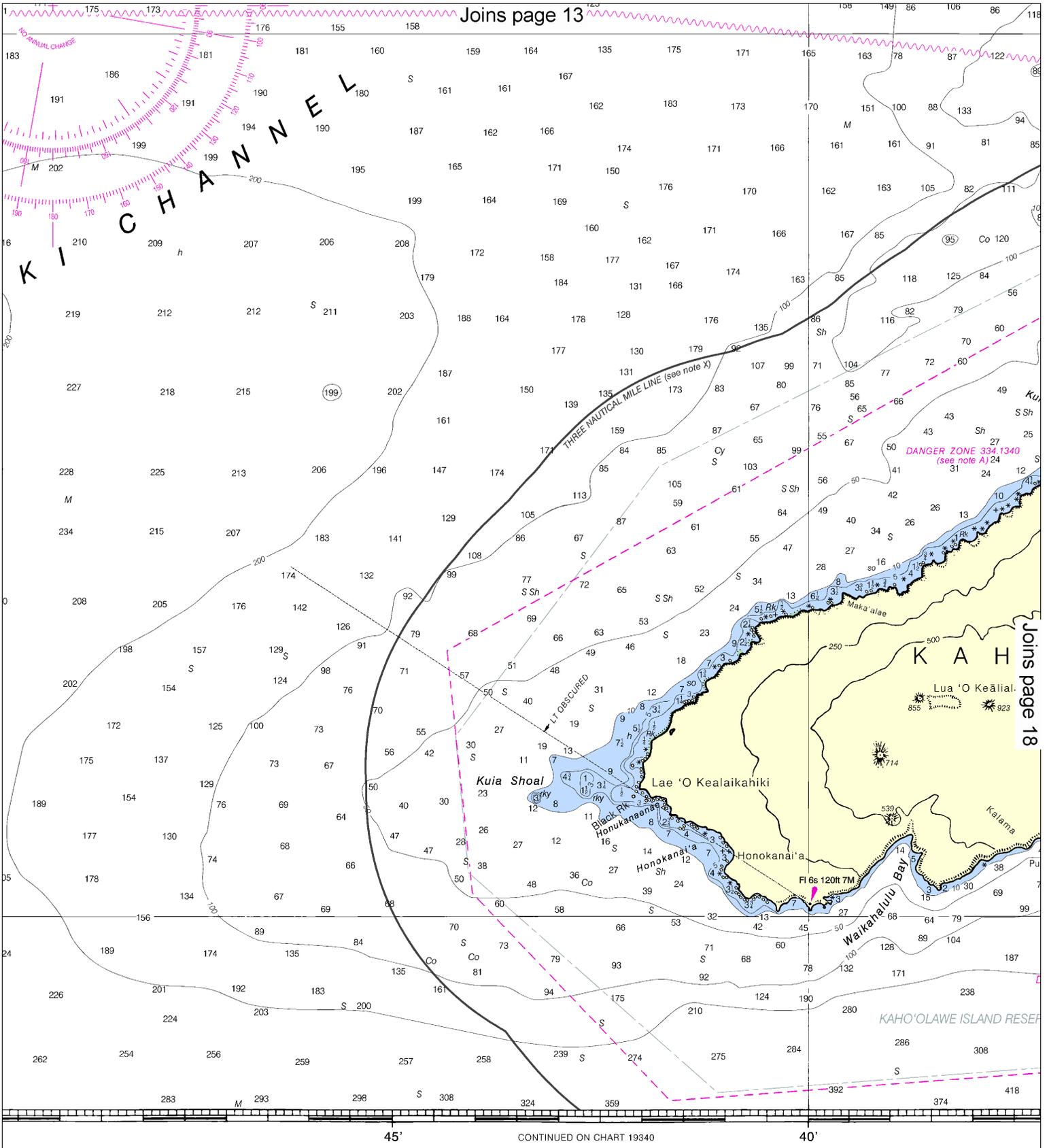
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.



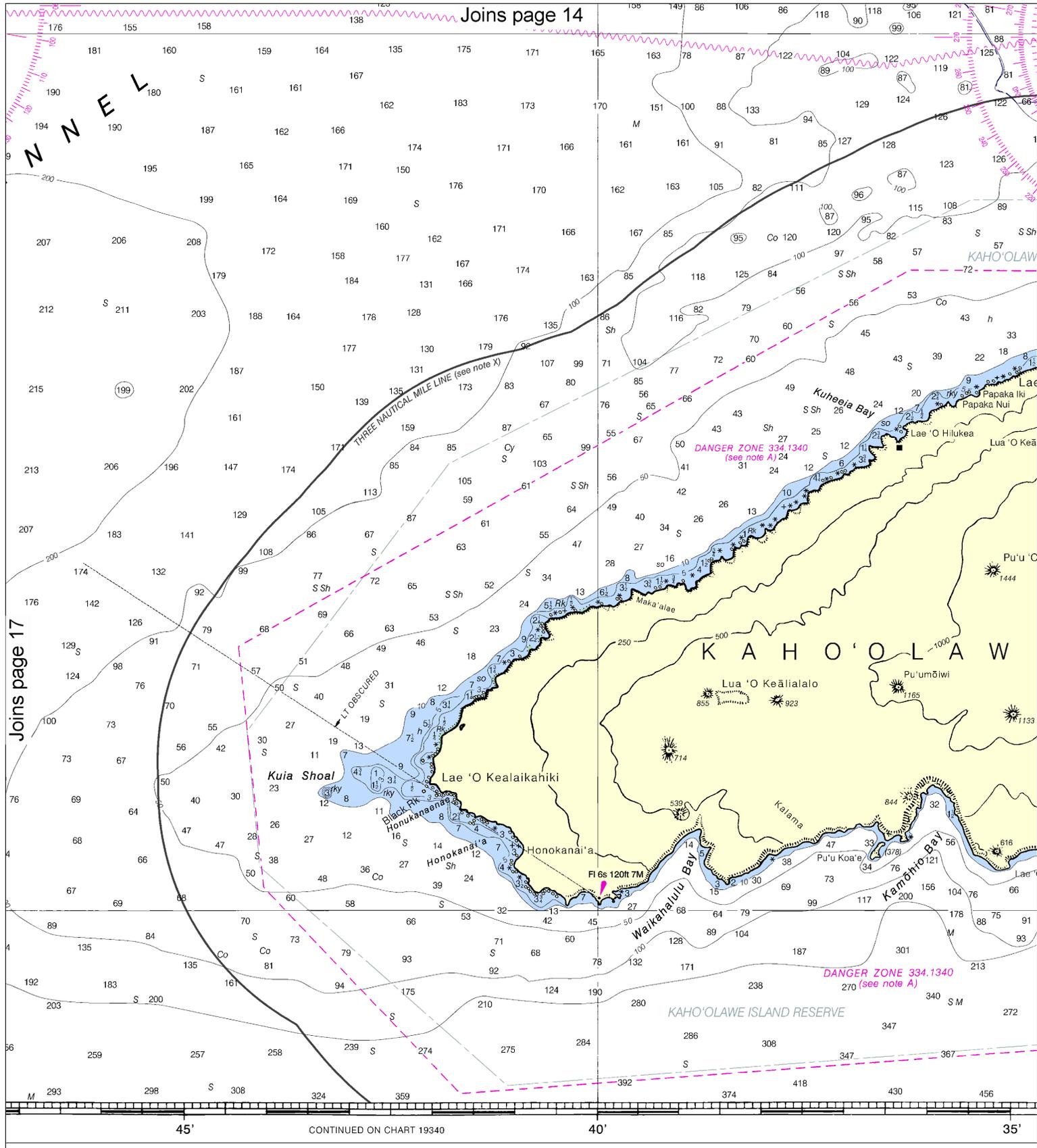


Joins page 18

CONTINUED ON CHART 19340

ATHOMS

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



Joins page 17

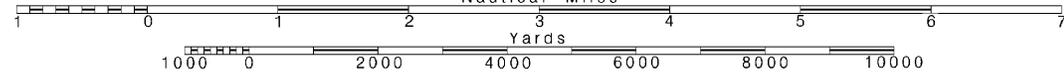
Published at Washington, D.C.
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 NATIONAL OCEAN SERVICE
 COAST SURVEY

18

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:80,000
 Nautical Miles

See Note on page 5.





EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

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

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – **Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.**

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

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.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



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>
- Online chart viewer — <http://www.nauticalcharts.noaa.gov/mcd/NOAChartViewer.html>
- Report a chart discrepancy — <http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx>
- Chart and chart related inquiries and comments — <http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>
- Chart updates (LNM 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 Weather Service — <http://www.weather.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>



— For the latest news from Coast Survey, follow @nauticalcharts



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.

NOAA's Office of Coast Survey



The Nation's Chartmaker