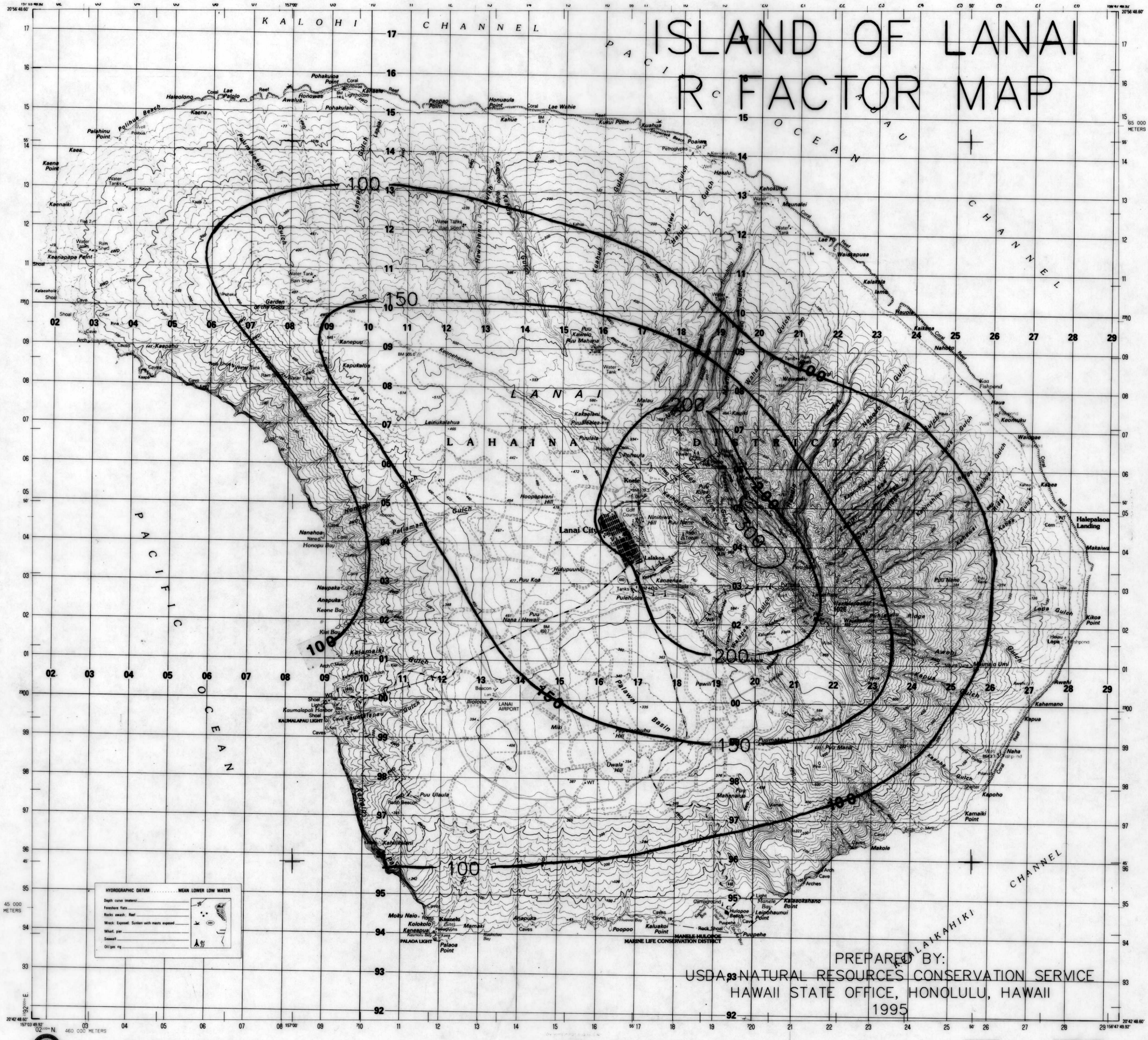
ISLAND OF LANAI
R FACTOR MAP



PREPARED BY:
USDA NATURAL RESOURCES CONSERVATION SERVICE
HAWAII STATE OFFICE, HONOLULU, HAWAII
1995

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

MAP INFORMATION AS OF 1984

SCALE 1:50,000

Meters 1000 500 0 1 2 3 4 5 Kilometers
1 ½ 0 1 2 3 Statute Miles
1 ½ 0 1 2 3 Nautical Miles

ELEVATIONS IN METERS

CONTOUR INTERVAL 20 METERS

HYDROGRAPHIC DATUM ..... MEAN LOWER LOW WATER

Depth curve (meters)
Foreshore flats
Rocks awash. Reef
Wreck. Exposed. Sunken with masts exposed
Wharf, pier
Seawall
Oil/gas rig

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 INHOLDINGS 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, unimproved surface
Trail
Route markers: Interstate, Federal, State
Bridge

RAILROADS (Standard gauge 1.44m 4.8"½")
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

GRATICULE AND GRIDS BASED ON NORTH AMERICAN DATUM 1983. SHEET CORNERS ESTABLISHED ON OLD HAWAIIAN DATUM (OHD). THE DIFFERENCE IN POSITION OF THE GRATICULE BETWEEN NAD 83 AND OHD IS APPROXIMATELY 351 METERS IN LATITUDE AND 291 METERS IN LONGITUDE. THE RELATIONSHIP BETWEEN NAD 83 AND OHD MAY BE DETERMINED BY COMPARING THE NAD 83 VALUES FOR SHEET CORNERS WITH CORRESPONDING OHD VALUES SHOWN IN THE INDEX TO ADJOINING SHEETS DIAGRAM.

Power transmission line
Buildings
Structures
Church. School
Power substation
Windmill. Watermill
Well. Tank
Mine shaft
Open pit mine or quarry
Horizontal control station
Bench mark, monumented — BM × 219.2
Bench mark, non-monumented — × 143.9
Spot elevations in meters — · 144
Levees, rims, dikes
Bluffs, cliffs
Woodland
Scattered trees. Scrub
Vineyard. Orchard, plantation
Intermittent lake. Dam. Earther. Masonry
Stream. Perennial. Intermittent
Marsh, swamp
Small falls. Large falls
Small rapids. Large rapids

CONVERSION GRAPH
(1 meter = 3.28 feet)

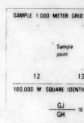
Meters	Feet
800	2600
700	2300
600	2000
500	1700
400	1300
300	1000
200	700
100	300
0	0

Meters	Feet
1100	3600
1000	3300
900	3000
800	2600
700	2300
600	2000
500	1700
400	1300
300	1000
200	700
100	300
0	0

ELLIPSOID	GEODETIC REFERENCE SYSTEM 80
GRID	1,000-METER UTM ZONE 4 (BLACK NUMBERED LINES) 5,000-METER STATE GRID TICKS, HAWAII (ZONE 3)
PROJECTION	TRANSVERSE MERCATOR
VERTICAL DATUM	MEAN SEA LEVEL
HORIZONTAL DATUM	NORTH AMERICAN DATUM 1983
CONTROL BY	USGS AND NOS/NOAA
PREPARED BY	U.S. GEOLOGICAL SURVEY
PUBLISHED BY	DMAHTC 10-89

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

SAMPLE 1,000 METER GRID SQUARE



100,000 M SQUARE IDENTIFICATION
GJ
GM
GRID ZONE DESIGNATION
4Q

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 12.3
2 Read large numbers labeling the HORIZONTAL grid line below point and estimate tenths (100 meters) from grid line to point 45.6
Example 123456

WHEN REPORTING ACROSS A 100,000 METER LINE, PREFIX THE 100,000 METER SQUARE IDENTIFICATION IN WHICH THE POINT LIES
Example GJ123456

WHEN REPORTING ACROSS THE GRID ZONE DESIGNATION AREA PREFIX THE GRID ZONE DESIGNATION
Example 4QGJ123456

USERS SHOULD REFER CORRECTIONS, ADDITIONS, AND COMMENTS FOR IMPROVING THIS PRODUCT TO: DIRECTOR, DEFENSE MAPPING AGENCY HYDROGRAPHIC/TOPOGRAPHIC CENTER, ATTN: PR, WASHINGTON, D.C. 20315-0030

GRID NORTH
MAGNETIC NORTH
TRUE NORTH
GRID CONVERGENCE 0°44' (13 MILS) FOR CENTER OF SHEET
1985 G-M ANGLE 10°½' (180 MILS)

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

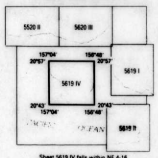
TO CONVERT A GRID AZIMUTH TO A MAGNETIC AZIMUTH SUBTRACT G-M ANGLE

SLOPE GUIDE

PERCENTAGE	DEGREE
0	0
1	1
2	1
3	2
4	2
5	3
6	3
7	4
8	5
9	5
10	6
11	6
12	7
13	7
14	8
15	8
16	9
17	10
18	10
19	11
20	11
21	12
22	12
23	13
24	13
25	14
26	14
27	15
28	15
29	16
30	16
31	17
32	17
33	18
34	18
35	19
36	19
37	20
38	20
39	21
40	21
41	22
42	22
43	23
44	23
45	24

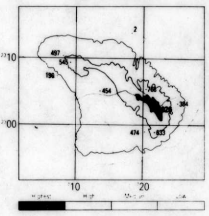
BOUNDARIES

ADJOINING SHEETS



Sheet 5619 IV falls within NF 6-10
1501 1:250,000

ELEVATION GUIDE



THIS MAP IS RED-LIGHT READABLE

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