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 Director, Coast and Geodetic Survey (N/CG22), National Ocean Service, NOAA, Rockville, Maryland 20852.

CAUTION
SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area   Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling.

Covered wells may be marked by lighted or unlighted buoys.

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY .... 100kHz.
PULSE REPETITION INTERVAL
9970 .... 99,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M .... Master
W .... Secondary
X .... Secondary
Y .... Secondary
Z .... Secondary
EXAMPLE: 9970-W

RATES ON THIS CHART
9970-W 9970-Y 9970-Z

The Loran-C correction tables published by the Defense Mapping Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by U.S. Coast Guard. Mariners, however, are cautioned not to rely solely on the lattices in inshore waters.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and DMA Sailing Directions, Publication 126, for details.

NOTE X
The 12 nautical mile territorial sea was established by Presidential Proclamation 5928, December 27, 1988, and is also the outer limit of the U.S. contiguous zone for the application of domestic law. The 3 nautical mile line, previously identified as the outer limit of the territorial sea, is retained because the proclamation states that it does not alter existing State or Federal law. The 9 nautical mile natural resources boundary off Texas, the Gulf coast of Florida, and Puerto Rico, and the 3 nautical mile line elsewhere remain the inner boundary of the Federal fisheries jurisdiction and the limit of States' jurisdiction under the Submerged Lands Act (P.L. 83-31; 67 Stat. 29, March 22, 1953). These maritime limits are subject to modification, as represented on future charts. The lines shown on the most recent chart edition take precedence.

TIDAL INFORMATION

Place		Height referred to datum of soundings (MLLW)			
Name	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Apra Harbor	(13°26'N/144°39'E)	2.4	2.3	----	----

(1292)

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices 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 B
Boundary limits of Submerged Submarine Operating Areas are shown by a solid magenta line. As submarines may be submerged in these areas, vessels should proceed with caution.

ACOUSTIC RANGE FACILITY
Numerous shore connected bottom cables are located within the outlined area.

CAUTION
Surface, subsurface, and aircraft operations including firing exercises are conducted at various times in areas within an approximate 220 mile radius of Guam.

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

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

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping 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)

SUPPLEMENTAL INFORMATION
Consult DMAHTC Pub. 126 for important supplemental information.

COAST AND GEODETIC SURVEY

PACIFIC OCEAN
MARIANAS

ISLAND OF GUAM
TERRITORY OF GUAM

Mercator Projection
Scale 1:100,000 at Lat. 13°22'
World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

HORIZONTAL DATUM
The horizontal reference datum of this chart is World Geodetic System 1984 (WGS 84) and for charting purposes is considered equivalent to the North American Datum of 1983 (NAD 83). Geographic positions referred to the Guam 1963 Datum must be corrected an average of 5.274" northward and 8.635" eastward to agree with this chart.

HEIGHTS
Elevations of rocks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

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

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

8th Ed., Feb. 27/93

LITIGATION/COPY

CAUTION
This chart has been corrected from the Notice to Mariners published weekly by the Defense Mapping Agency Hydrographic/Topographic Center and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

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

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

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