BookletChart™

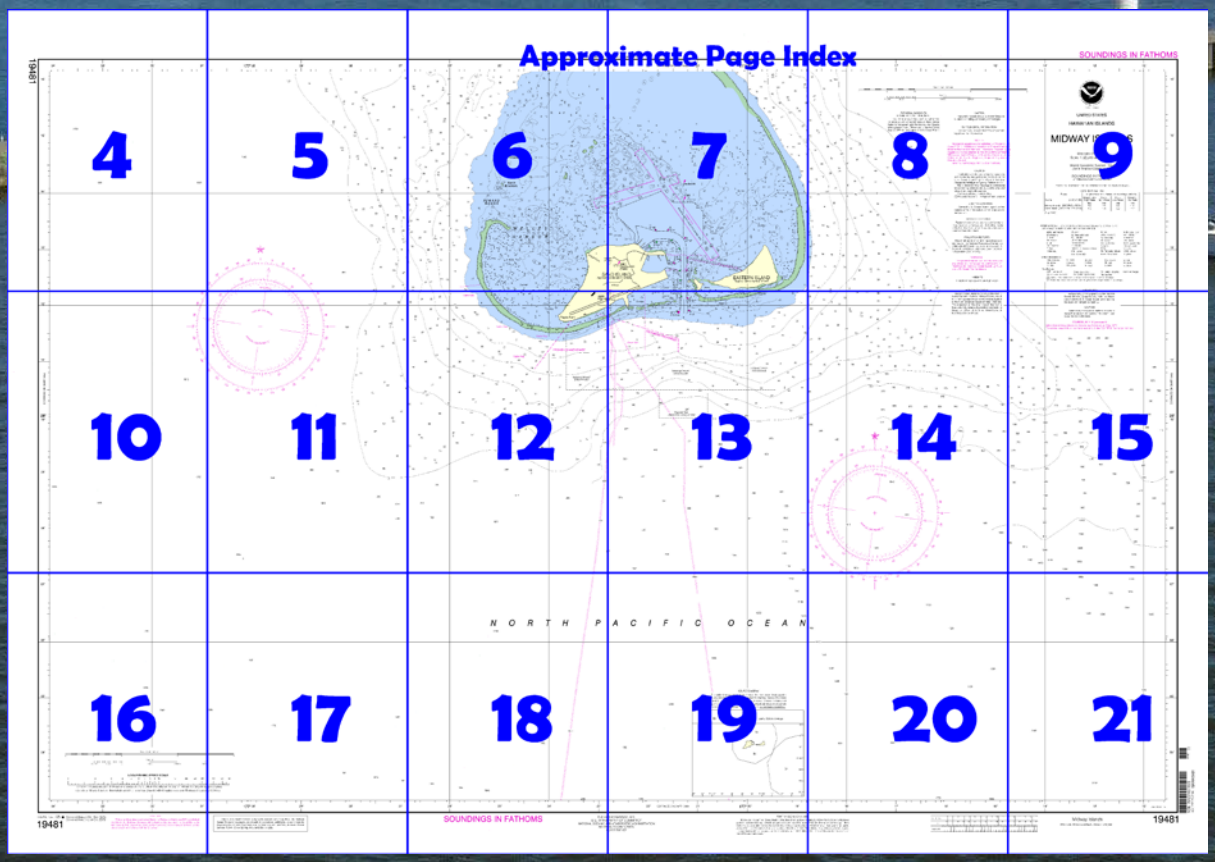
Midway Islands

NOAA Chart 19481

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.

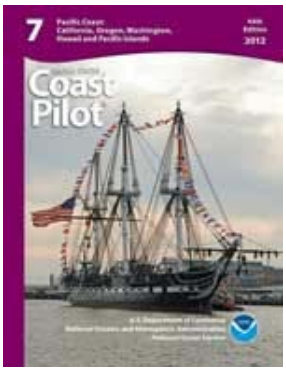
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

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=19481.



(Selected Excerpts from Coast Pilot)
Midway Islands are 1,150 miles WNW of Honolulu. The circular atoll is 6 miles in diameter and encloses two islands. The coral reef does not completely enclose the lagoon; there is a natural opening on the W side, and another opening has been dredged on the S side. The reef rises abruptly from deep water and there are no off-lying rocks or shoals; breakers mark all seaward sides of the reef. The enclosed islands average 12 feet high with a maximum height of 45 feet. Numerous birds, especially albatross, nest on the islands and are sometimes a hazard to landing or departing airplanes.

The Midway Islands, not part of the State of Hawaii, are under the administration of the Department of the Interior **Midway Atoll National Wildlife Refuge** established by Executive Order No. 13022 of October 31, 1996. Copies of the Executive Order directing the **Management** and **General Public Use** of the National Wildlife Refuge System can be obtained from Refuge Manager, Hawai'ian/Pacific Islands National Wildlife Refuge Complex, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, P.O. Box 50167, Honolulu, HI 96850.
Requests for emergency entry of vessels in distress should be made by any means possible to the Joint Rescue Coordination Center (JRCC), Honolulu, Hawaii (808–535–3333). JRCC will then obtain entry approval or denial from the USFWS Refuge Manager and provide a response to the requester.
Non-emergency entry requests must be approved in advance by contacting the USFWS Refuge Manager. Additionally, the Midway harbormaster can be reached by VHF-FM radio channel 16.
Eastern Island, at the SE end of the atoll, is triangular in shape, about 1.2 miles long, and 6 to 12 feet high.
Sand Island, on the S side of the atoll, is about 2 miles long in a SW direction and is composed of white coral sand. Prominent from offshore are the towers, tanks, and radio masts of the naval installations and a group of trees on the N side of the island. An aerolight is on top of the tallest tank in the N central part of the island.
Welles Harbor is the area inside the gap in the barrier reef on the W side of the atoll. The harbor was formerly used to a considerable extent as an anchorage by ships calling at Midway, but since the dredging of the ship channel and harbor between Sand and Eastern Islands, Welles Harbor is little used. Navigation in this area should not be attempted.
Channels.–Marked dredged channels through the S reef lead to deepwater basins on the E and NE sides of Sand Island, and to a small-craft basin on the W side of Eastern Island. The entrance channel is marked by a lighted buoy, unlighted buoys, and a **359.5°** lighted range. (Consult the United States Fish and Wildlife Service, Notice to Mariners, and latest editions of charts for controlling depths.)
Anchorages.–The established anchorage area is NE of Sand Island. Outside anchorage is available in depths of 15 to 25 fathoms E of the main channel sea buoy; this anchorage is fair during NE winds, but should not be attempted during winds from other quadrants. Anchorage S of Sand Island is prohibited to avoid possible fouling of the San Francisco-Honolulu-Midway-Guam-Manila cable.
Currents.–The current off the main entrance channel usually sets W with a velocity of about 2 knots. Within the channels, the current changes direction with velocities of 2 to 8 knots, depending on the weather; extreme caution is necessary to avoid being carried outside the channel limits. It is reported that during heavy gales Welles Harbor is full of strong currents caused by the sea forced over the reefs.
Pilotage, Midway Islands.–Vessels required by law to have a licensed master should consult the Captain of the Port, Honolulu (808–842–2640) to determine specific pilotage requirements. Pilots are not required for public vessels of the United States.

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

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

Table of Selected Chart Notes

Corrected through NM Jan. 15/11
Corrected through LNM Jan. 04/11

Mercator Projection
Scale 1:32,500 at Lat 28° 10'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the 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.

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). The projection of this chart was shifted from a local datum by means of georeferenced satellite imagery and has not been confirmed by land-based geodetic methods.

CAUTION

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

HEIGHTS

Heights in feet above Mean High Water.

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

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) o(Approximate location)

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.

AIDS TO NAVIGATION

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

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.

PAPAHĀNAUMOKUĀKEA
MARINE NATIONAL MONUMENT

The entire area of this chart lies within the boundaries of the Papahānaumokuākea Marine National Monument and the Midway Atoll Special Management Area. These are protected areas. See 50 CFR 404 or Chapter 2, U.S. Coast Pilot 7.

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.

NOTE C
SHIP REPORTING SYSTEM

The following vessels entering or departing any U.S. port of place and in transit through the reporting area are required to report into the System: all vessels 300 gross tons or greater and all vessels in the event of a developing emergency. The following vessels in transit through the reporting area should report into the System: all vessels 300 gross tons or greater, fishing vessels, and all vessels in the event of a developing emergency. See IMO SN.1, Circ. 273. Information concerning the Ship Reporting System is also published in the U.S. Coast Pilot 7, Chapters 2 and 14, and updated through Notices to Mariners. Information may also be obtained at the Office of the Commander, 14th Coast Guard District in Honolulu, or at the Office of the District Engineer, Corps of Engineers, in Honolulu.

PARTICULARLY SENSITIVE SEA AREA

This chart falls entirely within the limits of a Particularly Sen--sitive Sea Area (PSSA). A PSSA is an environmentally sensitive area in which and around which mariners should exercise extreme caution. See U.S. Coast Pilot volumes for information regarding this area.

NOTE B
AREA TO BE AVOIDED

All vessels solely in transit should avoid the area (MSC IMO SN.1/Circ.263).

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.

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	N nun	R TR radio tower
Al alternating	IQ interrupted quick	OBSC obscured	Rot rotating
B black	Iso isophase	Oc occulting	s seconds
Bn beacon	LT HO lighthouse	Or orange	SEC sector
C can	M nautical mile	Osc oscillating	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
	Mo morse code	R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds 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	

(21) 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.

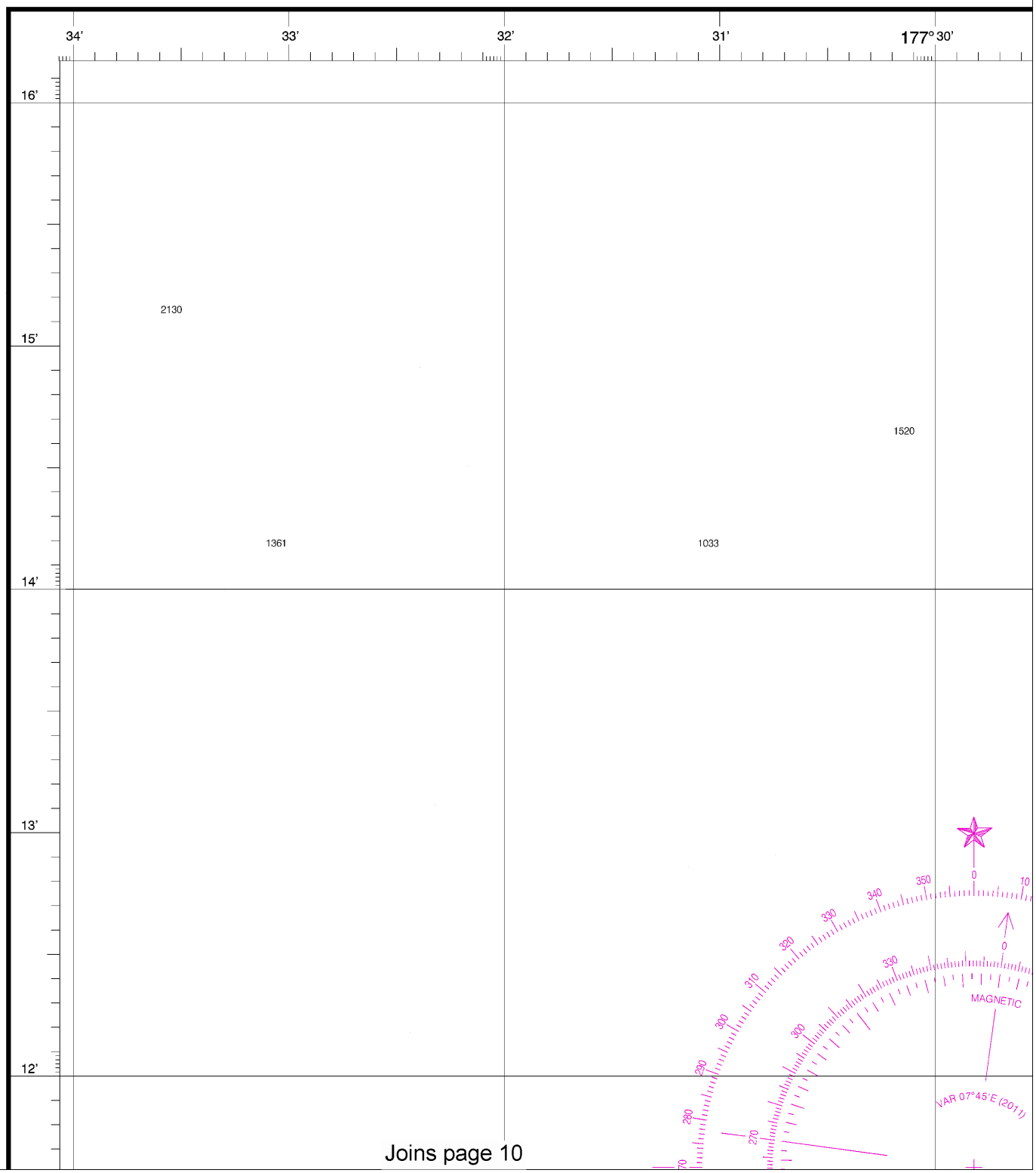
TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Sand Island	(28°12.7'N/177°21.6'W)	1.2	1.1	0.2
Midway Islands	(28°13'N/177°22'W)	1.2	1.0	0.2

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.

(Dec 2010)

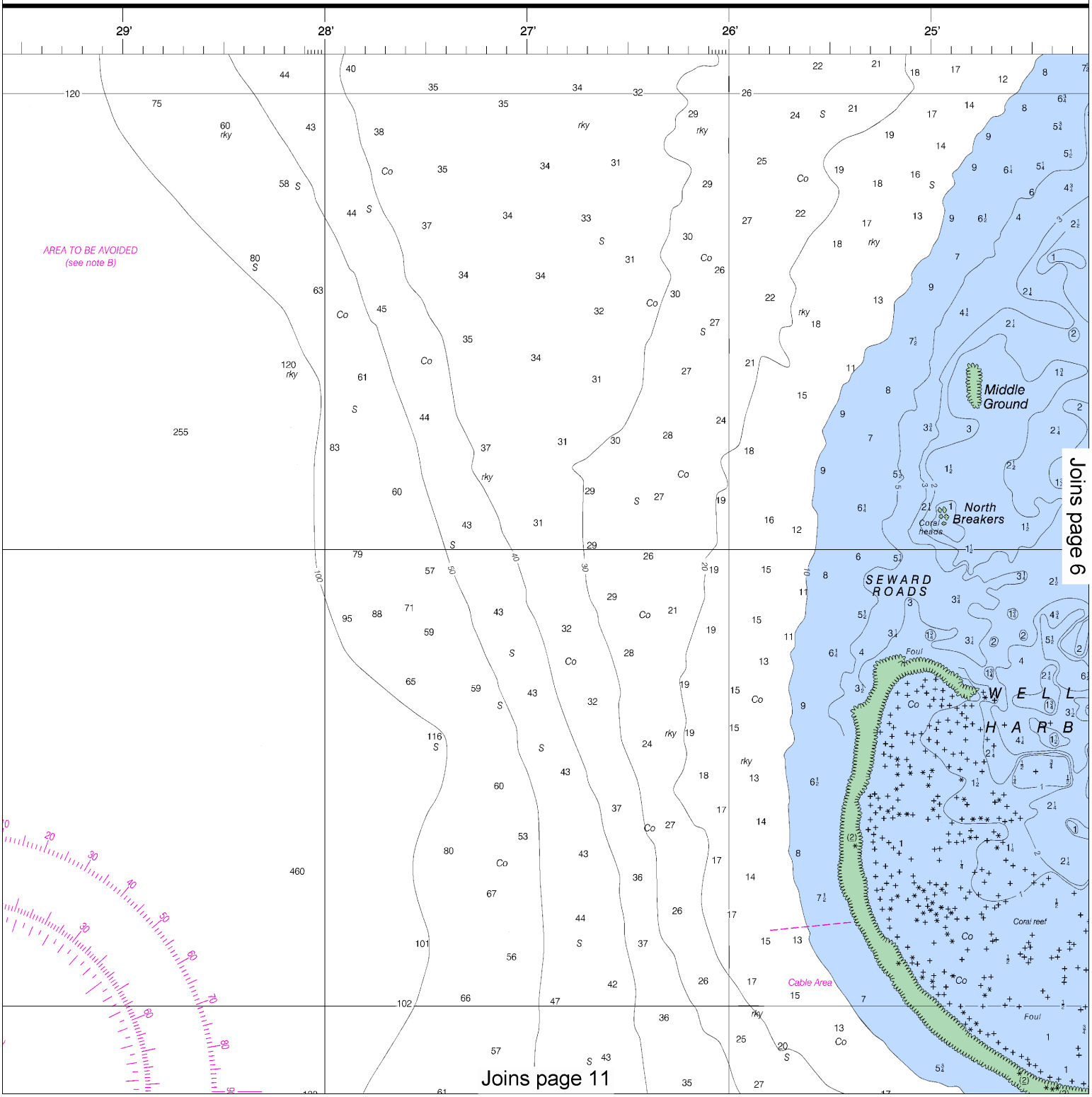
19481



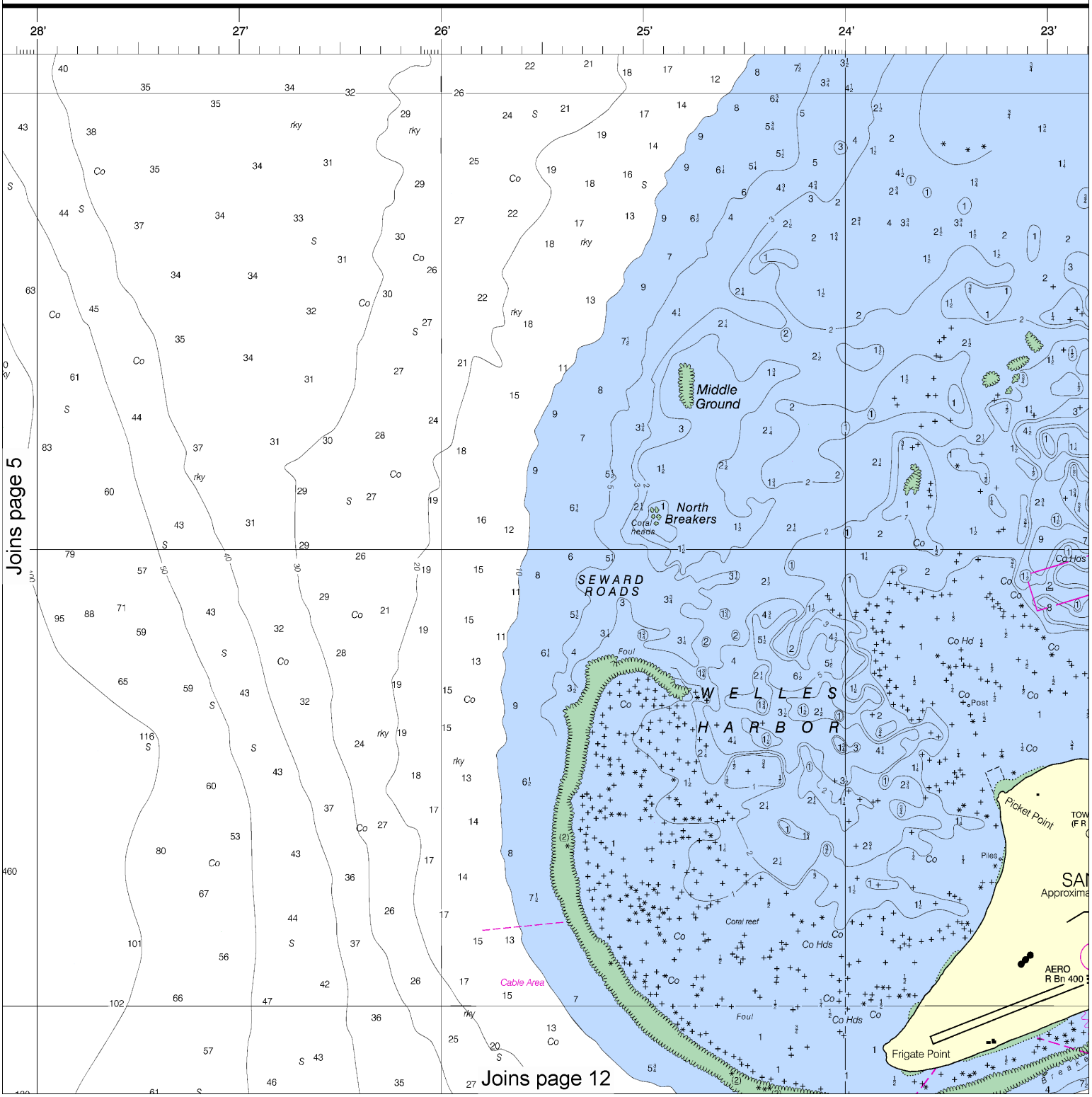
Joins page 10

4

Note: Chart grid lines are aligned with true north.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:43333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



6

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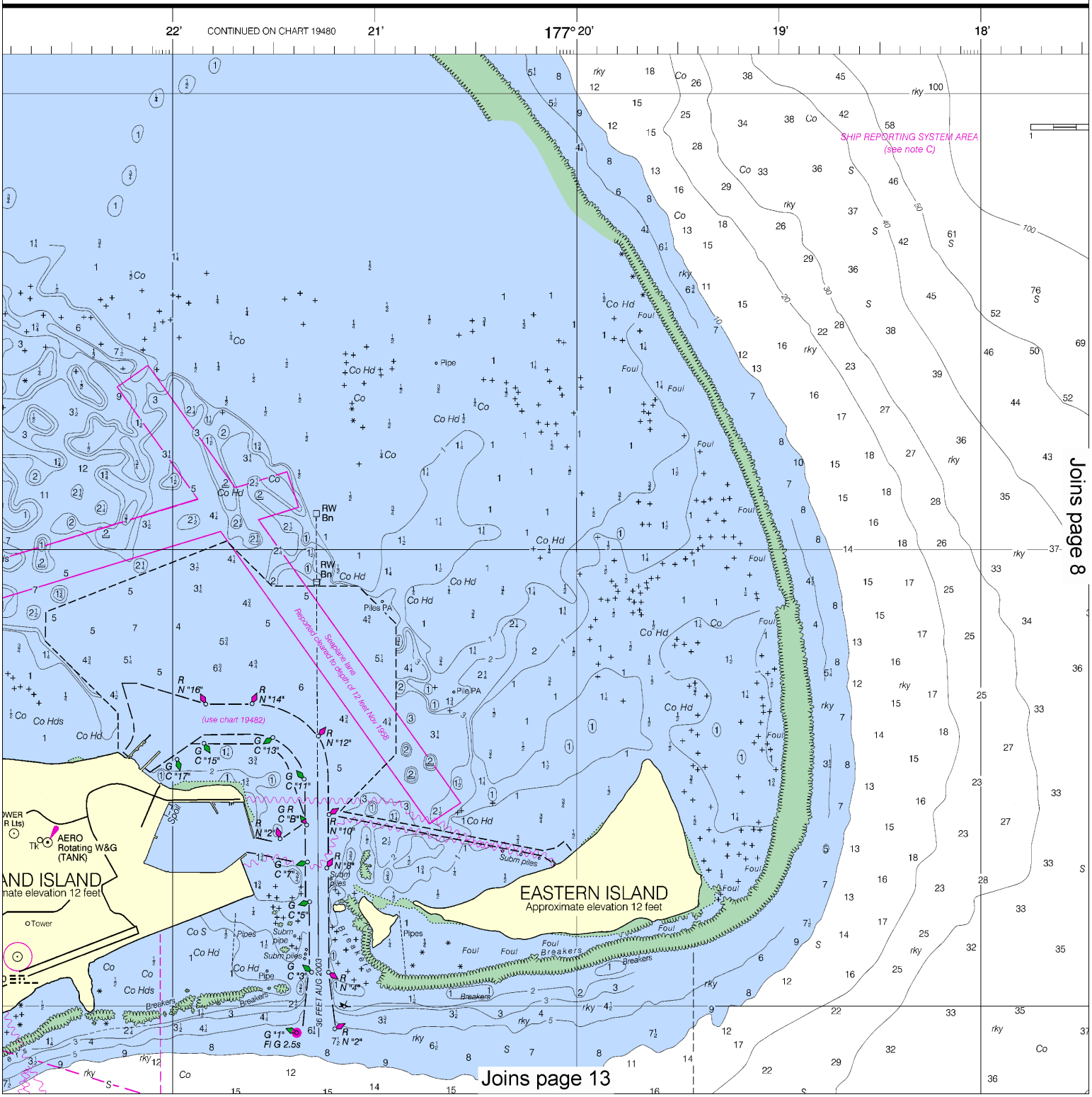
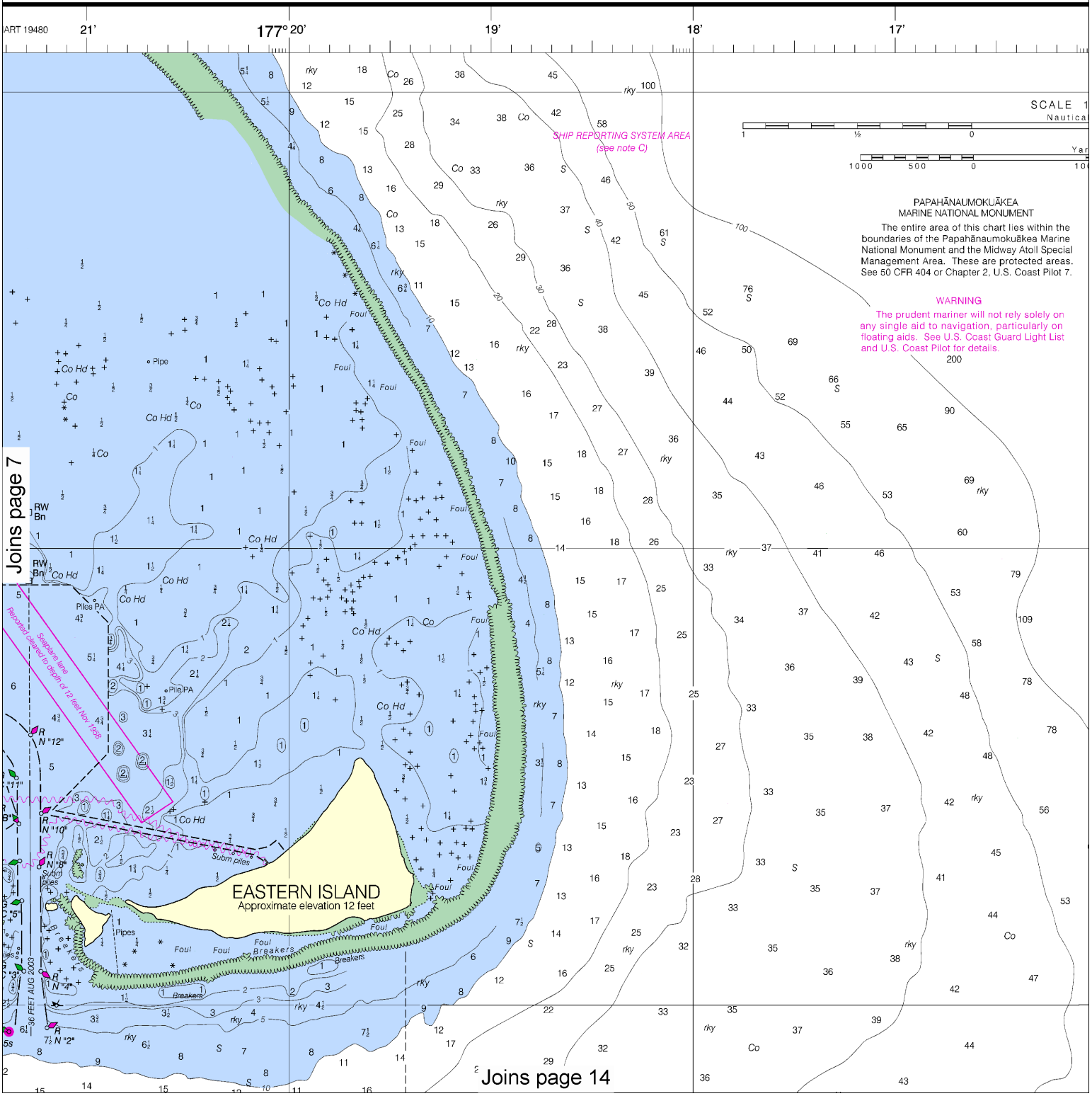
Ed., Oct. 1943 C-1943-596 KAPP 2826



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4812 11/27/2012,
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.

SOUNDINGS IN FATHOMS

16' 15' 14' 13' 12'

1:32,500
al Miles
1 2
ards
000 2000 3000

NOTE A

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HEIGHTS

Heights in feet above Mean High Water.

HORIZONTAL DATUM

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CAUTION

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

SUPPLEMENTAL INFORMATION

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES

HAWAI'IAN ISLANDS

MIDWAY ISLANDS

Mercator Projection
Scale 1:32,500 at Lat 28° 10'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

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

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
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		feet	feet	feet
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(Dec 2010)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

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

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

Bottom characteristics:

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

Miscellaneous:

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

21, 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.

AUTHORITIES

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

CAUTION

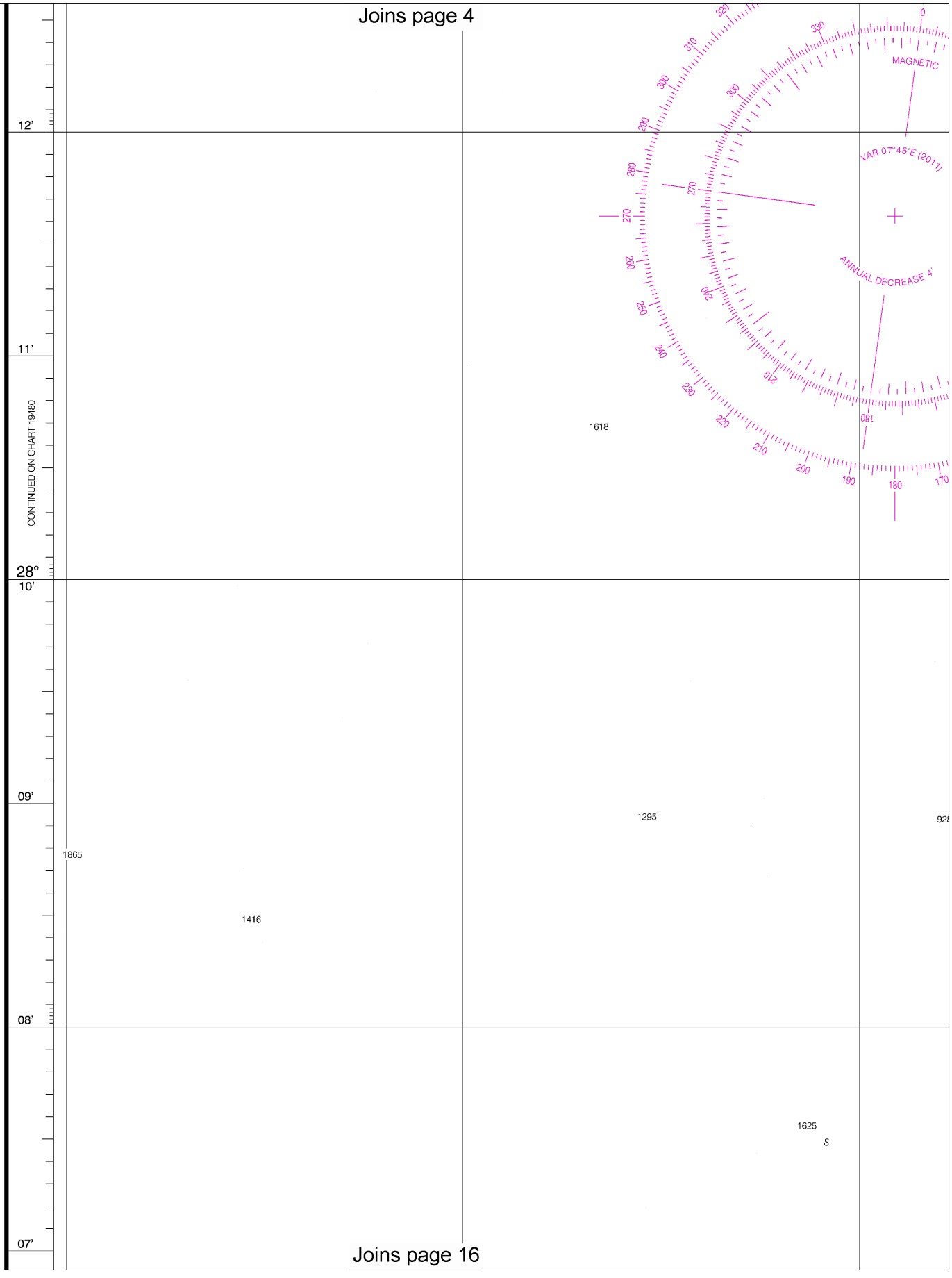
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

Internation Joins page 15 10 (see note A) Collisions at Sea, 1972.

16' 15' 14' 13' 12'

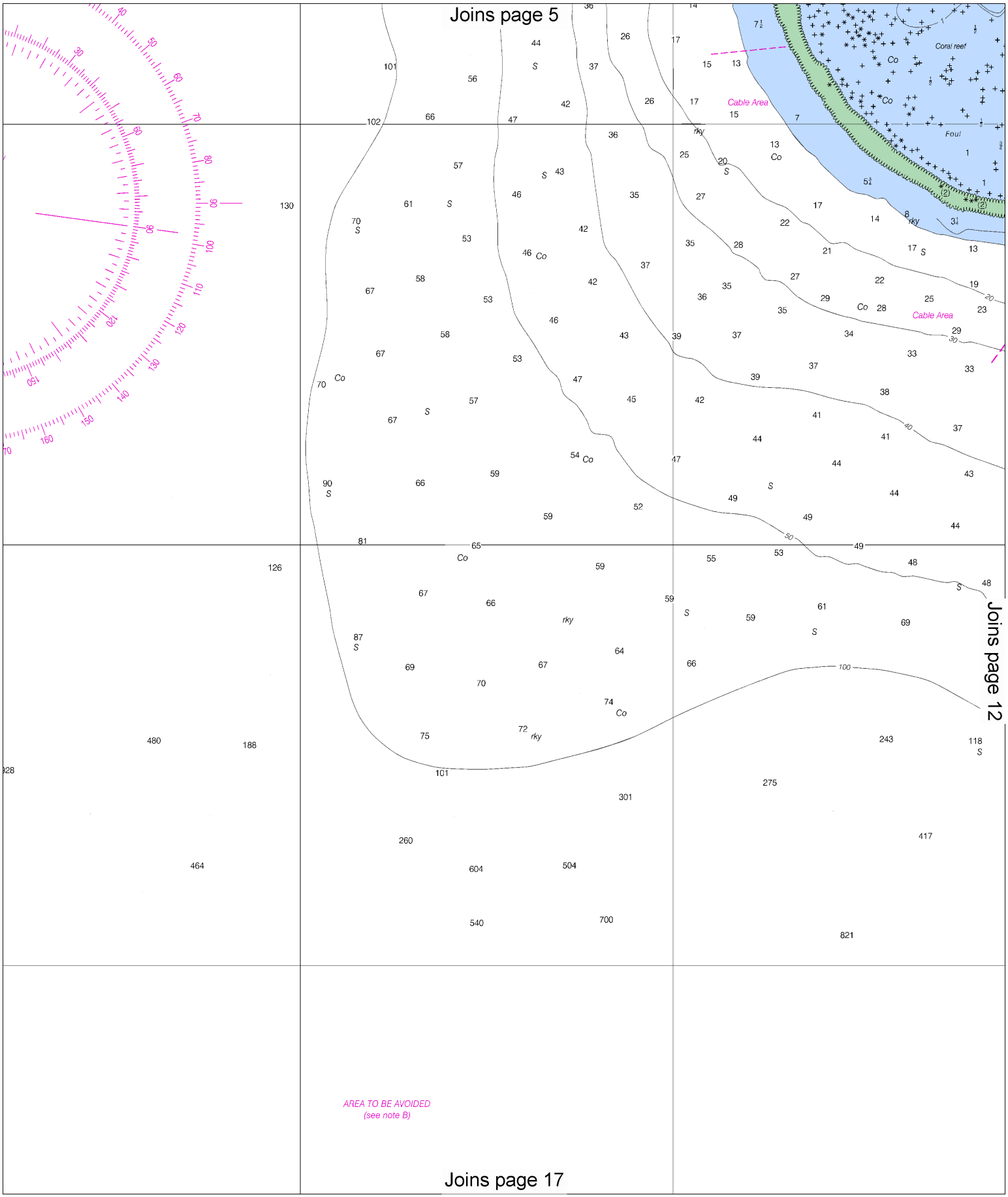
75 62 57 54 52

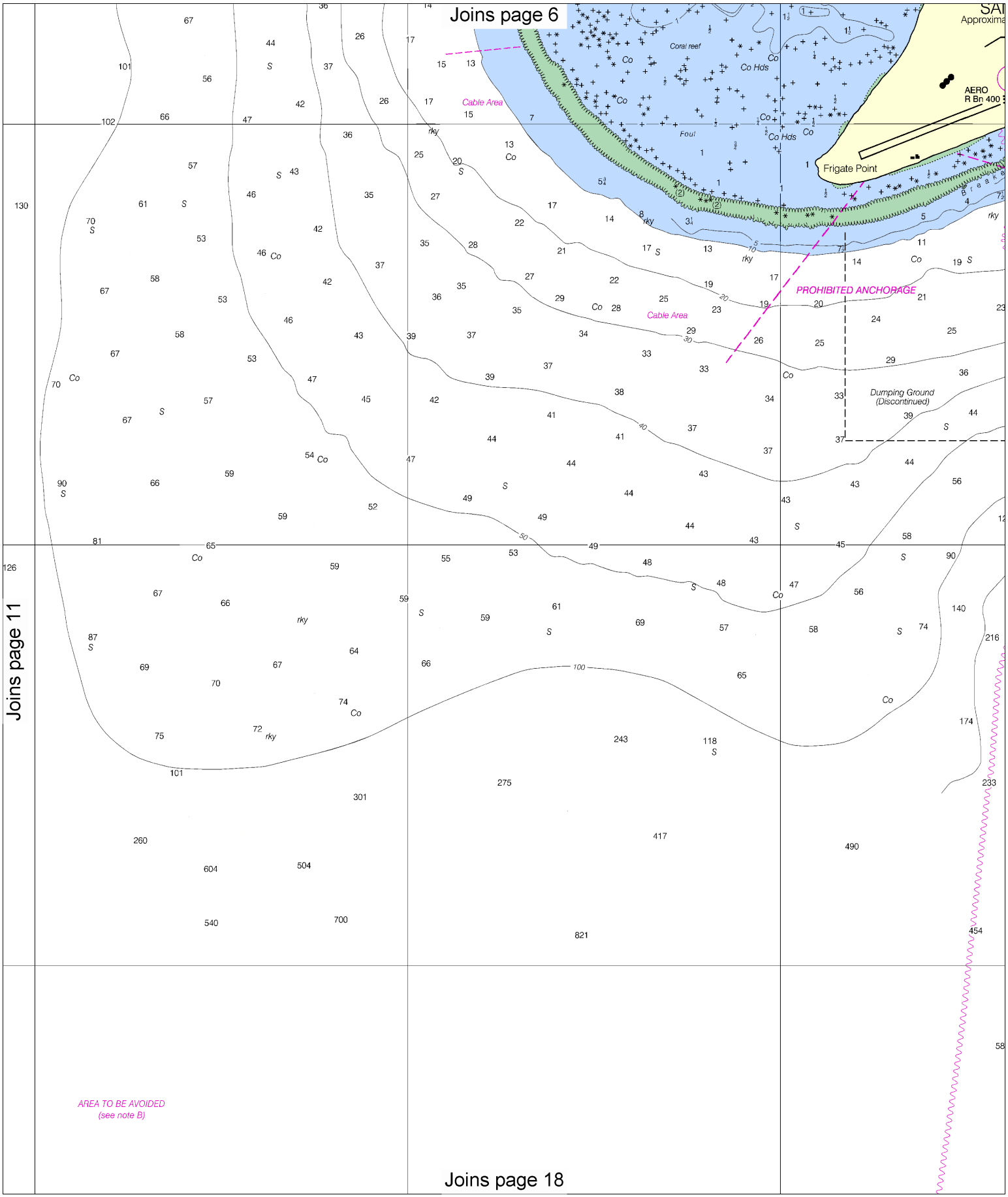
Joins page 4



Joins page 16

Note: Chart grid lines are aligned with true north.


Joins page 5
Coral reef
Foul
Cable Area
Cable Area
Joins page 12
AREA TO BE AVOIDED
(see note B)
Joins page 17



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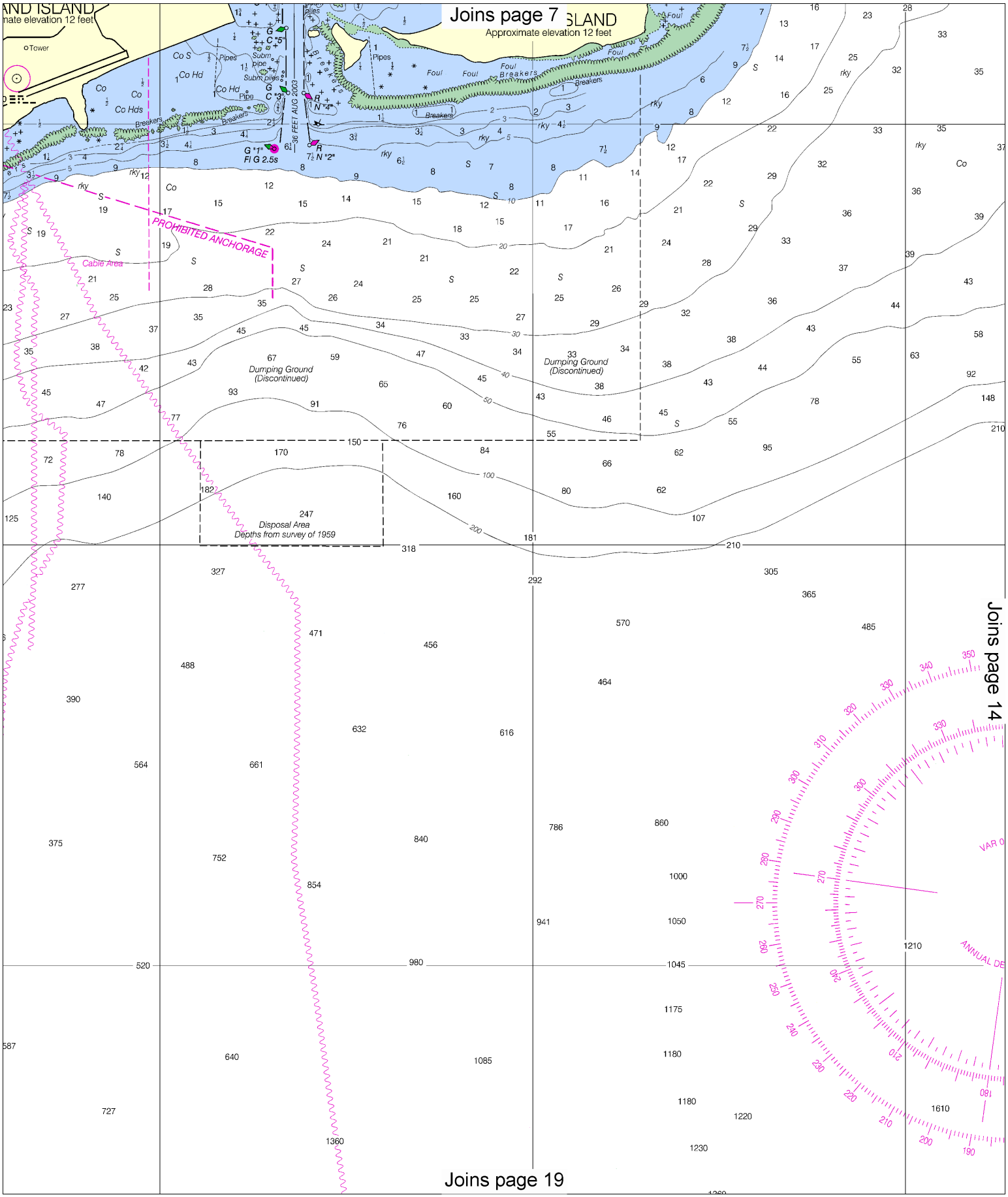
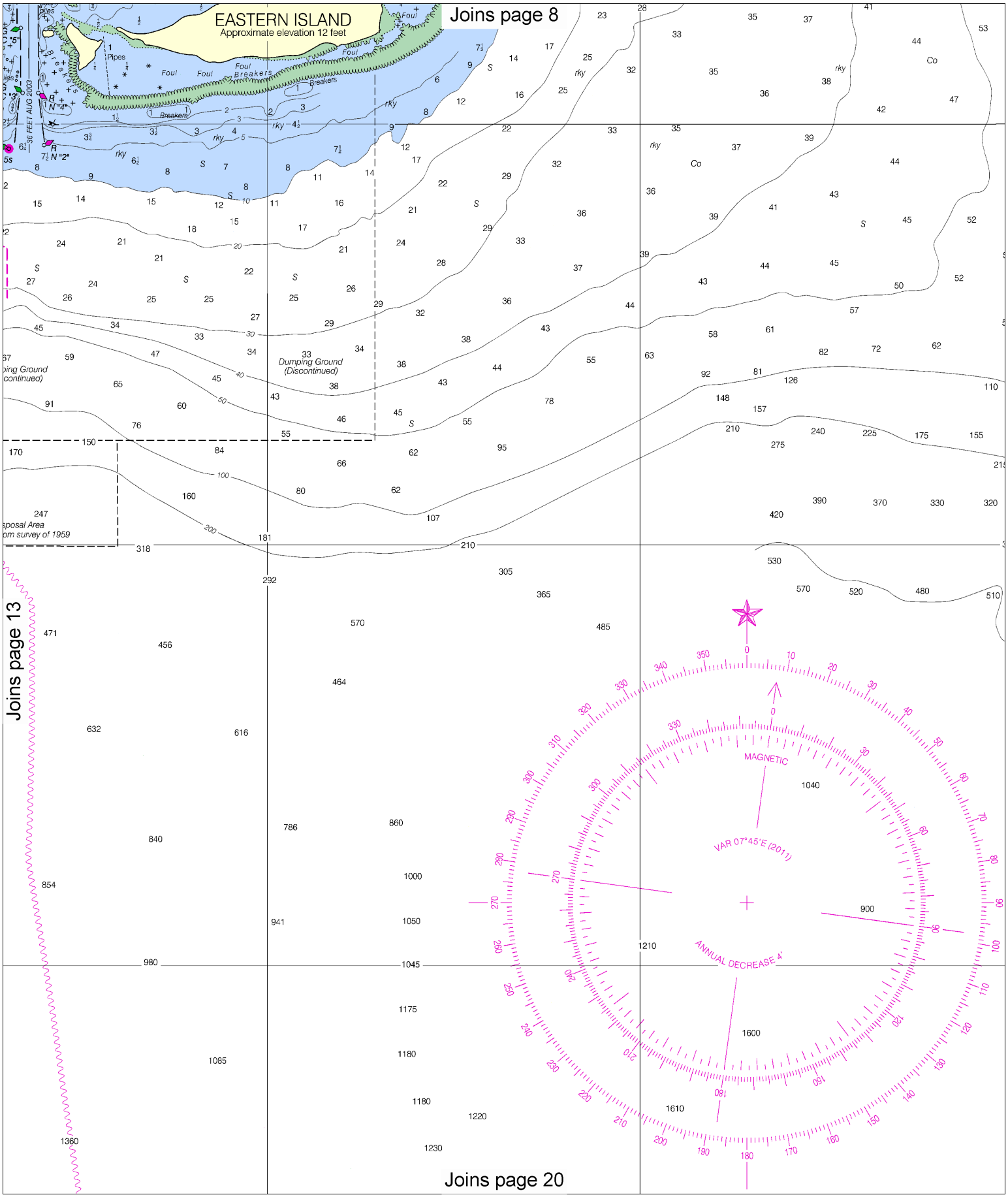

Joins page 7
Approximate elevation 12 feet
Tower
PROHIBITED ANCHORAGE
Cable Area
Dumping Ground
(Discontinued)
Dumping Ground
(Discontinued)
Disposal Area
Depths from survey of 1959
36 FEET AUG 2003
G "1"
Fl G 2.5s
R
N "2"
G "5"
G "3"
R
N "4"
Pipes
Subm pipe
Subm piles
Foul
Breakers
rky
Co
Co Hd
Co Hds
Co S
Joins page 14
Joins page 19
VAR 0
ANNUAL DE



14

Note: Chart grid lines are aligned with true north.

Heights in feet above Mean High Water.

ED existenc… nate Rep reported
(21) Wreck, r… r to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

Joins page 9

HORIZONTAL DATUM

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SUPPLEMENTAL INFORMATION

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

AUTHORITIES

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

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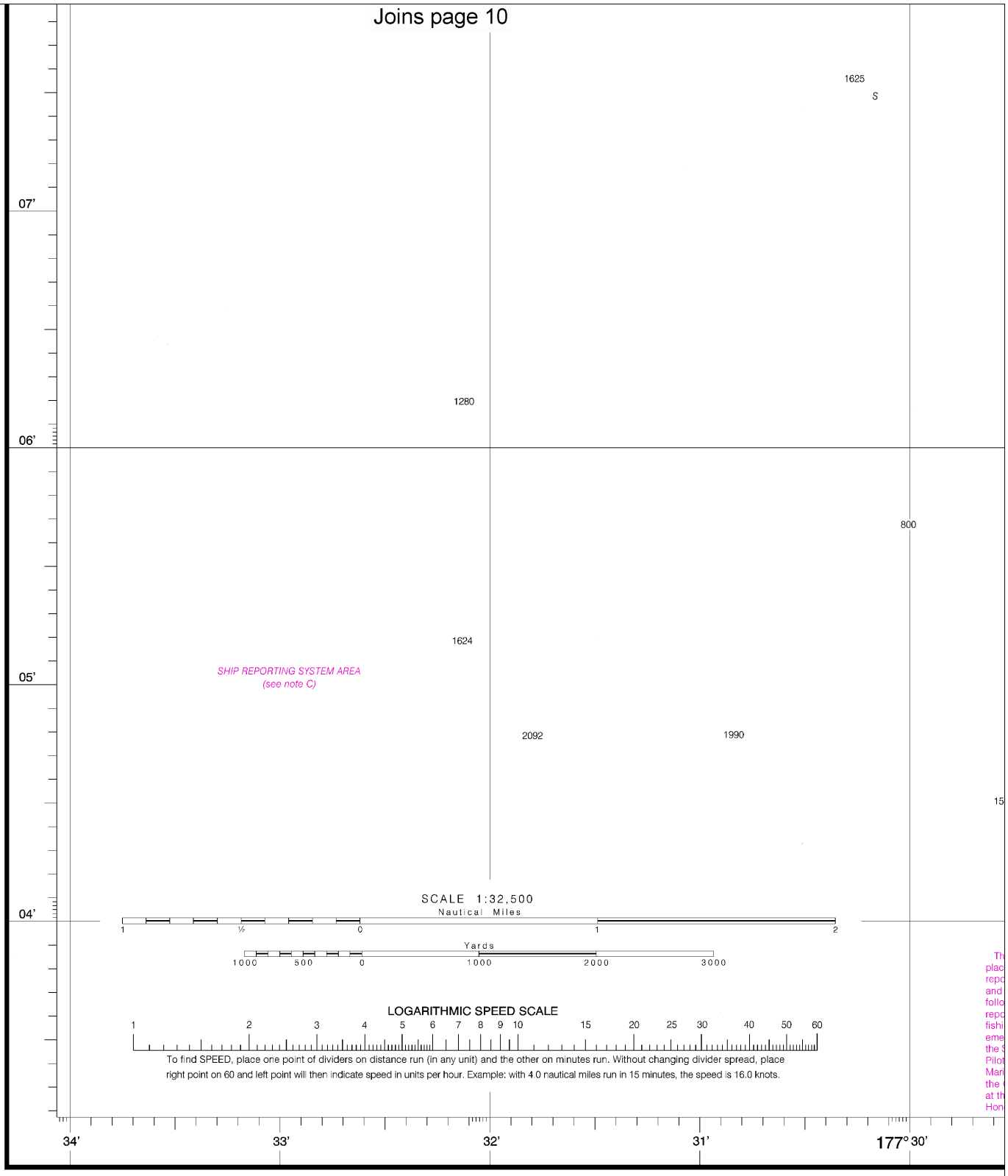
COLREGS, 80.1410 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

AREA TO BE AVOIDED
(see note B)

CONTINUED ON CHART 19480

Joins page 21

Joins page 10



12th Ed., Jan. / 11 ■ Corrected through NM Jan. 15/11
Corrected through LNM Jan. 04/11

19481

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.

This nautical chart has been designed to promote
Ocean Service encourages users to submit corrections
improving this chart to the Chief, Marine Chart Divisi
Service, NOAA, Silver Spring, Maryland 20910-3282.

Note: Chart grid lines are aligned with true north.

Joins page 11

AREA TO BE AVOIDED
(see note B)

N O R

1788

1520

1570

Joins page 18

NOTE C
SHIP REPORTING SYSTEM

The following vessels entering or departing any U.S. port of
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the Office of the District Engineer, Corps of Engineers, in
nolulu.

1063

1025

981

1300

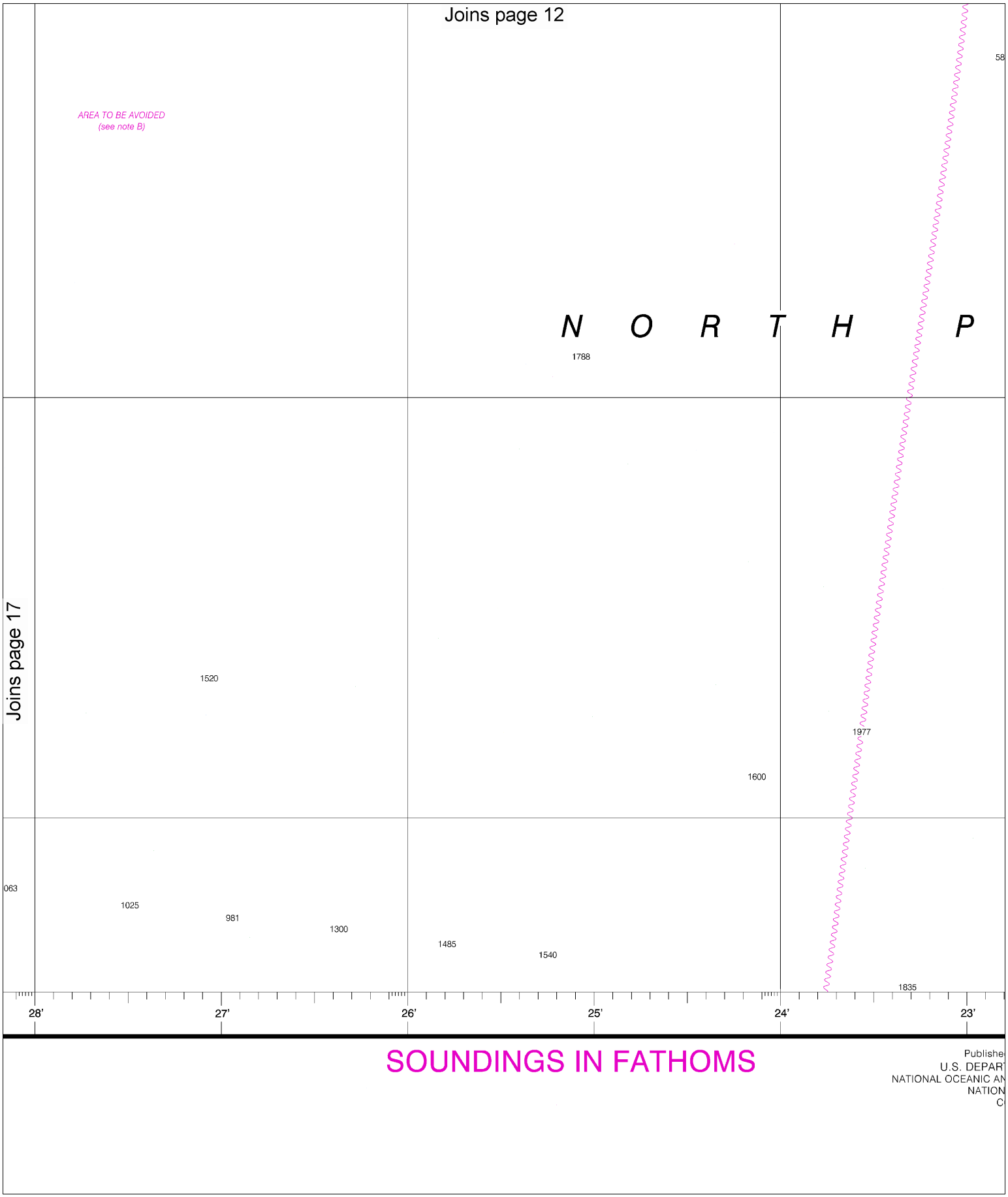
1485

1540

29’ 28’ 27’ 26’ 25’

e safe navigation. The National
ns, additions, or comments for
sion (N/CS2), National Ocean
2.

SOUNDINGS IN FATHOM



Note: Chart grid lines are aligned with true north.

Joins page 13

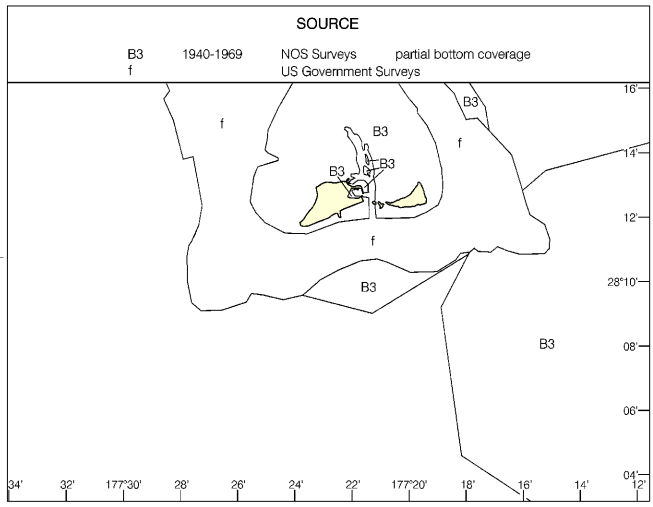
587 640 727 1085 1175 1180 1180 1220 1610 1360 1230 1360 1405 1260 1470 1495 1470 1530 1480 1530 1525 1525 1550 1800 1560 1680

240 230 220 210 200 190 012 081

A C I F I C O C E A N

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 20

22' CONTINUED ON CHART 19480 21' 177° 20' 19' 18'

ed at Washington, D.C.
RTMENT OF COMMERCE
AND ATMOSPHERIC ADMINISTRATION
NAL OCEAN SERVICE
COAST SURVEY

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 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx, or OceanGrafix at 1-877-56CHART or http://www.oceangrafix.com.

Joins page 14

1175
1180
1085
1180
1220
1610
1600
1360
1230
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1405
1590
1730
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1470
I C O C E A N
1495
1470
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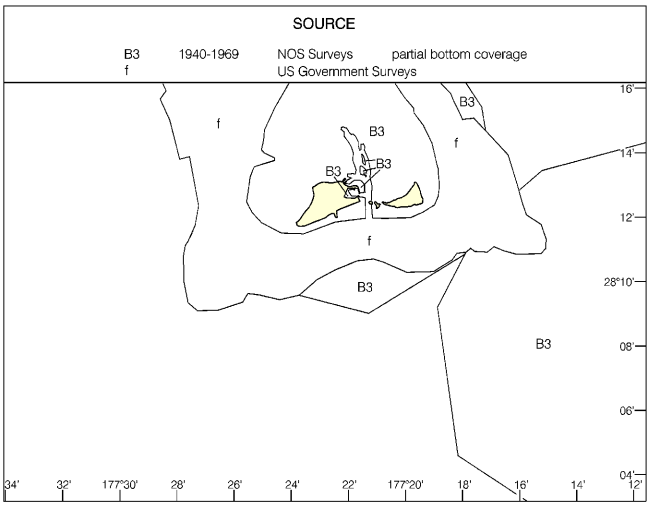
1480
1530
1525
1525
1800
1835
1730

Joins page 19

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.



HART 19480 21' 177° 20' 19' 18' 17'

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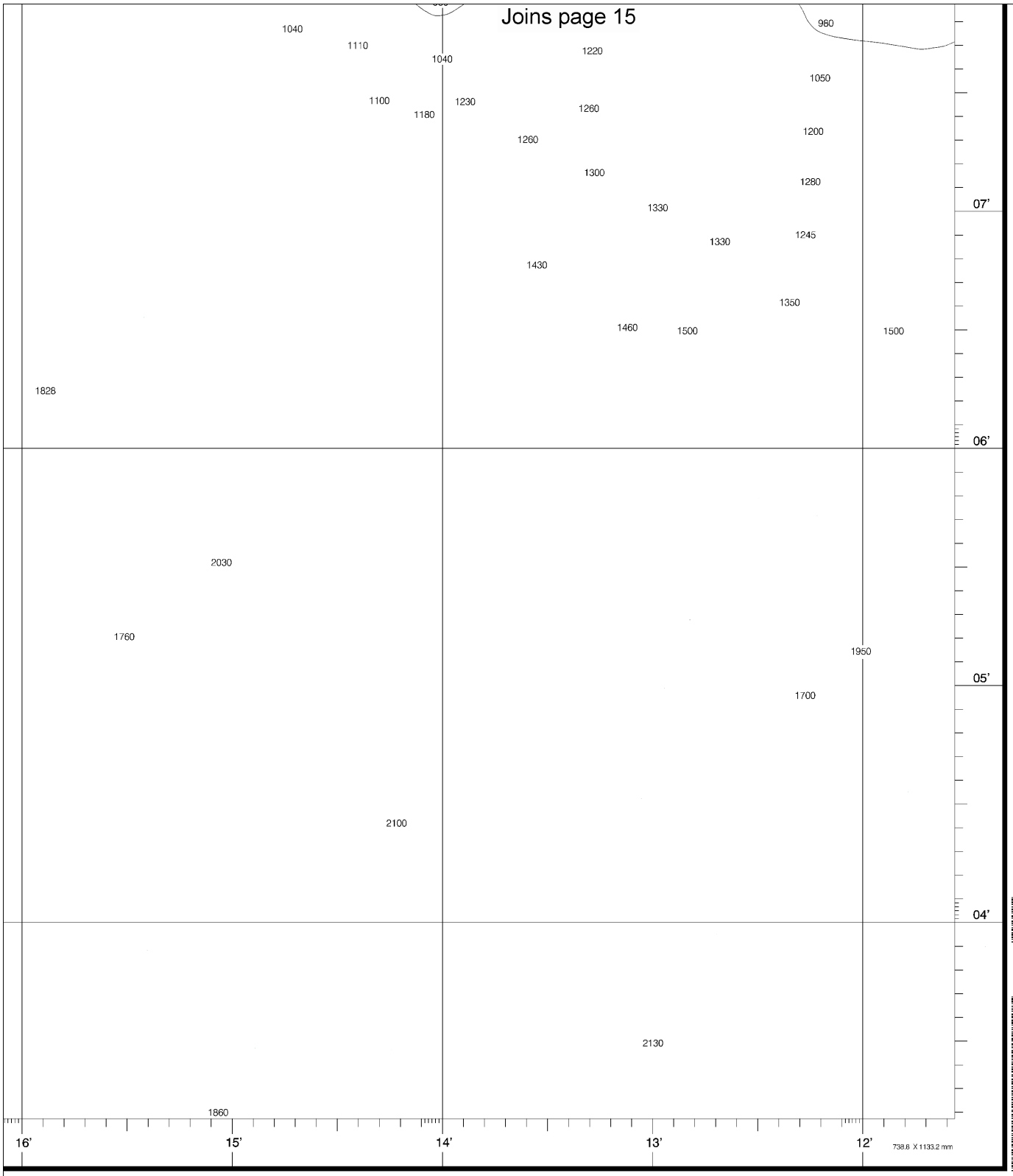
FATHOMS
FEET
METERS

Note: Chart grid lines are aligned with true north.



ED. NO. 12
NSN 7642014011673
NGA REFERENCE NO. 19AHA19481

Midway Islands

SOUNDINGS IN FATHOMS - SCALE 1:32,500

19481

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!

All Hazards NOAA Weather Radio NOAA's National Weather Service

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/NOAAChartViewer.html**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.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 Hurrican 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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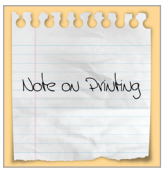

This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey The Nation's Chartmaker