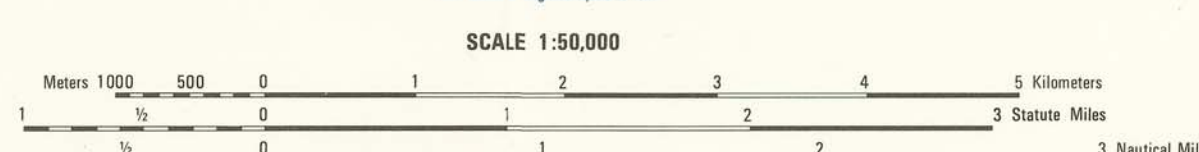




HYDROGRAPHIC DATUM MEAN LOWER LOW WATER

Depth curve (meters)
 Function table
 Rocks awash: Reef
 Wharf, pier
 Sewall
 Oil/gas rig

Prepared by the U.S. Geological Survey for publication by the Defense Mapping Agency Hydrographic/Topographic Center, Washington, D.C.
 MAP INFORMATION AS OF 1981

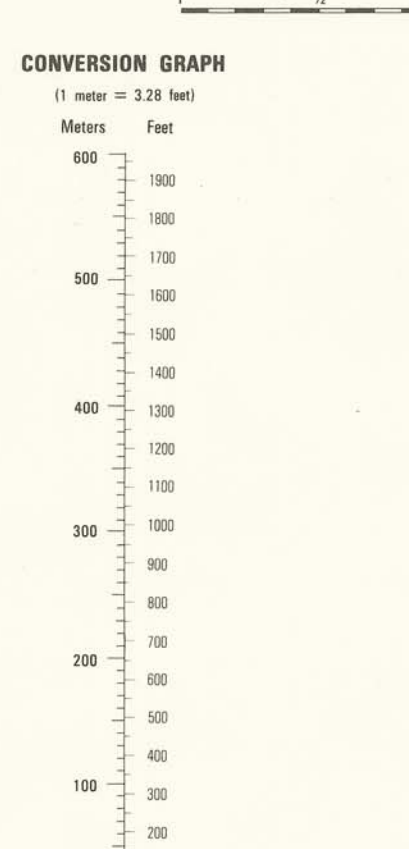


LEGEND

CAUTION: ALL TELEPHONE AND ELECTRIC SERVICE LINES ARE NOT SHOWN. A LANE ON THIS MAP IS CONSIDERED TO BE 2.5 METERS WIDE. IN DEVELOPED AREAS ONLY THROUGH ROADS ARE CLASSIFIED. THERE MAY BE PRIVATE INCLUSIONS WITHIN THE BOUNDARIES OF THE NATIONAL OR STATE RESERVATIONS SHOWN ON THIS MAP.

ROADS
 Divided highway with median strip
 Primary, all weather, hard surface
 Secondary, all weather, hard surface
 Light duty, all weather, hard or improved surface
 Fair or dry weather, unpaved surface
 Route markers: Interstate, Federal, State
 Bridge
 RAILROADS (Standard gauge 1.44m - 4'8 1/2")
 Single track
 Multiple track
 Nonoperating
 Railroad station: Location known, Location unknown
 Car line
 Railroad bridge
 Tunnel: Highway, Railroad
BOUNDARIES
 National, with monument
 State, territory
 County, parish
 Civil township, town
 Incorporated city, village, town
 Reservation: National, State, Military

Power transmission line
 Buildings
 Structures
 Church: School
 Power substation
 Windmill: Windmill
 Well: Tank
 Mine shaft
 Open pit mine or quarry
 Horizontal control station
 Bench mark, monument
 Bench mark, non-monumented
 Spot elevation in meters
 Levant, cross, disk
 Bluffs, cliffs
 Windbreak
 Scattered trees, scrub
 Vineyard: Orchard, plantation
 Intertidal lake, Dam, Embankment, Masonry
 Stream: Perennial, intermittent
 Marsh, swamp
 Small falls: Large falls
 Small rapids: Large rapids



ELEVATIONS IN METERS

CONTOUR INTERVAL 20 METERS

SPYKROD 1:000-METER UTM ZONE 5 (BLACK NUMBERED LINES)
 5:000-METER STATE GRID TICKS, HAWAII (ZONE 1)
 PROJECTION: VERTICAL DATUM NORTH AMERICAN DATUM 1983
 HORIZONTAL DATUM MEAN SEA LEVEL
 CONTROL BY U.S. GEOLOGICAL SURVEY
 PREPARED BY USGS AND HONOLULU
 PUBLISHED BY SMANTIC 8-88

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225
 OR RESTON, VIRGINIA 22092

100-METER REFERENCE

1. Read large numbers labeling the VERTICAL grid line left of point and estimate tenths (100 meters) from grid line to point 12.2
 2. Read large numbers labeling the HORIZONTAL grid line below point and estimate tenths (100 meters) from grid line to point 45.6
 Example: 1245.6

WHEN REPORTING ACROSS A 100,000 METER LINE, PREFIX THE 100,000 METER SQUARE IDENTIFICATION IN WHICH THE POINT LIES. Example: K8123456

WHEN REPORTING ACROSS THE GRID ZONE DESIGNATION AREA, PREFIX THE GRID ZONE DESIGNATION. Example: SQK8123456

BOUNDARIES

ADJOINING SHEETS

ELEVATION GUIDE

SLOPE GUIDE

PERCENTAGE DEGREE

THIS MAP IS RED-LIGHT READABLE

TO CONVERT A GRID AZIMUTH TO A MAGNETIC AZIMUTH
 SUBTRACT G-M ANGLE

TO CONVERT A MAGNETIC AZIMUTH TO A GRID AZIMUTH
 ADD G-M ANGLE

TO CONVERT A GRID AZIMUTH TO A MAGNETIC AZIMUTH
 SUBTRACT G-M ANGLE

TO CONVERT A MAGNETIC AZIMUTH TO A GRID AZIMUTH
 ADD G-M ANGLE

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