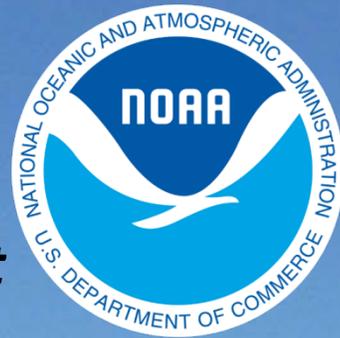


BookletChart™



Harbors and Landings on the Northeast and Southeast Coasts of Hawai'i

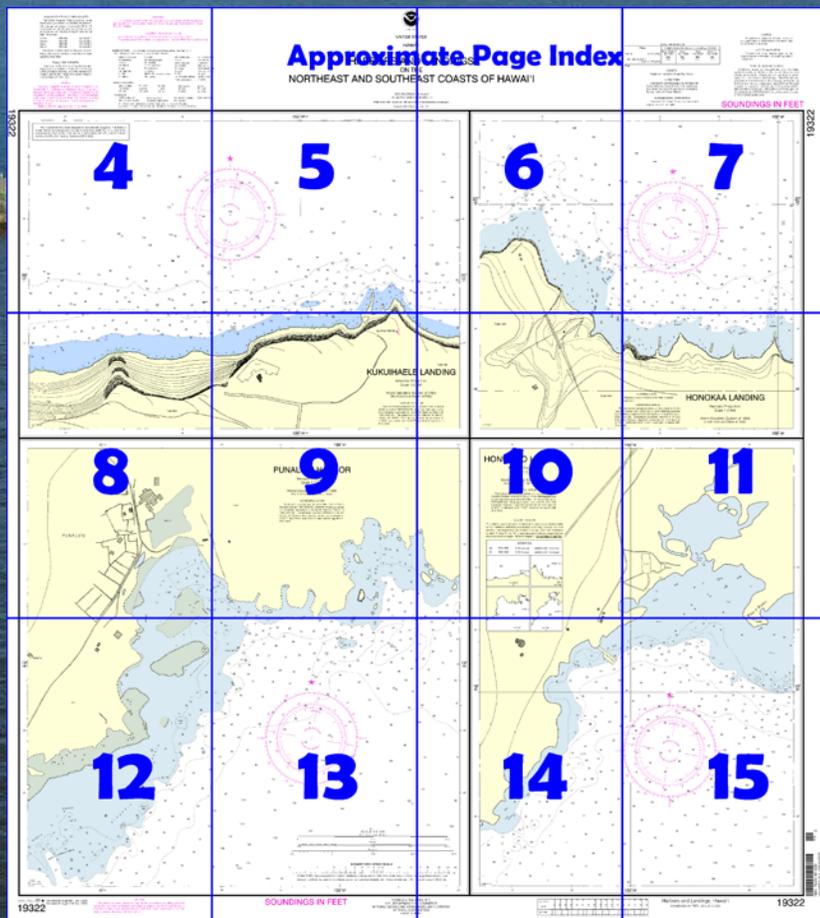
NOAA Chart 19322

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.

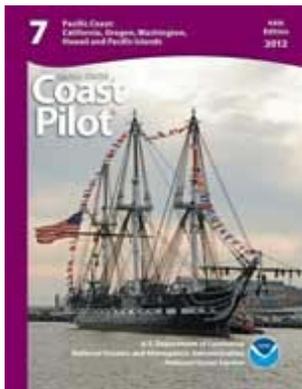
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

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=19322>.



(Selected Excerpts from Coast Pilot)
Kukuihaele Point Light (20°07'41"N., 155°33'22"W.), 154 feet above the water, is shown from a 27-foot white concrete tower at **Kukuihaele**, 19 miles SE of Upolu Point.
Honokaa is 24 miles SE of Upolu Point. A power plant (Hamakua Energy) with two storage tanks, two stacks, and a cooling tower is prominent just N of Honokaa in about 20°05'38"N., 155°28'13"W. A reef that usually breaks extends 170 yards N from the landing and is marked by several bare

rocks. No shelter is available during normal weather, as the landing is open to the N and E.

Punaluu, 17 miles NE from Kalae, is a small bight with a black sand beach at its head. It was a former shipping point for the town of **Pahala**, 3 miles inland, but the landing is no longer used and is in disrepair; a surfaced ramp is just N of the landing. Small boats find some protection in depths of 6 to 11 feet close to the E shore of the bight.

The SW part of the bight is foul. A rock, awash at half tide, is 260 yards SSE of the landing; another, with 8 feet of water over it, is 40 yards farther offshore in the same direction. The entrance is between these rocks and the shore to the N. A rock, with 3 feet of water over it, is 0.2 mile E of the entrance and 80 yards offshore. The NE trades tend to haul more offshore in the vicinity of Punaluu Harbor, but in rough weather breakers extend completely across the entrance and passage is impossible.

Honuapo Bay is a slight coastal indentation 13 miles NE of Kalae. Most prominent from offshore is the 236-foot cliff 0.5 mile SW of the bay; the upper half of the cliff shows black against the light-brown background of the hills, and the lower half is a grass-covered slide. The Honuapo pier is in ruins. The bay offers good anchorage in about 20 fathoms for deep-draft vessels. The bay is exposed to the trades and offers little protection for small craft.

**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 Dec. 13/03
Corrected through LNM Nov. 25/03

**SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER**

HEIGHTS
Heights in feet above Mean High Water.

**Mercator Projection
Scale 1:2,500**

World Geodetic System 1984
(North American Datum of 1983)

**Mercator Projection
Scale 1:2,500**

World Geodetic System of 1984
(North American Datum of 1983)

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

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

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

**Mercator Projection
Scale 1:2,500**

World Geodetic System of 1984
(North American Datum of 1983)

MOORING BUOYS
Mooring buoys are established when a vessel is expected.

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.

O'ahu	KBA-99	162.55 MHz
Hawai'i	KBA-99	162.55 MHz
Mauli	KBA-99	162.40 MHz
Kaua'i	KBA-99	162.40 MHz

Reception in some areas will be poor or even impossible due to obstruction of the FM radio signal by mountains.

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).

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.

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 10.821" southward and 10.012" eastward to agree with this chart.

**Mercator Projection
Scale 1:2,500**

World Geodetic System of 1984
(North American Datum of 1983)

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 10.821" southward and 10.012" eastward to agree with this chart.

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 11.038" southward and 10.007" eastward to agree with this chart.

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 11.038" southward and 10.007" 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.

COLREGS, 80.1410 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

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.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
A alternating	IO interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HC lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M stature miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bids boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

① Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
② Rocks that cover and uncover, with heights in feet above datum of soundings.

TIDAL INFORMATION

Place	Height referred to datum of soundings (MLLW)			
	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Honou'apo, Hawai'i I (19°05'N / 155°33'W)	feet 2.5	feet 2.0	feet 0.3	feet -1.5

(703)

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.

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Aids to Navigation (lights are white unless otherwise indicated):

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Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bids boulders	Co coral	gy gray	Cys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

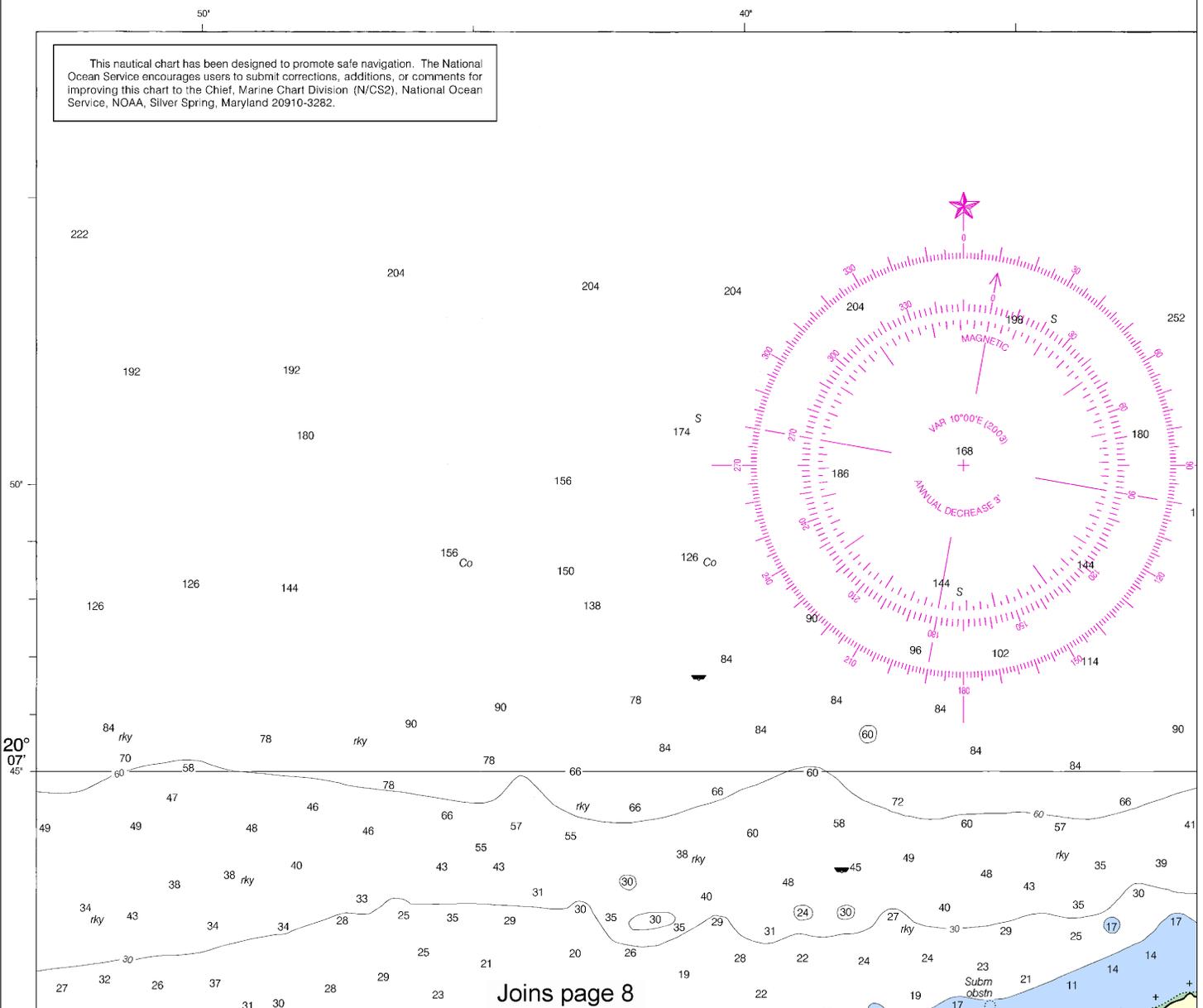
Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
 (2) Rocks that cover and uncover, with heights in feet above datum of soundings.

19322

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.

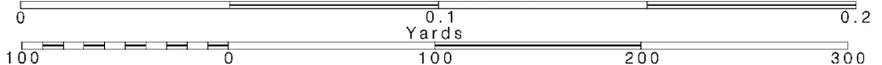


4

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:2,500

See Note on page 5.



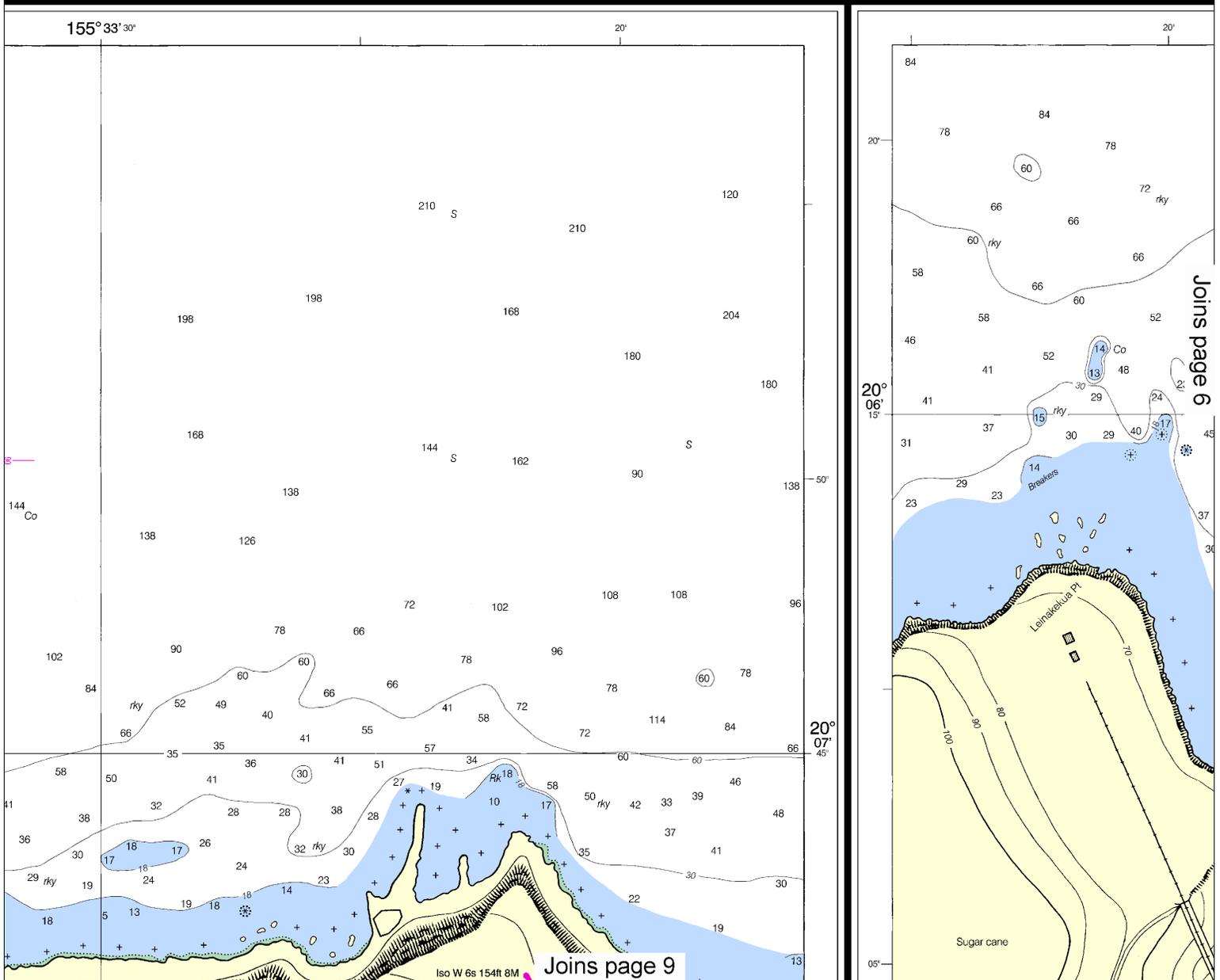


UNITED STATES
HAWAII

HARBORS AND LANDINGS ON THE NORTHEAST AND SOUTHEAST COASTS OF HAWAI'I

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.
Formerly C&GS 4162, 1st Ed., Apr. 1931



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:3333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

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

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

PRINT-ON-DEMAND CHARTS

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.

TIDAL INFORMATION

Place Name (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
Honu'apo, Hawai'i I (19°05'N / 155°33'W)	2.5	2.0	0.3	-1.5

(703)

HEIGHTS

Heights in feet above Mean High Water.

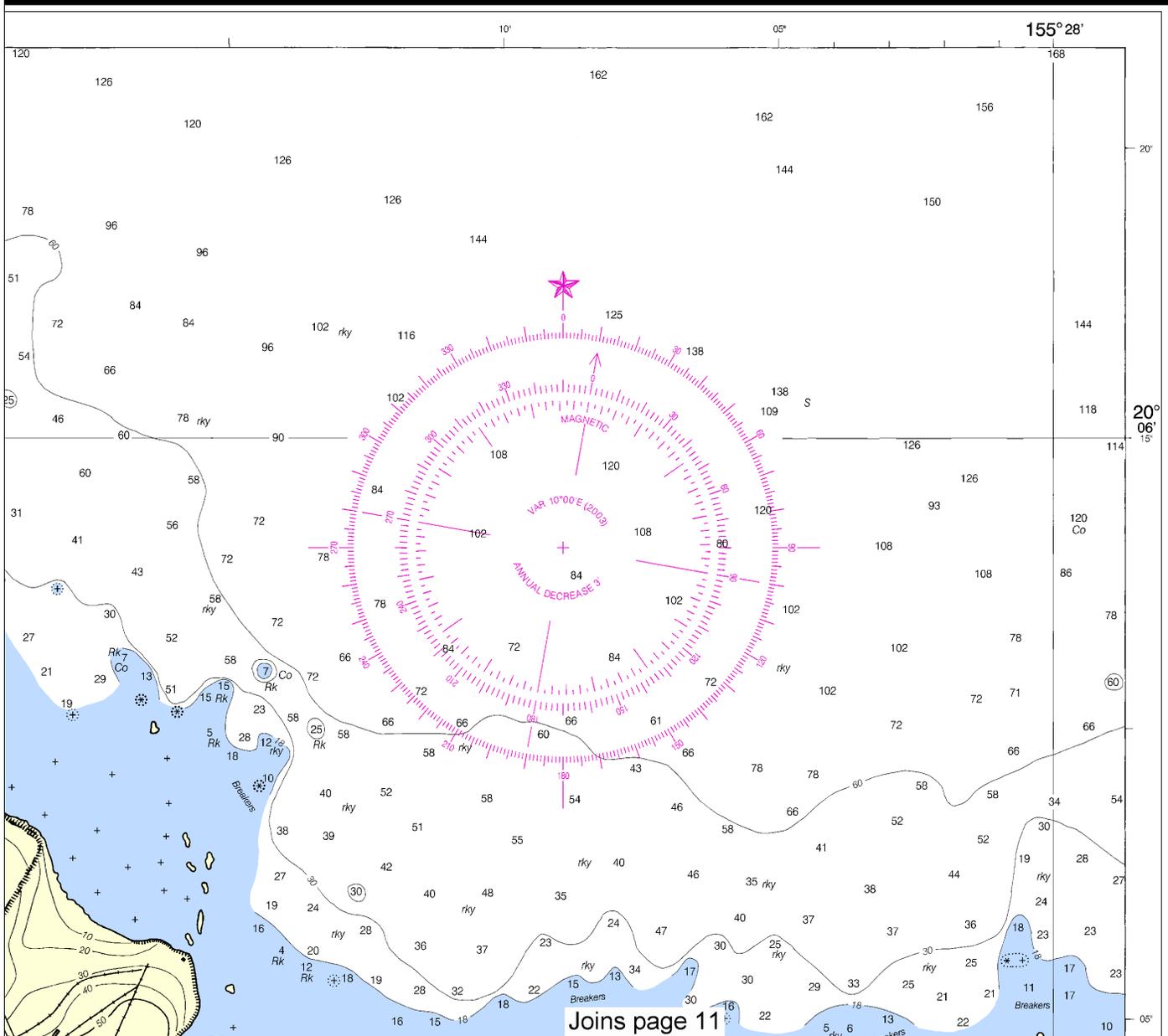
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Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

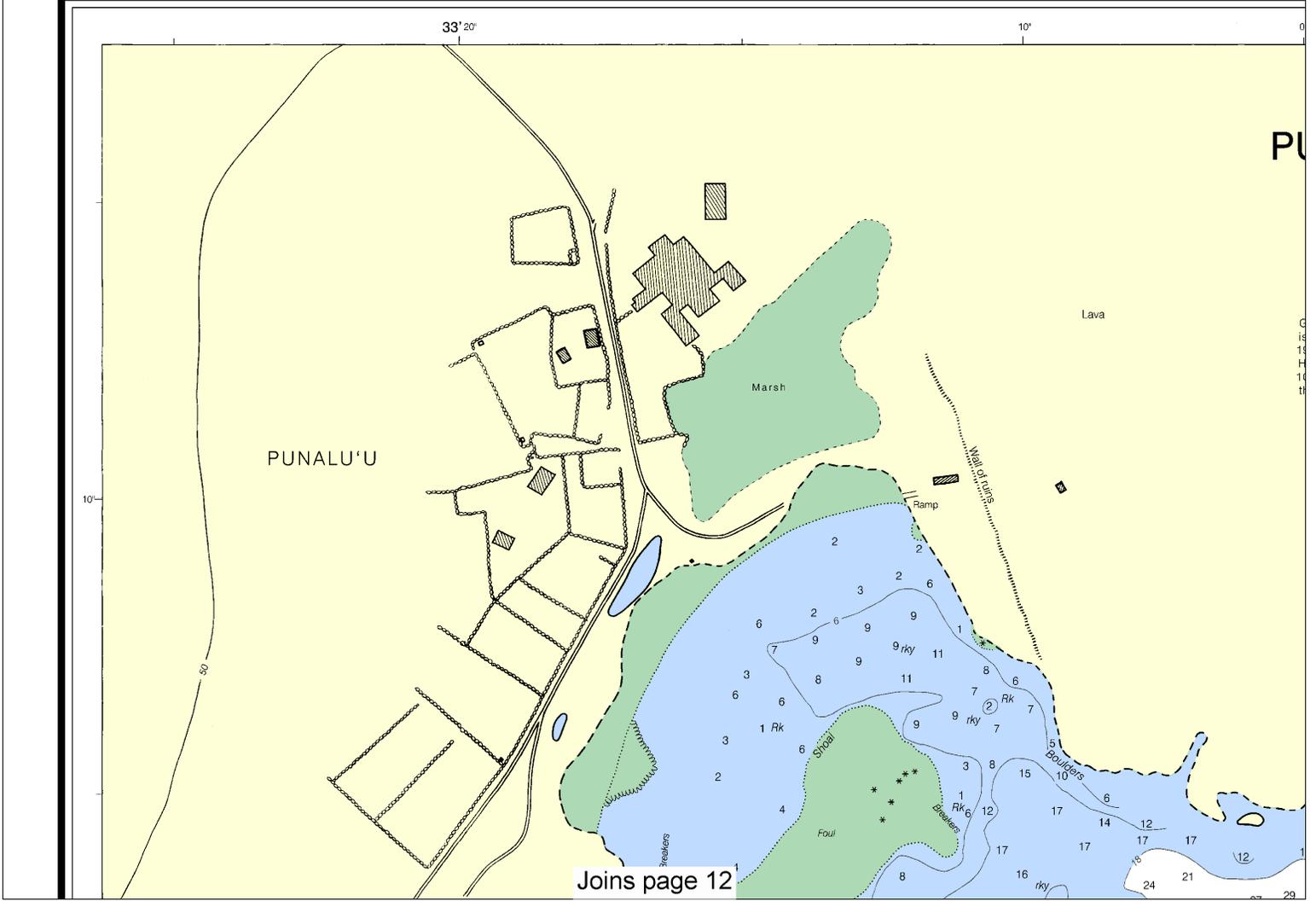
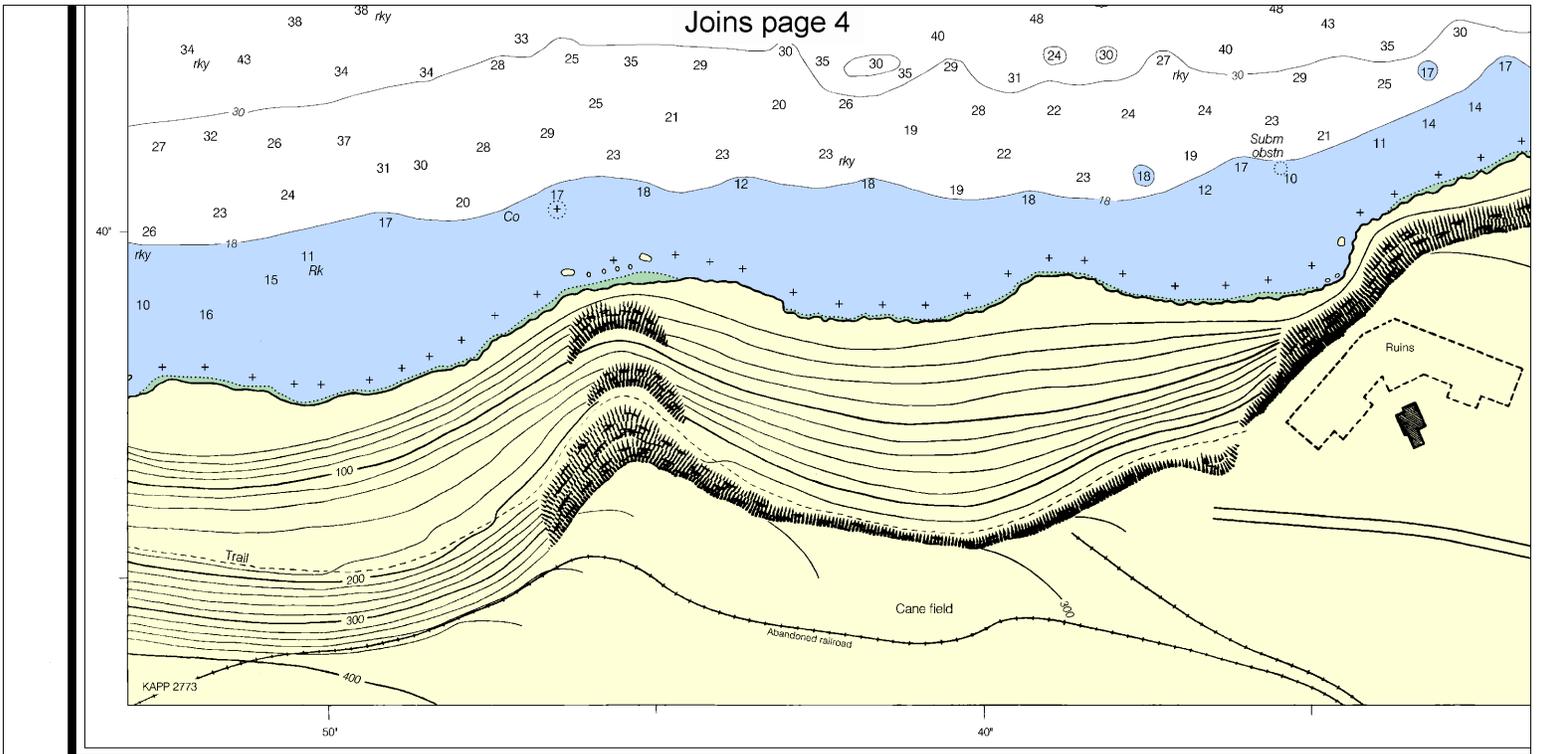
Consult U.S. Coast Pilot 7 for important supplemental information.

SOUNDINGS IN FEET

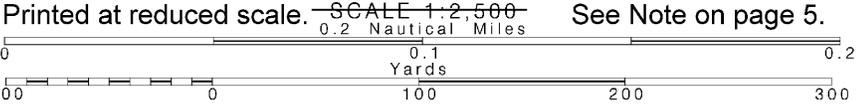


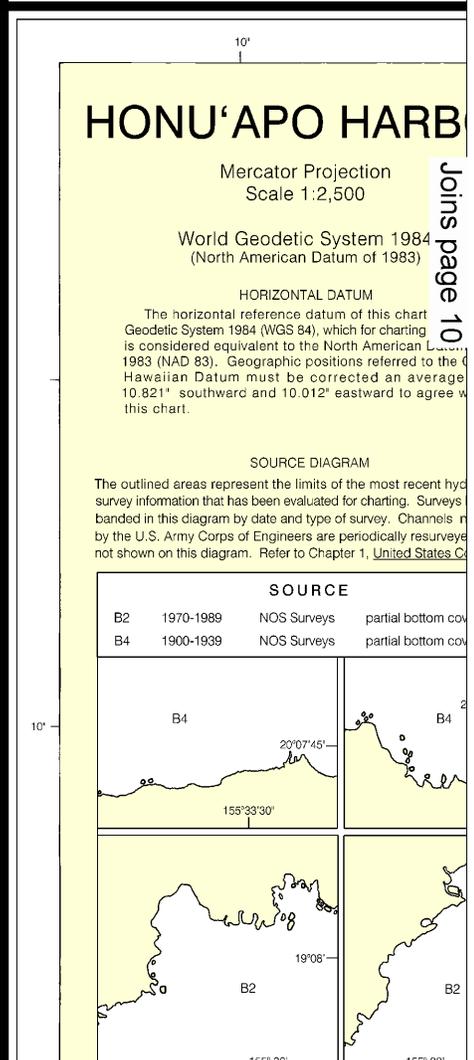
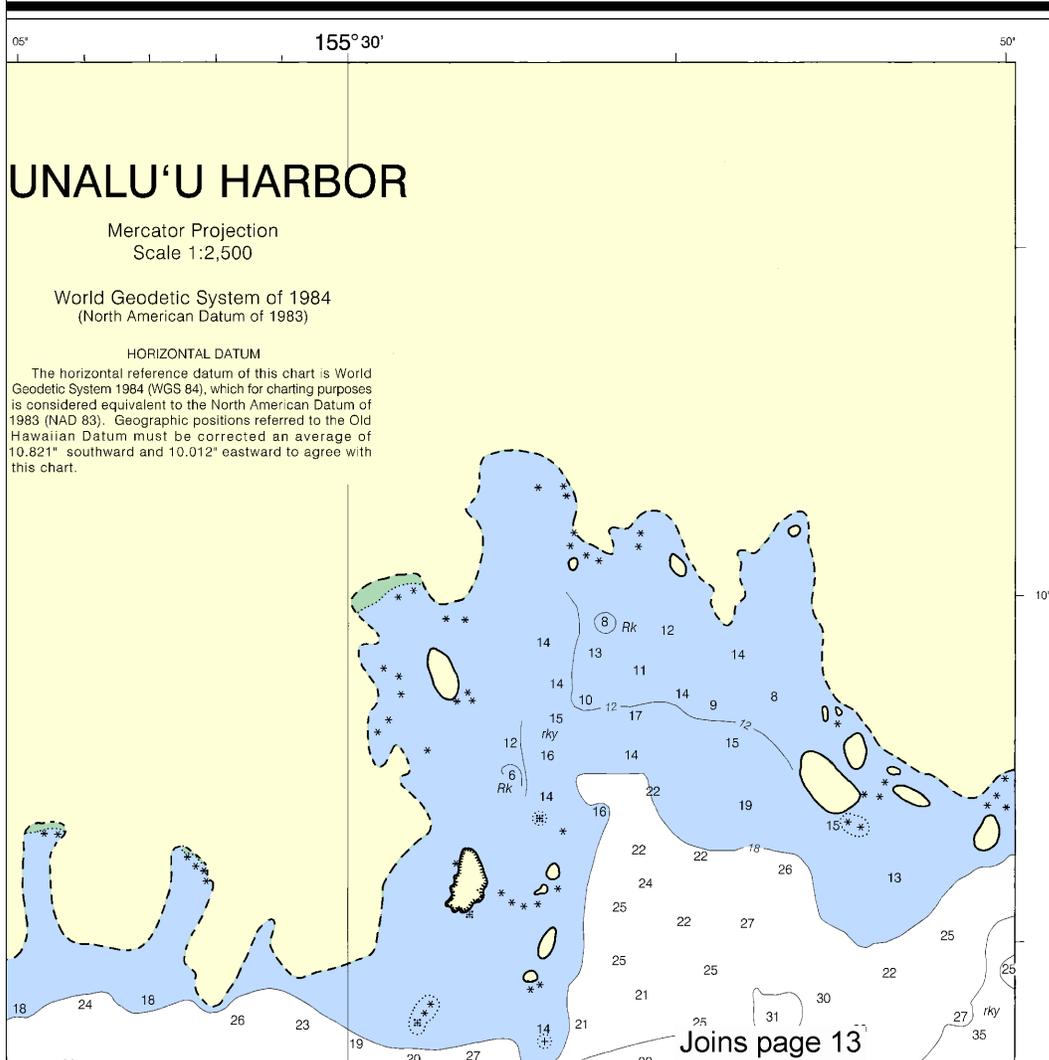
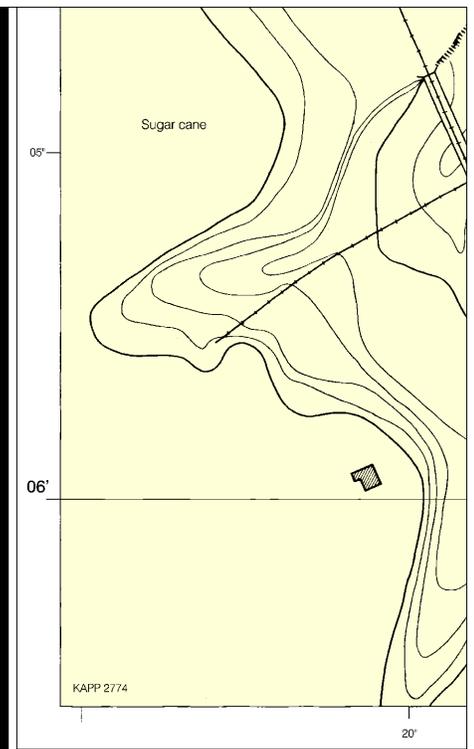
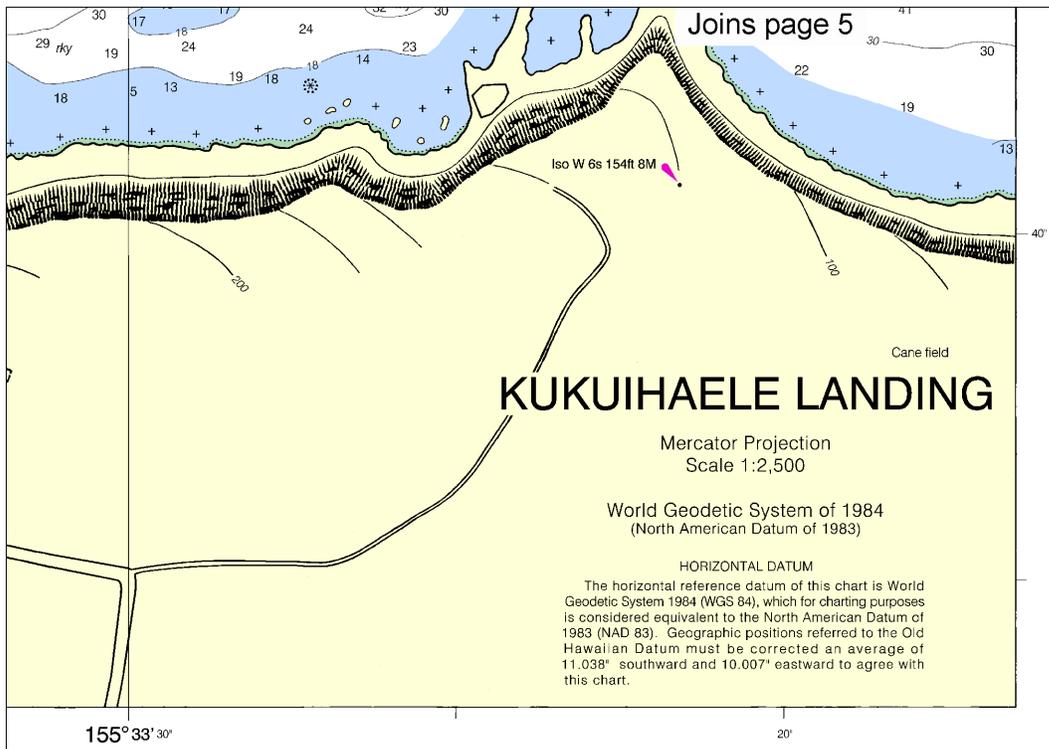
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NGA Weekly Notice to Mariners: 4912 12/8/2012,
Canadian Coast Guard Notice to Mariners: n/a.

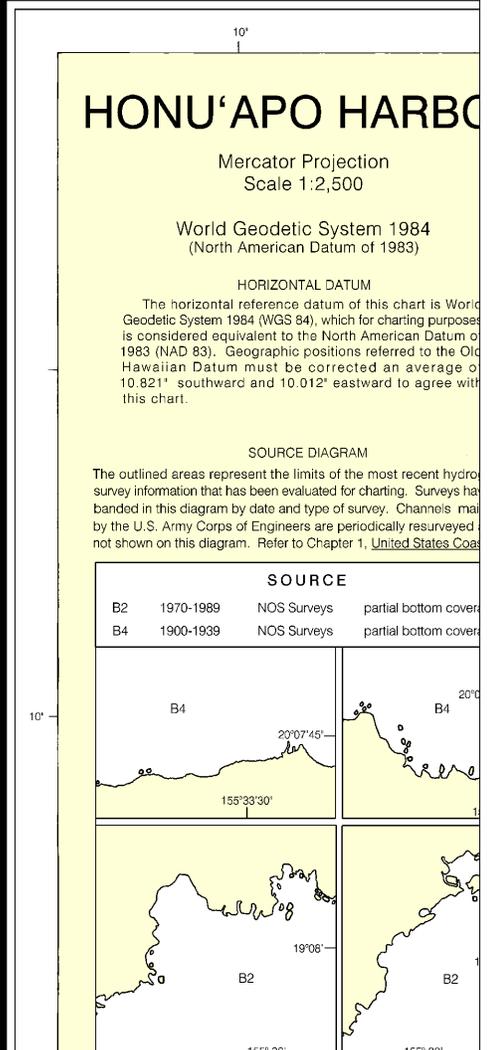
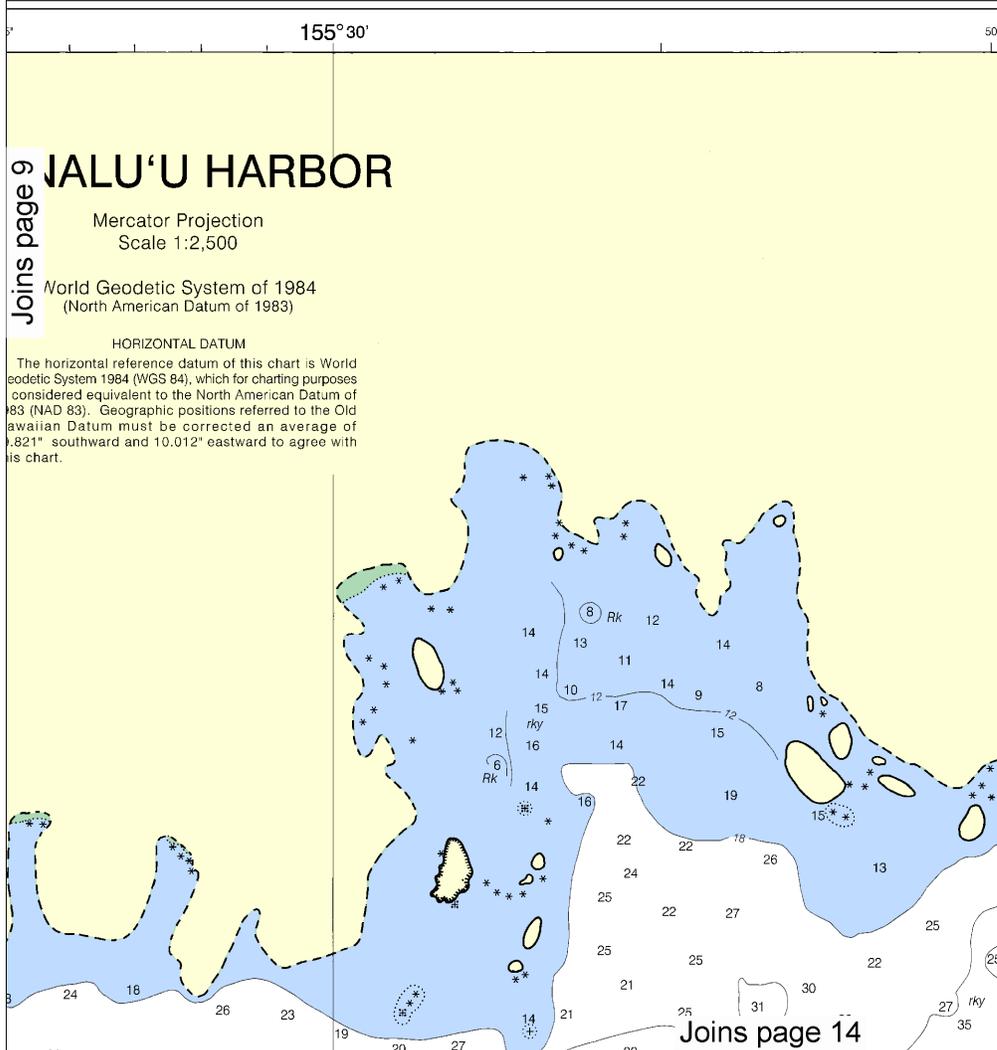
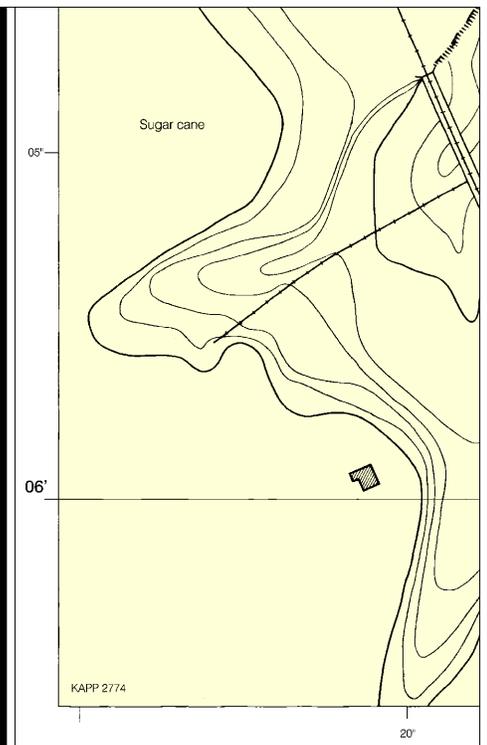
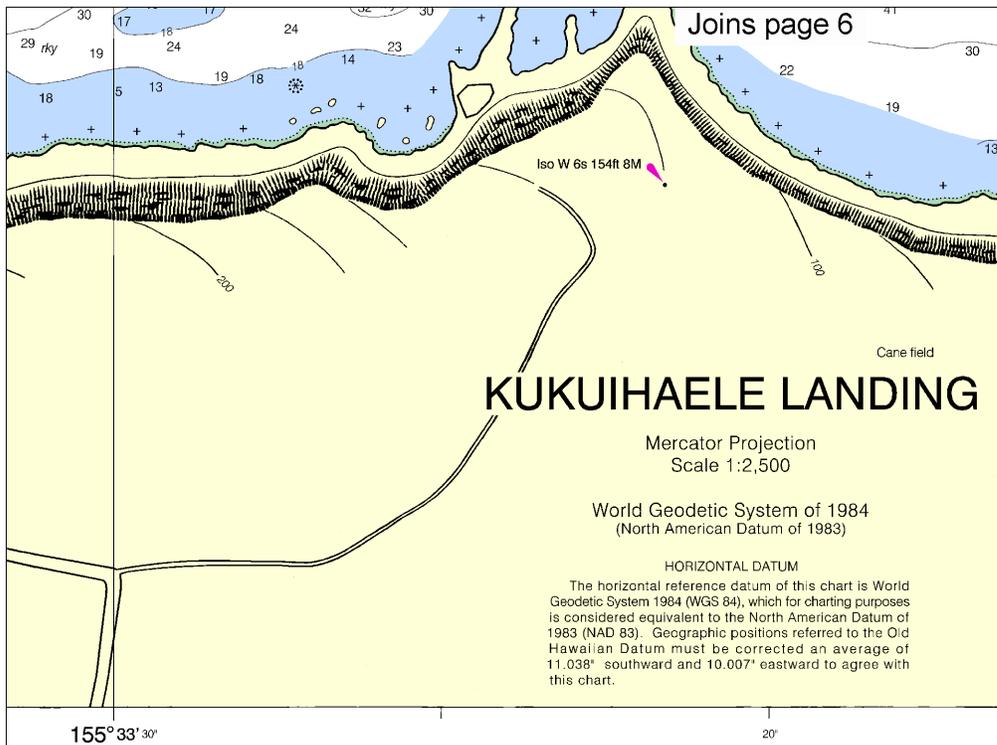




Note: Chart grid lines are aligned with true north.





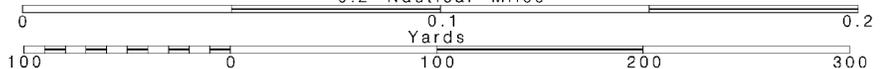


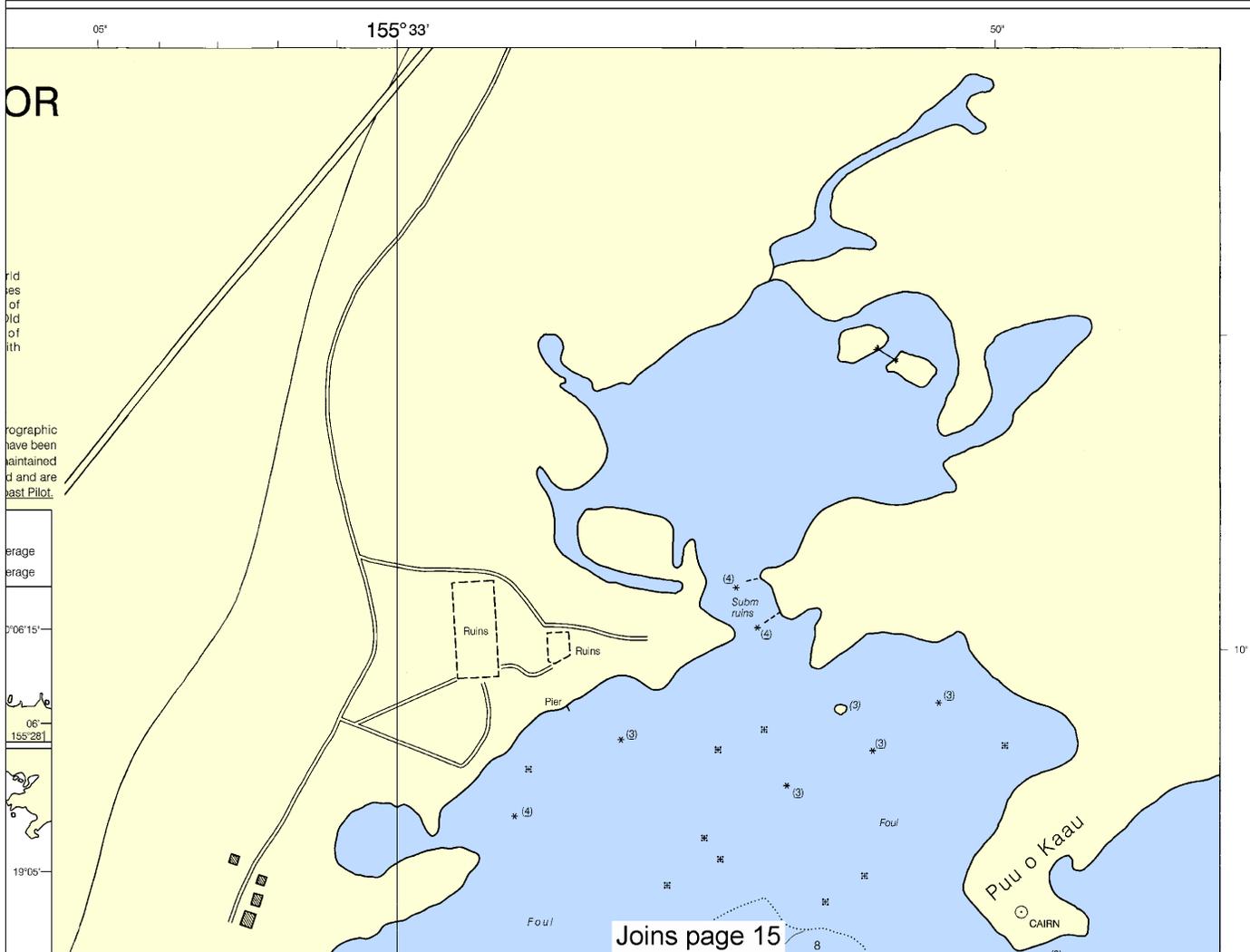
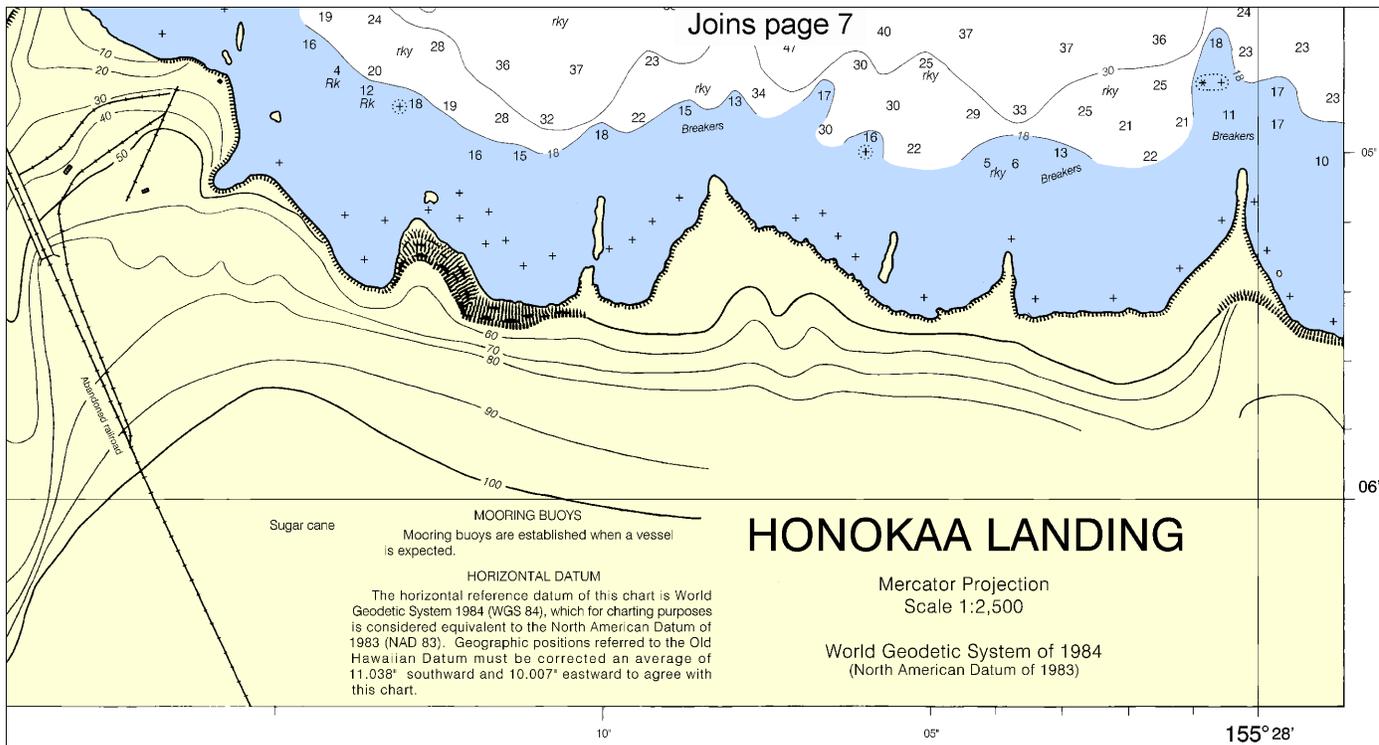
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Note: Chart grid lines are aligned with true north.

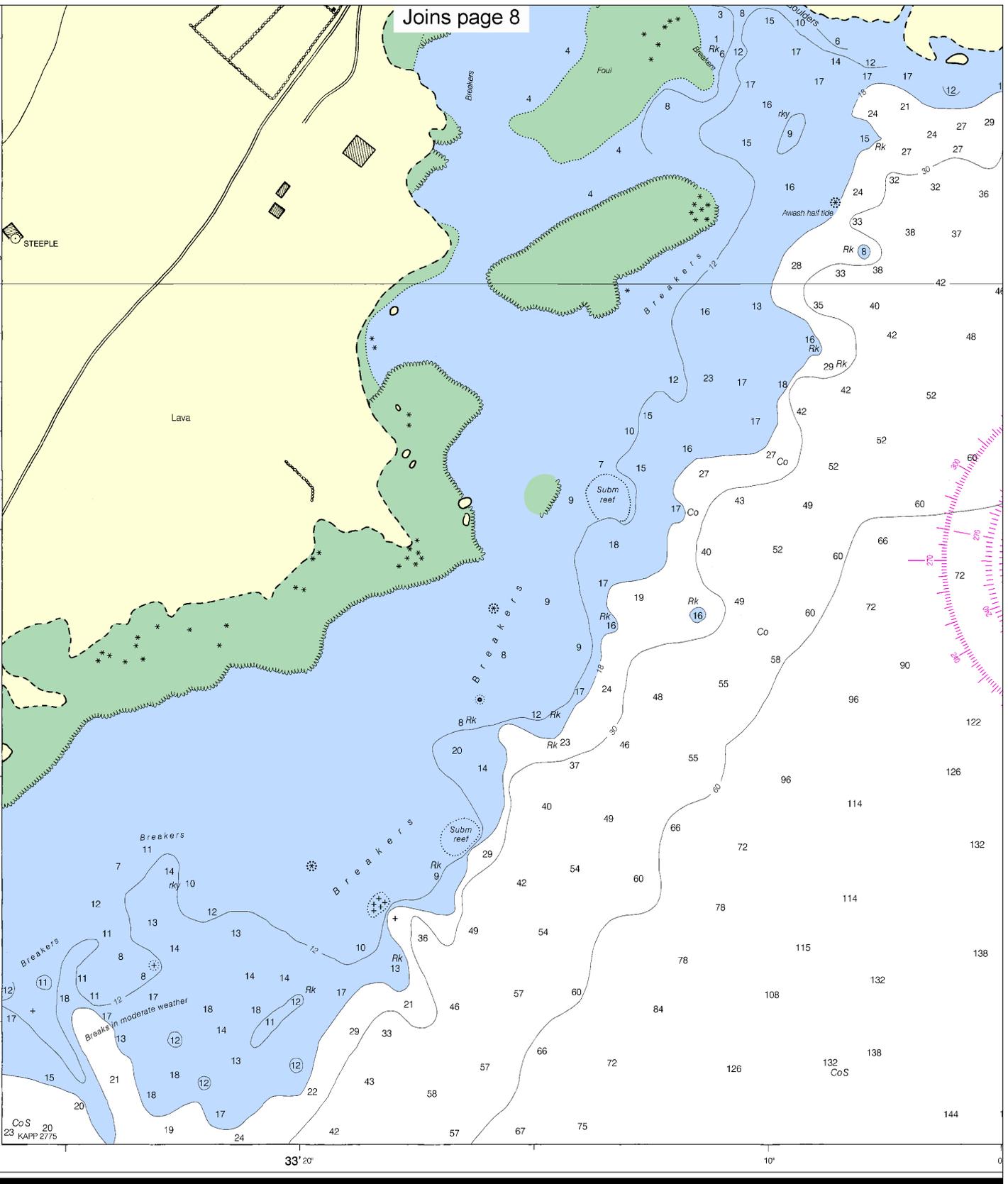
Printed at reduced scale. ~~SCALE 1:2,500~~
0.2 Nautical Miles

See Note on page 5.





19° 08'



8th Ed., Dec. / 03 ■ Corrected through NM Dec. 13/03
Corrected through LNM Nov. 25/03

19322

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping 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.

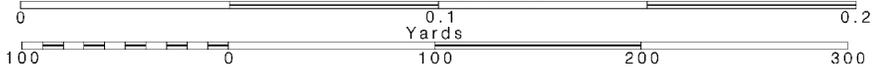
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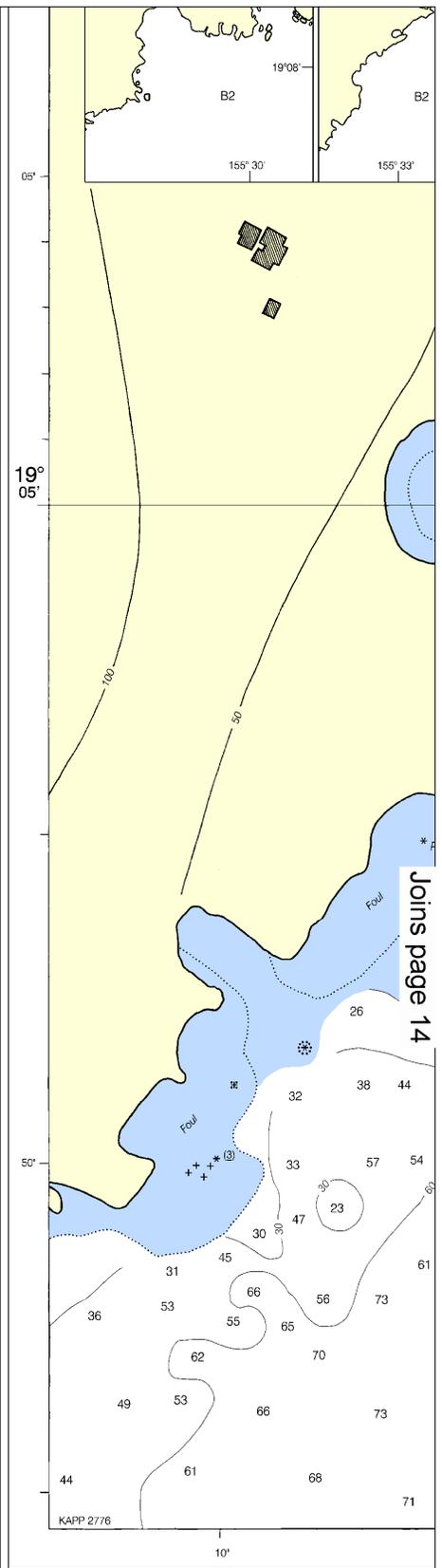
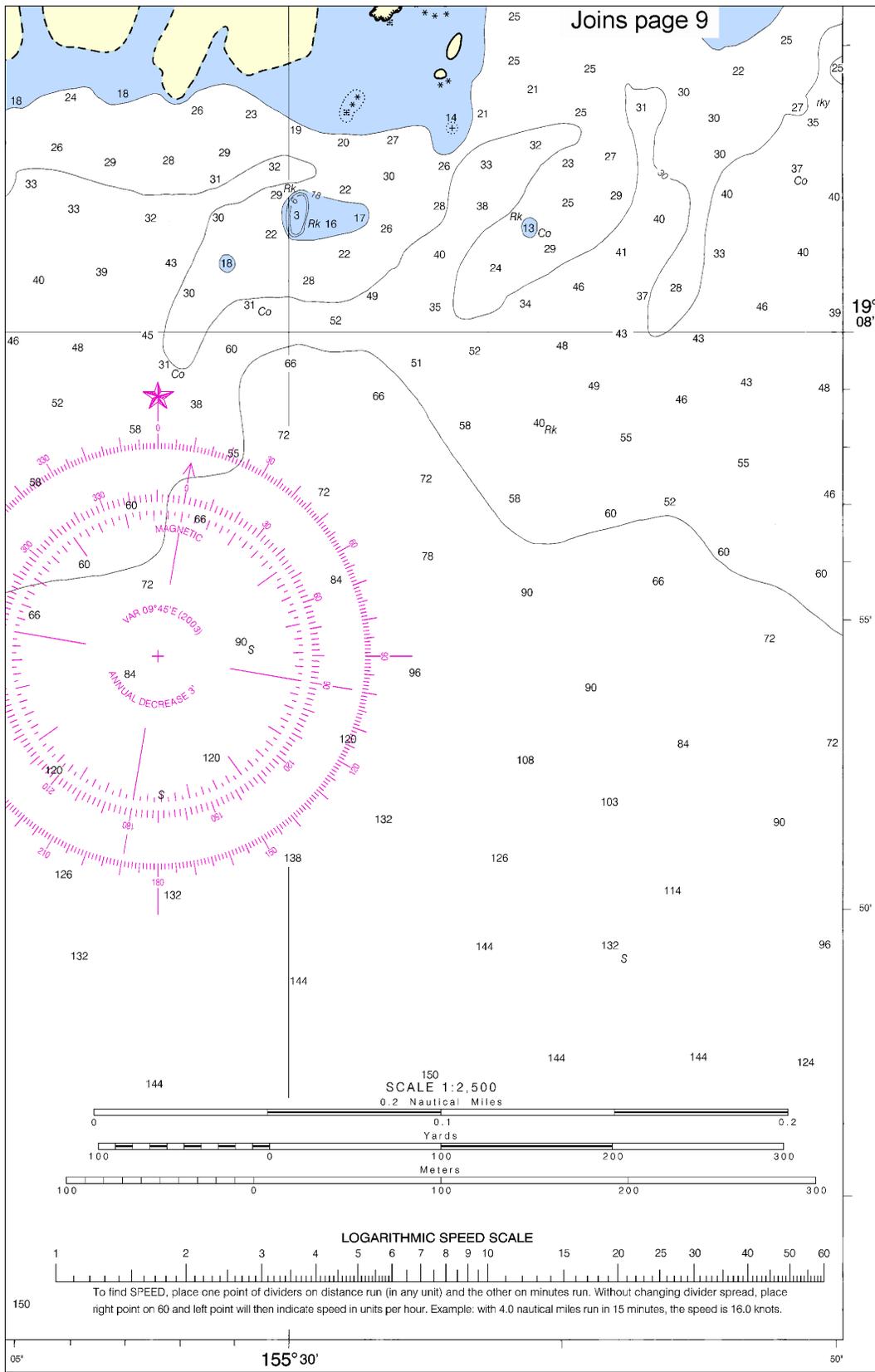
12

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:2,500
0.2 Nautical Miles

See Note on page 5.

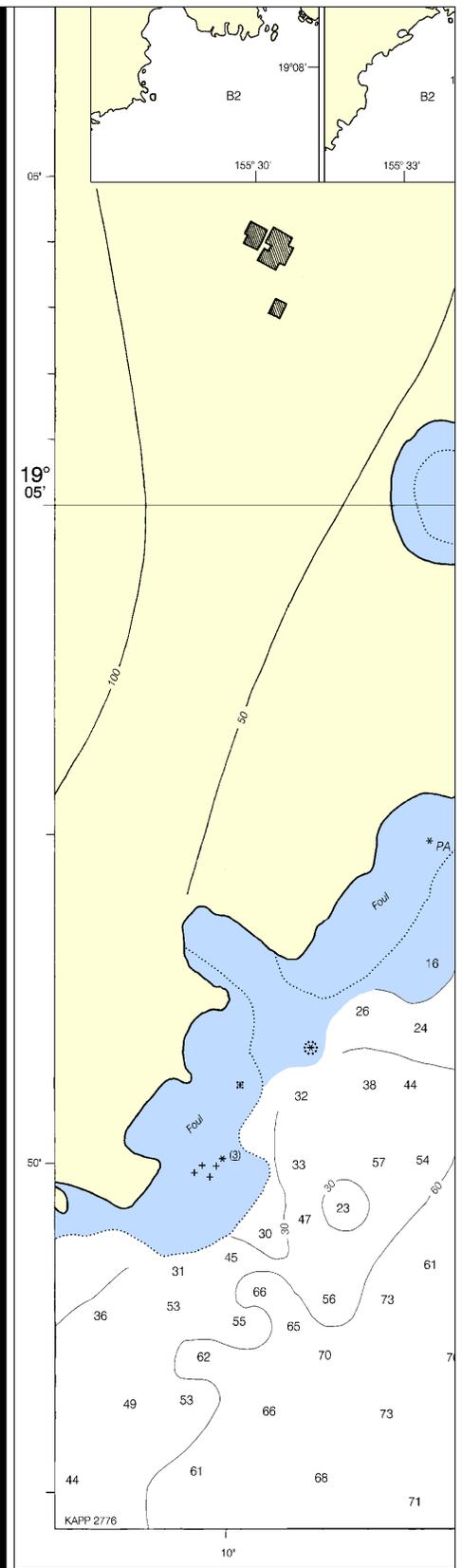
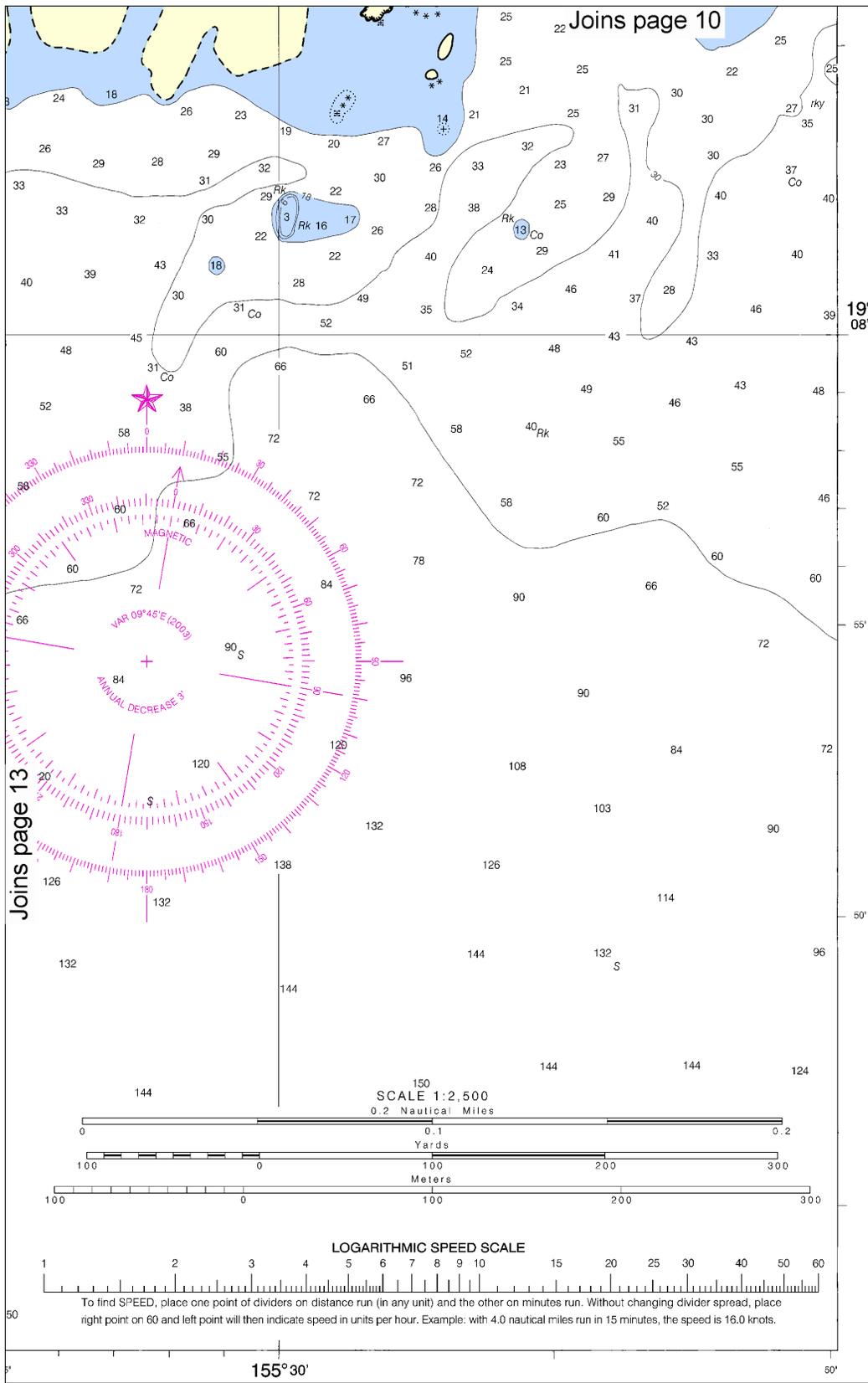




INDINGS IN FEET

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

FATHOMS	
FEET	
METERS	



INDINGS IN FEET

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

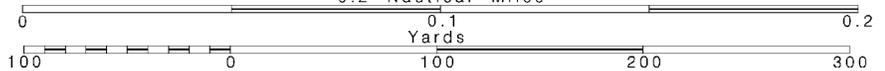
FATHOMS	1
FEET	6
METERS	1.2

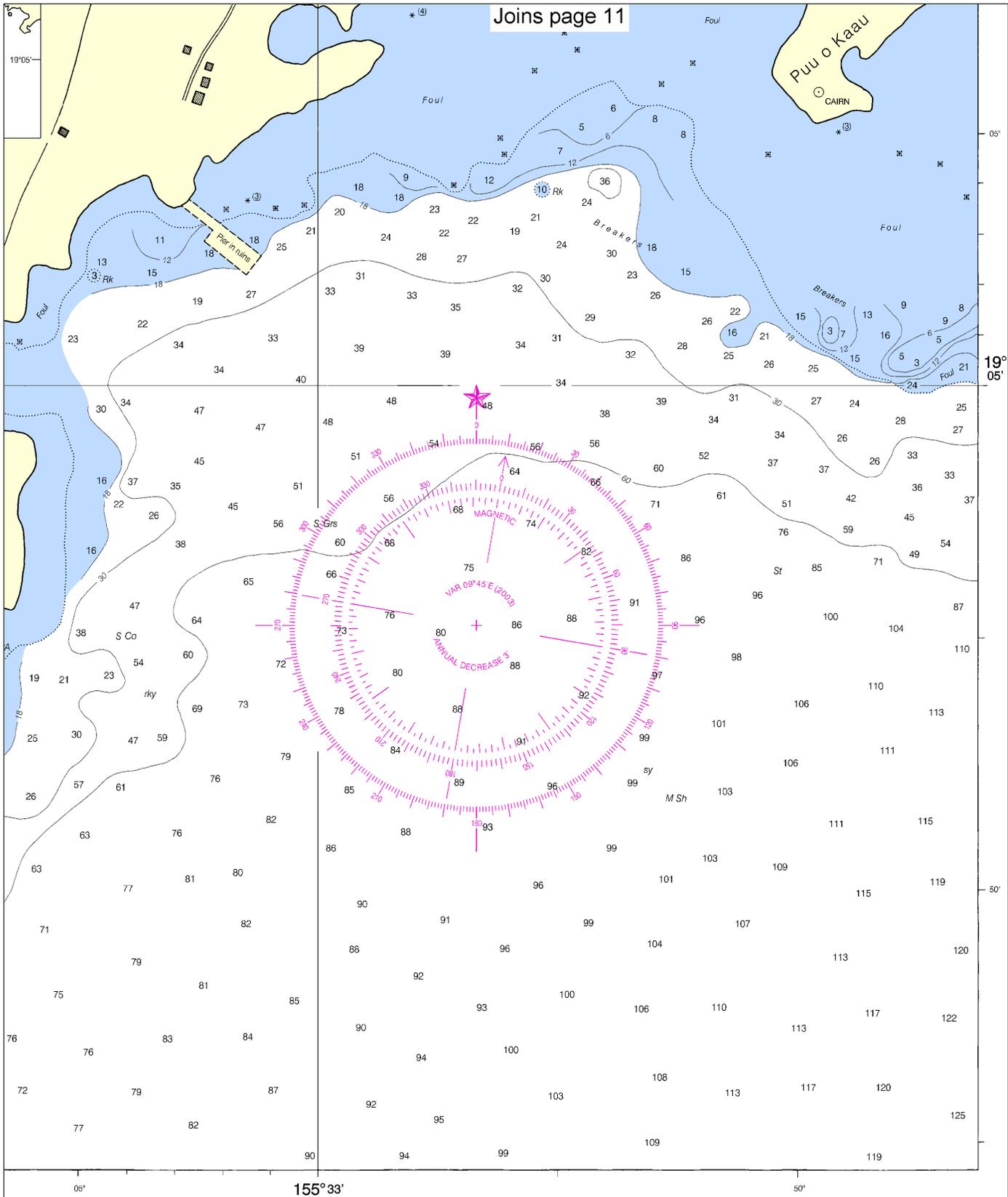
14

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. SCALE 1:2,500
0.2 Nautical Miles

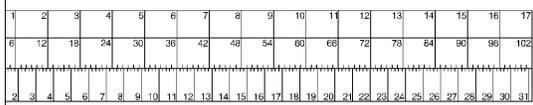
See Note on page 5.





ED. NO. 8

NSN 7642014011699
NIMA REFERENCE NO. 19XHA19322



Harbors and Landings, Hawai'i
SOUNDINGS IN FEET - SCALE 1:2,500

19322



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