

BookletChart™

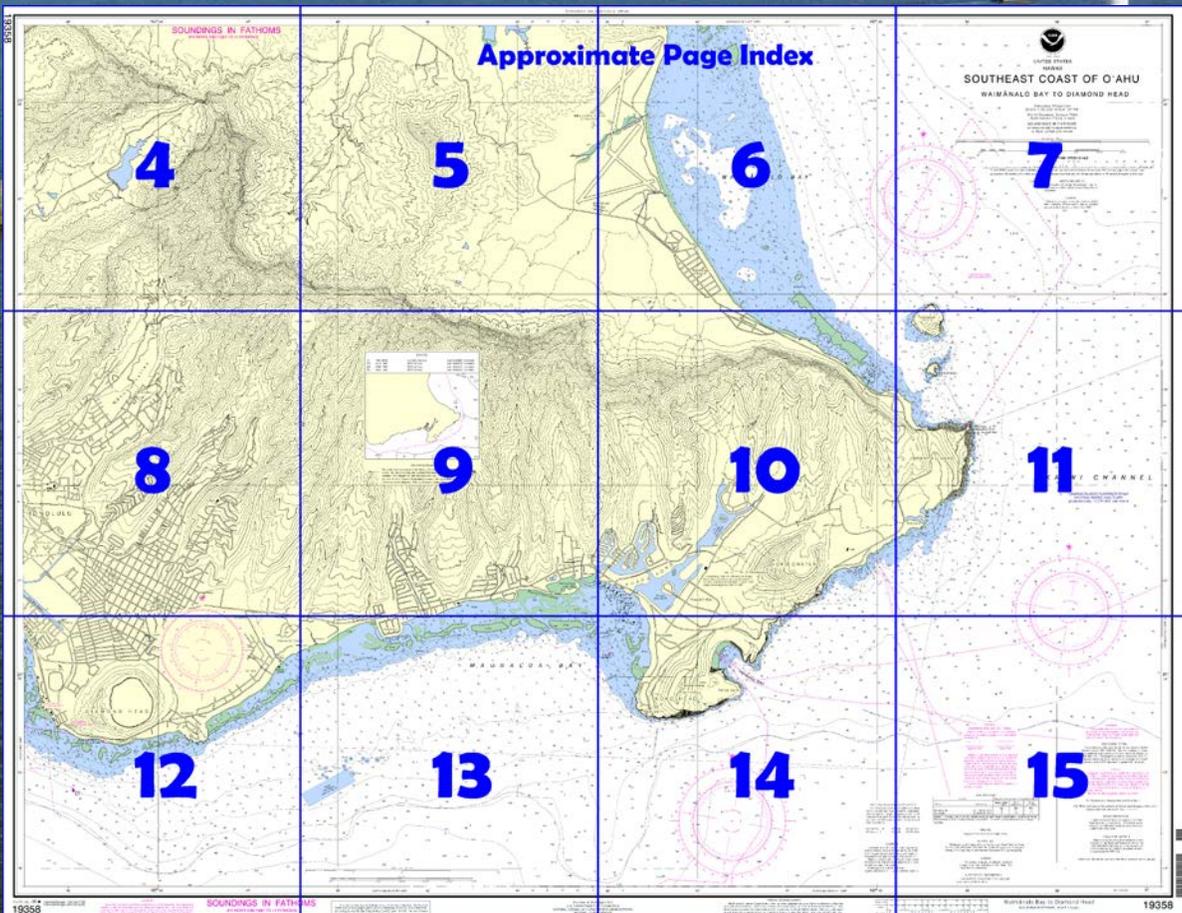


Southeast Coast of O'ahu – Waimanalo Bay to Diamond Head NOAA Chart 19358

*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.

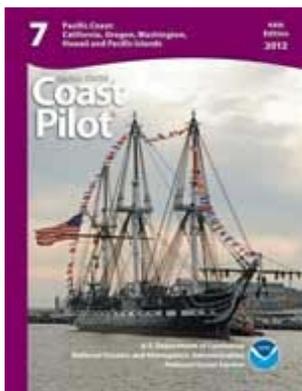
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=19358>.



(Selected Excerpts from Coast Pilot)
Makapu'u Head, the E extremity of O'ahu, is a rocky headland 647 feet high. **Makapuu Point Light** (21°18'36"N., 157°38'59"W.) is shown from a 49-foot white cylindrical concrete tower on the head. The seaward side of Makapu'u Head is a dark cliff; the inland side slopes rapidly to the valley which separates it from the Ko'olau Range. The headland is the landfall for vessels inbound to Honolulu from the mainland. There is deep water close to the outer

end of the headland, but shallower water is found along the N and E sides. Deep-draft vessels should give Makapu'u Head a berth of about 1 mile and/or stay in depths greater than 20 fathoms.

The **restricted area** of the Makai Undersea Test Range extends NW and NE from Makapu'u Point. (See **334.1410**, chapter 2, for limits and regulations.)

Hanauma Bay, 3.5 miles SW of Makapu'u Head, is 0.3 mile wide and extends 0.5 mile inland. The waters off the entrance are very choppy during S and E winds. Across the head of the bay is a sand beach that is fringed by 150 yards of coral reefs. The bay is a nature preserve and is a popular snorkeling and scuba diving site. State regulations do not permit boats to enter the bay.

Koko Head, 4 miles SW of Makapu'u Head, is a bold promontory 640 feet high; the seaward side is precipitous, the top is flat, and it slopes off rapidly on the inland side. The headland is developed on its lower W slopes with residential homes, but its general appearance is mostly brown and barren. There is deep water close to Koko Head. Strong W currents have been reported offshore.

Maunalua Bay is an open bight that extends W from Koko Head to Diamond Head; coral reefs fringe most of the shore. On the W side of Koko Head, a channel, marked by a light and private daybeacons, leads through the reef to a private marina in Kuapa Pond and to a public launching ramp behind the reef. The channel has a least depth of 5 feet, except at the entrance where it shoals to a depth of 3 feet on the E side near Daybeacon 2. Behind the Koko Head reefs is one of the few anchorages that offer small-craft shelter in all weather except kona storms. Although depths are 13 feet, only small craft familiar with the area should venture behind the reefs. Tidal currents in Maunalua Bay flood W and ebb E; slack waters occur at about the times of high and low waters at Honolulu.

Caution.—Vessels approaching Honolulu from the E at night should not mistake the lights between Koko Head and Diamond Head for the lights of Waikiki Beach. Commercial and residential development of the coast along Maunalua Bay has resulted in an increase of background lighting. Vessels have mistaken Makapuu Point Light for Diamond Head Light and run aground on the reef W of Koko Head.

Wailupe, 2.7 miles W of Koko Head, is a residential area with a seawall and private piers. A channel, dredged to 12 feet, leads through the reefs to Wailupe. Several pipes mark the W side of the entrance channel.

Diamond Head, 9 miles WSW of Makapu'u Head, is an extinct volcano 761 feet high. The steep slopes and the top of the crater are bare and brown; the base is brush covered. **Diamond Head Light** (21°15'21"N., 157°48'34"W.), 147 feet above the water, is shown from a 64-foot white concrete tower near the beach. A lighted buoy is moored in 150 feet of water 0.6 mile off the light. Currents setting in various directions with velocities up to 1 knot were noted about 3 miles SW of Diamond Head.

Wailea Point, 5 miles NW of Makapu'u Head, is the NW point of Waimanalo Bay. An inactive airfield occupies a large area S of the point.

Waimanalo Bay, between Wailea Point and Makapu'u Head, affords all-weather shelter for small craft behind the barrier reefs that parallel much of the bay's shore. A 2-mile stretch off midbay has no fringing coral reef; in its S part, the reef gets closer to shore and disappears near Makapu'u Head. Depths of 10 feet can be carried into the bay except during strong trades when the entrance is closed by breakers.

Waimanalo is on the coastal highway that skirts the head of the bay.

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

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

Navigation Managers Area of Responsibility



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



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>

19358

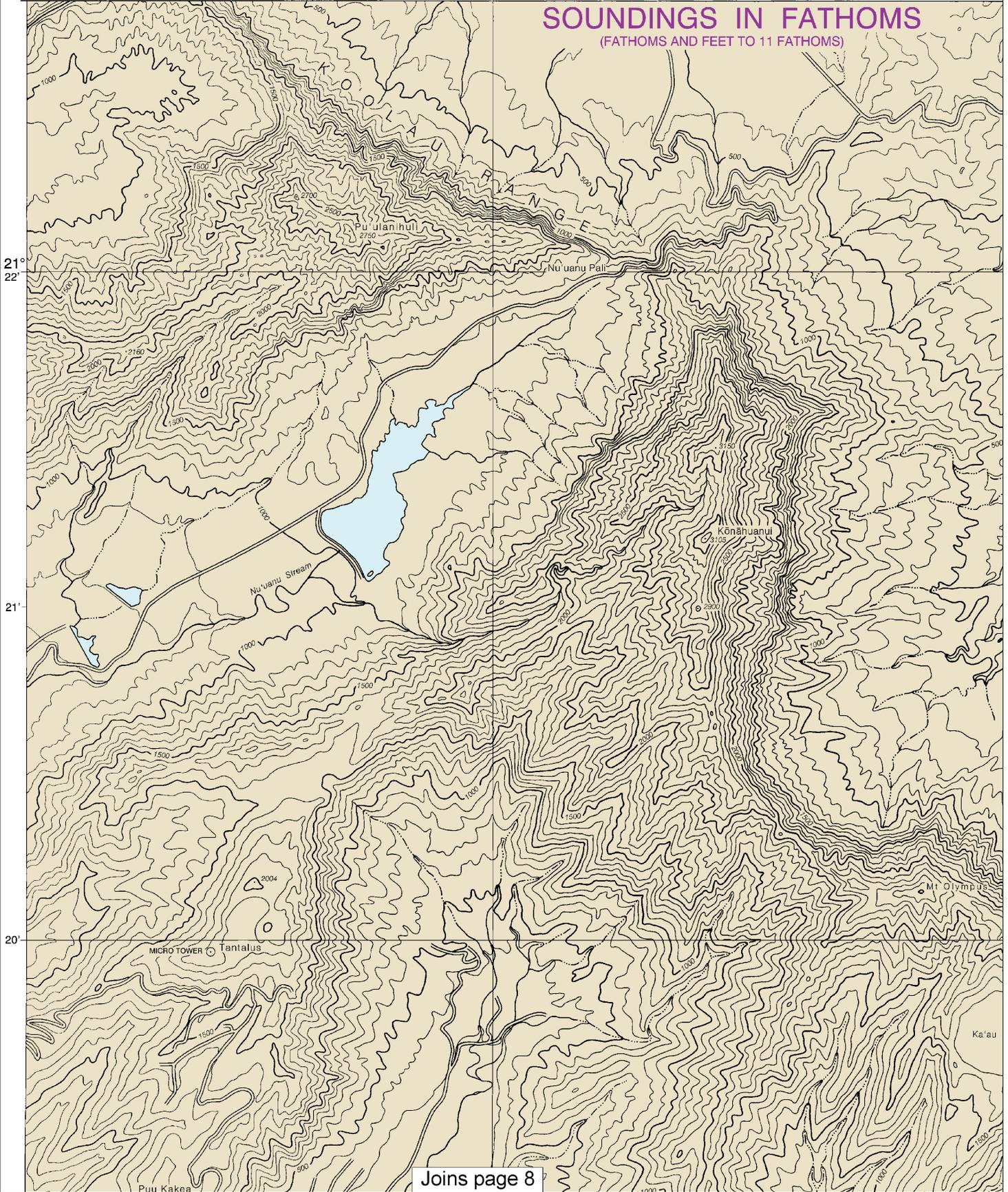
49'

157° 48'

47'

SOUNDINGS IN FATHOMS

(FATHOMS AND FEET TO 11 FATHOMS)



Joins page 8

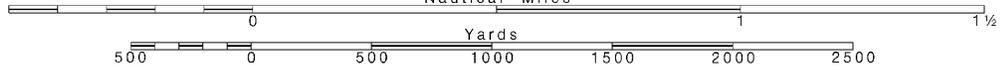
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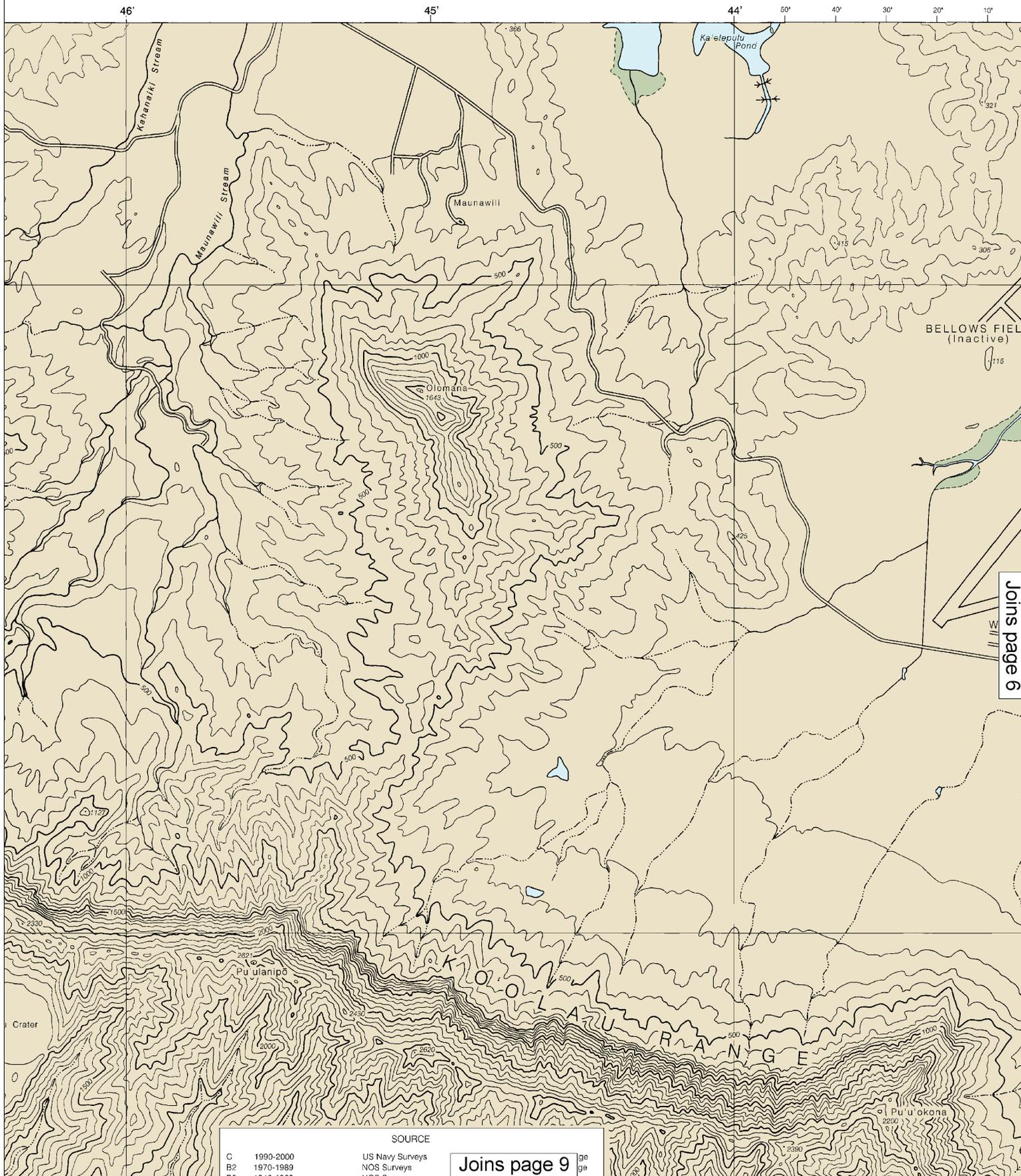
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

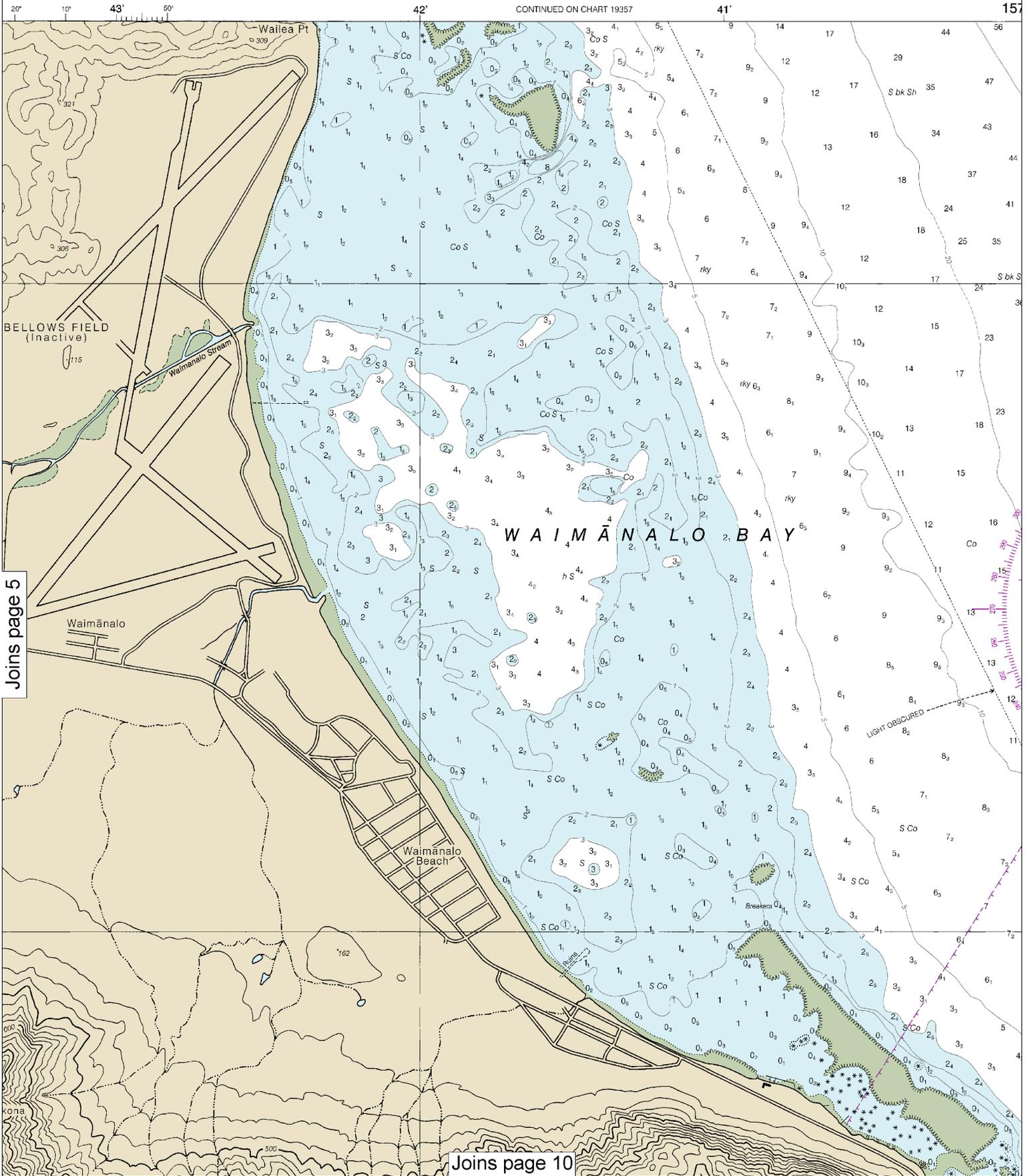
SCALE 1:20,000
Nautical Miles

See Note on page 5.





This BookletChart was reduced to 70% of the original chart scale. The new scale is 1:28571. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



Joins page 5

Joins page 10



Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:20,000 Nautical Miles

See Note on page 5.



57° 40' 39' 38' 37'



UNITED STATES
HAWAII

SOUTHEAST COAST OF O'AHU

WAIMĀNALO BAY TO DIAMOND HEAD

Mercator Projection
Scale 1:20,000 at Lat. 21°18'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

Nautical Miles

Yards

AIDS TO NAVIGATION

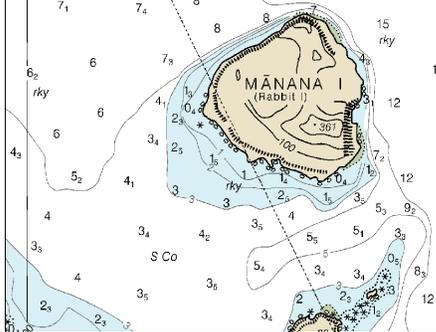
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

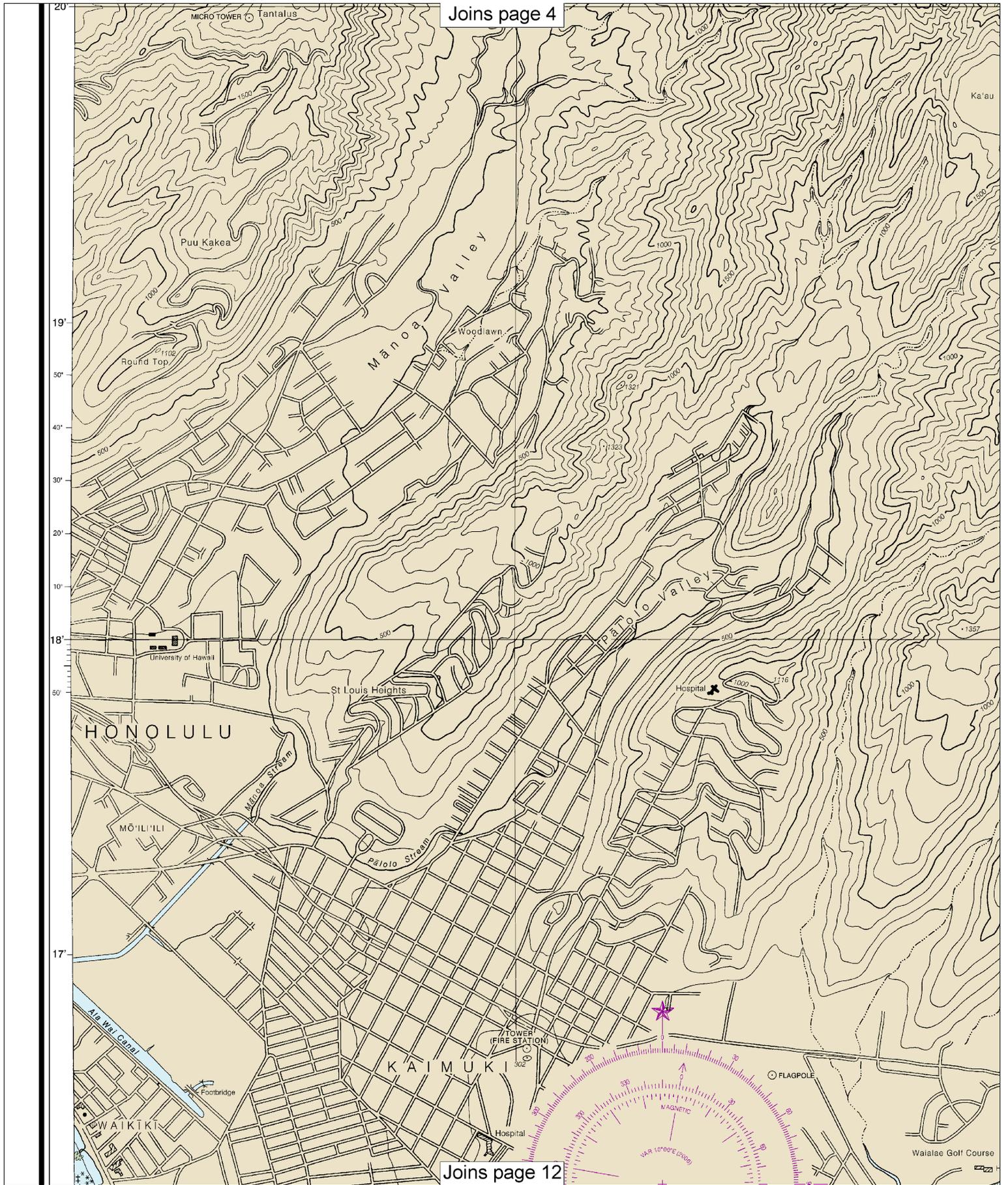
Mariners are urged to exercise extreme caution when transiting inshore waters due to changes caused by the hurricane of November 1982.

RESTRICTED AREA
334.1410 (see note A)

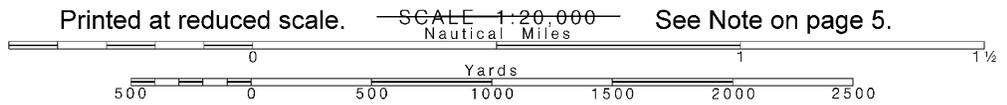
Joins page 11

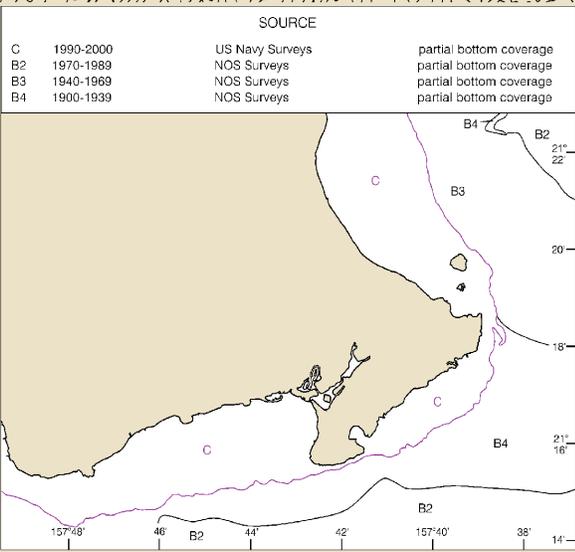


21st Ed., Oct. 2006. Last Correction: 9/9/2015. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)



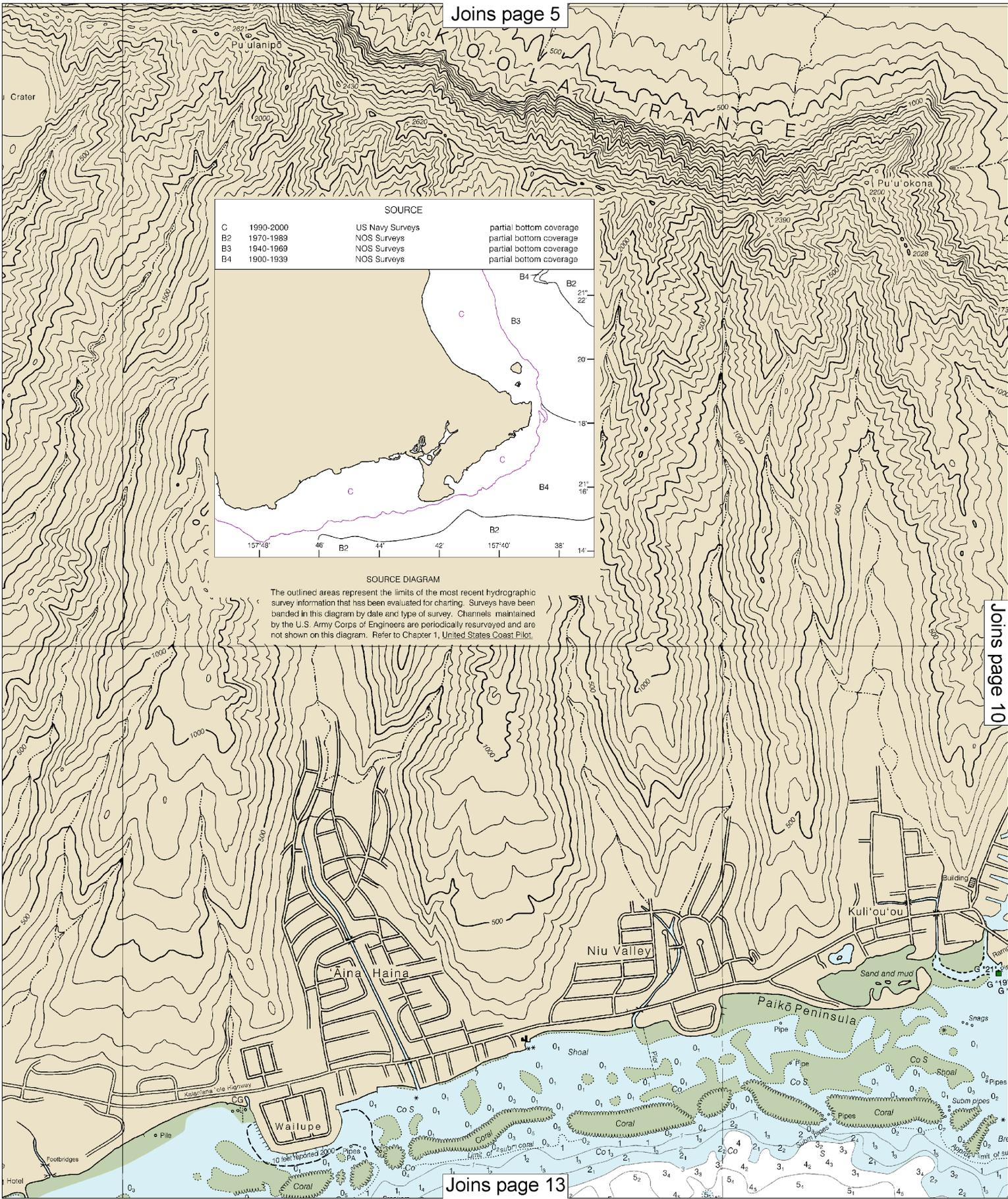
Note: Chart grid lines are aligned with true north.



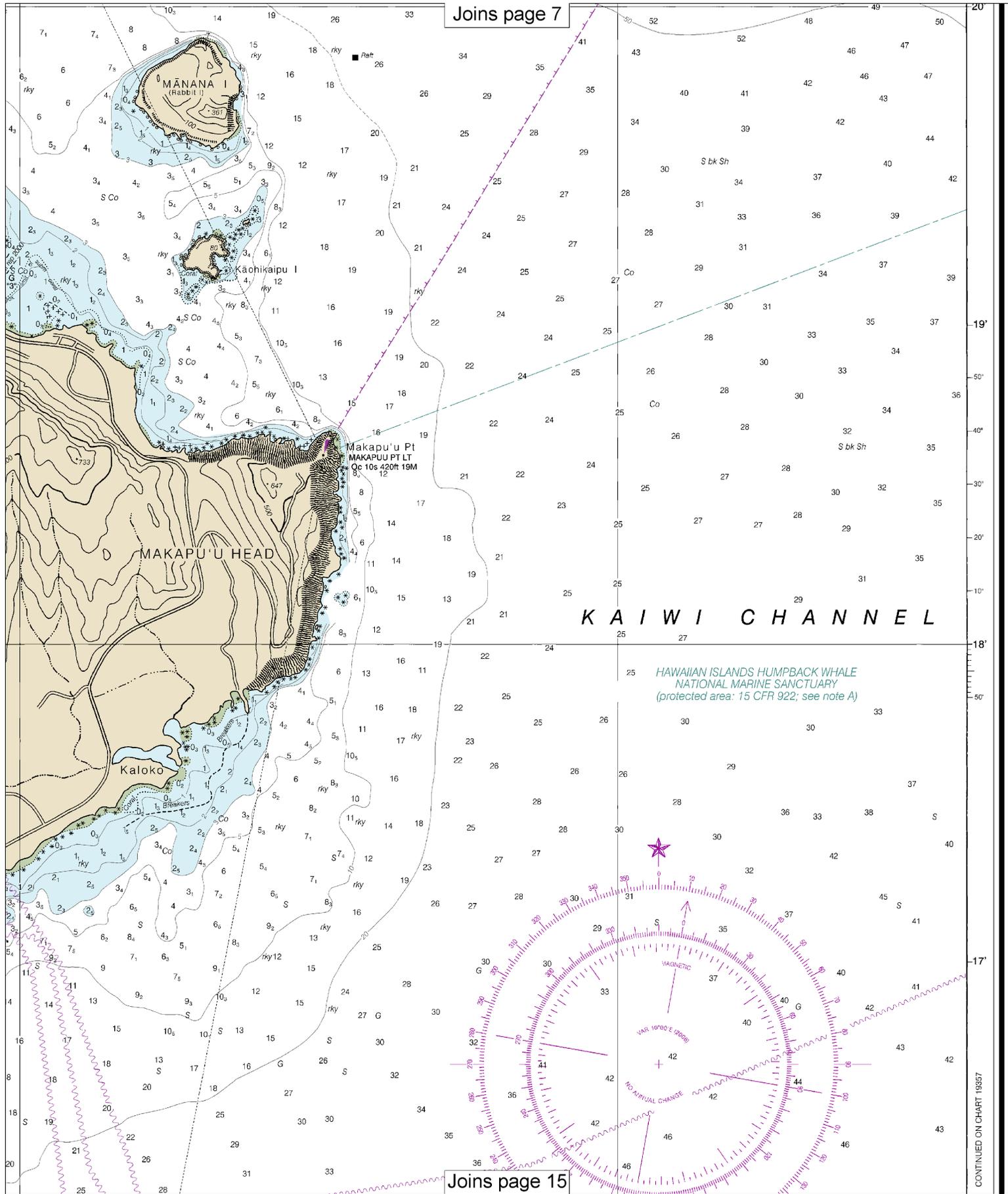


SOURCE DIAGRAM

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.



Joins page 7



Joins page 15

CONTINUED ON CHART 19657



19358

21st Ed., Oct. 2006. Last Correction: 9/9/2015. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016)

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.

SOUNDINGS
(FATHOMS AND FEET)

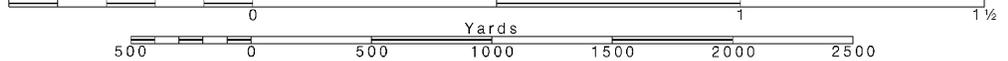
12

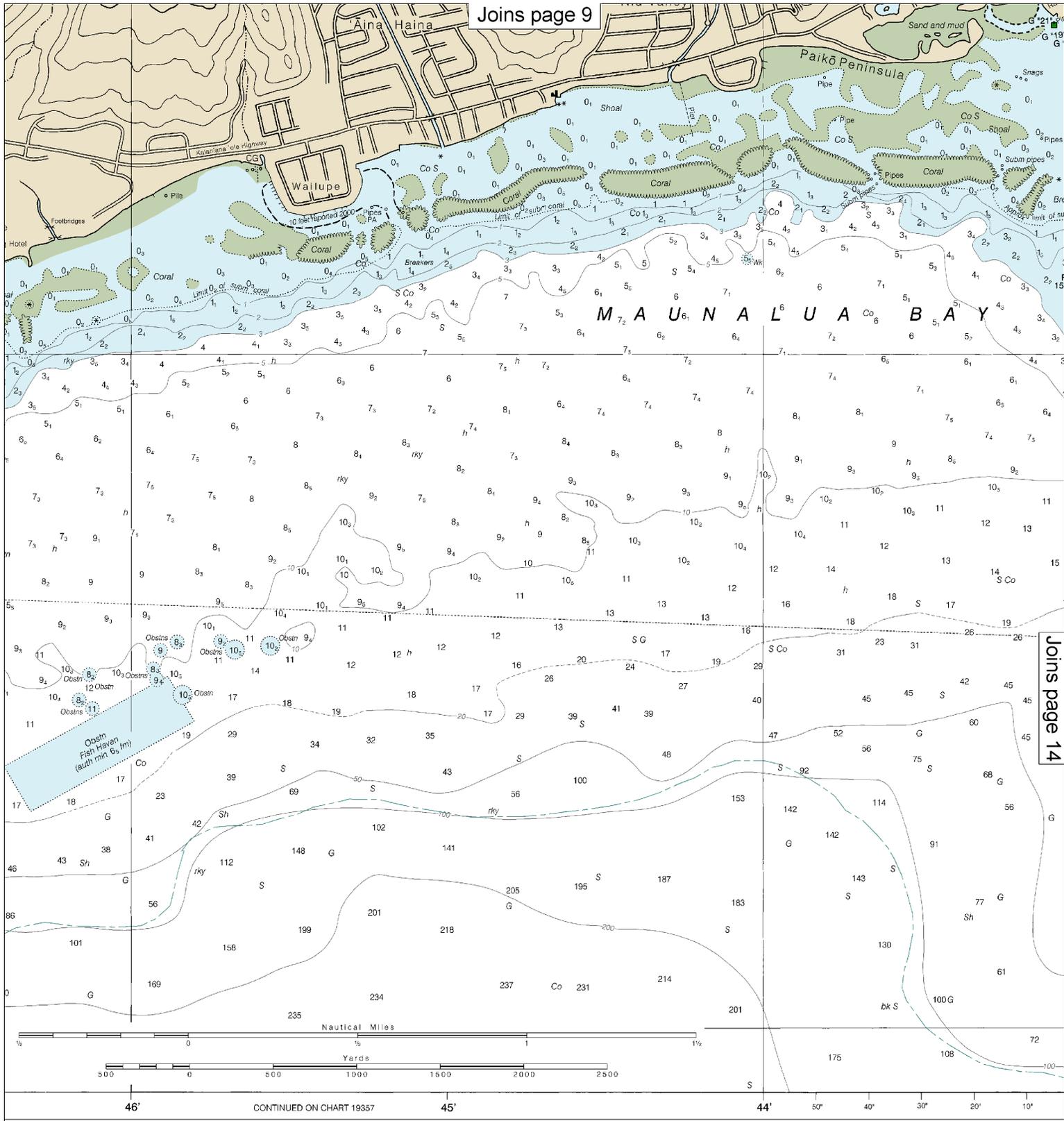
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

See Note on page 5.

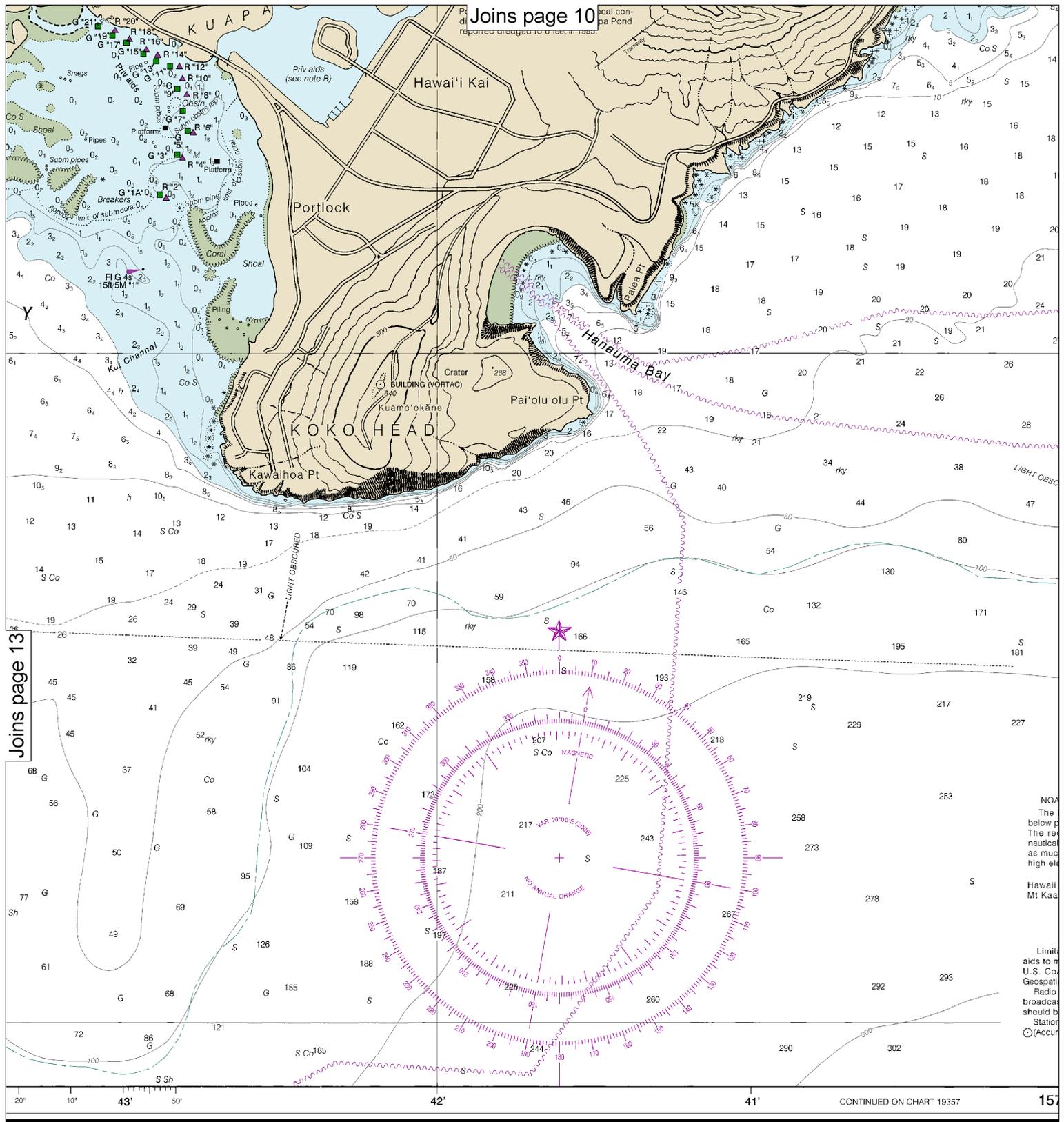




IN FATHOMS
ET TO 11 FATHOMS)

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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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



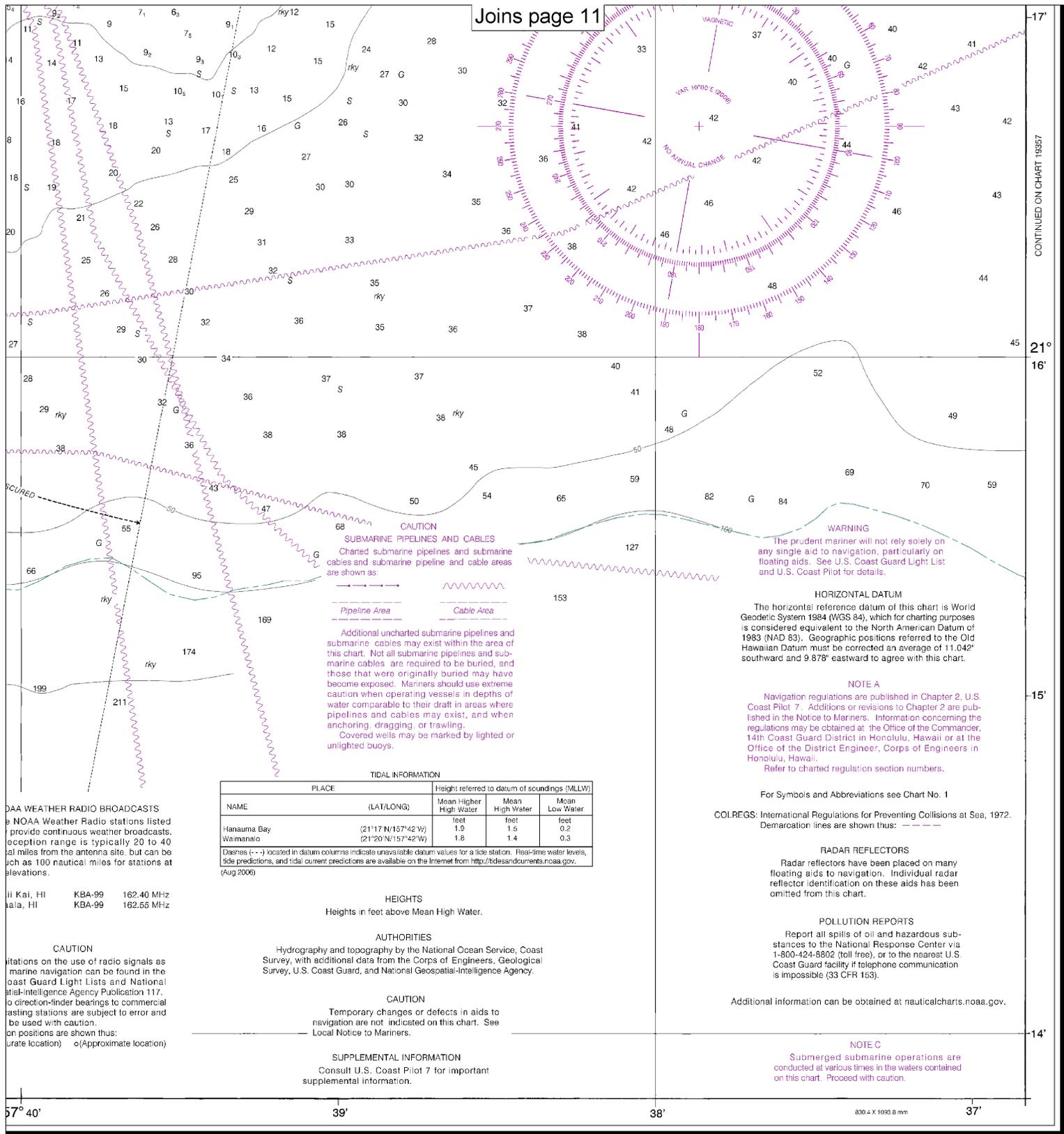
Joins page 13

Joins page 10

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CONTINUED ON CHART 19357

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CAUTION
SUBMARINE PIPELINES AND CABLES
 Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:
 Pipeline Area (dashed line)
 Cable Area (wavy line)

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.

TIDAL INFORMATION

PLACE	NAME (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Hanauma Bay	(21°17'N/157°42'W)	1.9	1.5	0.2
Waimānalo	(21°20'N/157°42'W)	1.8	1.4	0.3

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>. (Aug 2006)

DAA WEATHER RADIO BROADCASTS
 NOAA Weather Radio stations listed provide continuous weather broadcasts. Reception range is typically 20 to 40 miles from the antenna site, but can be as much as 100 nautical miles for stations at elevations.

Il Kai, HI KBA-99 162.40 MHz
 ʻāia, HI KBA-99 162.65 MHz

CAUTION
 Warnings on the use of radio signals as marine navigation can be found in the Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Direction-finder bearings to commercial listening stations are subject to error and should be used with caution. Approximate locations are shown thus: (o) (Approximate location)

HEIGHTS
 Heights in feet above Mean High Water.

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.

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

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 7 for important supplemental information.

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 11.042" southward and 9.878" eastward to agree with this chart.

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.

For Symbols and Abbreviations see Chart No. 1
COLREGS: International Regulations for Preventing Collisions at Sea, 1972. Demarcation lines are shown thus: (---)

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.

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 163).

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

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

FATHOMS	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

Waimānalo Bay to Diamond Head
 SOUNDINGS IN FATHOMS - SCALE 1:20,000

19358



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>
- Interactive chart catalog — <http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml>
- 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>



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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.