

11973

Diag

Diag. Cht. No. 4116.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. Ph-21045 Office No. T-11973

LOCALITY

State HAWAII

General locality LANAI

Locality ANAPUKA COVE

1960-1962

CHIEF OF PARTY

WILBUR R. PORTER, CHIEF OF PARTY
FRED NATELLA, PHOTOGRAMMETRIC UNIT

LIBRARY & ARCHIVES

DATE September 1964

USCOMM-DC 5087

11973

DESCRIPTIVE REPORT - DATA RECORD

T - 11973

PROJECT NO. (II):

21045

FIELD OFFICE (II):

HONOLULU, HAWAII

CHIEF OF PARTY

WILBUR R. PORTER

UNIT CHIEF,

L. F. VAN SCOY

PHOTOGRAMMETRIC OFFICE (III):

PORTLAND, OREGON

OFFICER-IN-CHARGE

FRED NATELLA

INSTRUCTIONS DATED (II) (III):

JULY 31, 1962 II

DEC. 18, 1962 III

AMENDMENT I:

MAY 23, 1963 III

AMENDMENT II:

JUNE 24, 1963 III

AMENDMENT III:

JULY 9, 1963 III

AMENDMENT IV:

SEPT. 30, 1963 III

METHOD OF COMPILATION (III):

KELSH INSTRUMENT

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:5000

PANTOGRAPH SCALE:

& 1:3000
1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

OLD HAWAIIAN

VERTICAL DATUM (III):

MEAN SEA LEVEL EXCEPT AS FOLLOWS: X

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

REFERENCE STATION (III):

HONOLULU, 1962

LAT.:

20° 50' 02.21"

LONG.:

156° 58' 55.15"

☐ ADJUSTED☒ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 181,926.45

X = 392,324.51

HAWAII

2

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE,
OR (IV) WASHINGTON OFFICE.

WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III): L. F. VAN SCOY		DATE: Oct-Dec. 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): OCTOBER-DECEMBER 1962 BY FIELD INSPECTION. COMPILATION BY KELSH INSTRUMENT.		
PROJECTION AND GRIDS RULED BY (IV): A.R.		DATE 6-24-63
PROJECTION AND GRIDS CHECKED BY (IV): R. X. G.		DATE 6-25-63
CONTROL PLOTTED BY (III): L. L. GRAVES		DATE 7-17-63
CONTROL CHECKED BY (III): D. N. WILLIAMS		DATE 7-7-63
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): HENRY P. EICHERT		DATE AUGUST 1963
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY R. H. MEYER	DATE 7-31-63
	CONTOURS NONE	DATE
MANUSCRIPT DELINEATED BY (III): SMOOTH DRAFT: J. L. HARRIS		DATE 8-7-63
SCRIBING BY (III): STICK-UP: D. N. WILLIAMS		DATE 8-14-63
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): ROUGH DRAFT: D. N. WILLIAMS ADVANCE: J. E. DEAL		DATE 8-1-63 8-14-63
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&GS SINGLE LENS "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
61W 1252 AND 1253	9-26-61	09:15	1:15,000	1.6' ABOVE M.L.L.W.
62 W 2474 THRU 2478	2-1-62	08:00	1:25,000	0.9' " "
RATIO PRINTS OF ABOVE AT 1:10,000				
62 W 2462 THRU 2465	2-1-62	08:00	"	0.9' " "
60 W 2205 AND 2206	10-2-60	10:20	"	0.7' " "
62 W 2458 AND 2459	2-1-62	08:00	"	0.9' " "
COLOR PHOTOGRAPHS				
60 W 2740 AND 2741	10-12-60	08:50	1:10,000	1.9' " "
60 W 3279 THRU 3283	10-22-60	08:50	1:10,000	1.4' " "
				COMPUTED FROM PRE- DICTED TIDE TABLES.

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	DAILY SPRING RANGE
REFERENCE STATION: HONOLULU		1.2	1.9
SUBORDINATE STATION: KAUMALAPAU		1.5	2.2
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 6

RECOVERED: 6

IDENTIFIED: 2

NUMBER OF BM(S) SEARCHED FOR (II):

NONE

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): 6

REMARKS:

FIELD INSPECTION REPORT

MAP MANUSCRIPT T-11973

PROJECT 21045

REFER TO THE FIELD INSPECTION REPORT FOR THE ENTIRE PROJECT
INCLUDED WITH THE DESCRIPTIVE REPORT FOR T-11972.

PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-11973

PROJECT 21045

REFER TO THE PHOTOGRAMMETRIC PLOT REPORT BY HENRY P. EICHERT,
AUGUST, 1963, AND INCLUDED WITH THE DESCRIPTIVE REPORT FOR T-11972.

MAP T. 11973

PROJECT NO. 21045

SCALE OF MAP 1:10,000

SCALE FACTOR

[illegible]

1 FT. = 3048006 MEYER

COMPUTED BY: D.N.W.

DATE 7-17-63

CHECKED BY: L.L.G.

DATE 7-17-63

COMM-DC-57843

COMPILATION REPORT
MAP MANUSCRIPT T-11973
PROJECT 21045

31. DELINEATION:

REFER TO THE COMPILATION REPORT FOR T-11972. THREE COLOR PHOTOGRAPHS OF THE STRIP INTENDED TO COVER THE SHORELINE ON THIS MANUSCRIPT SHOWED LITTLE OR NO LAND AND CONSEQUENTLY WERE VALUELESS IN CHECKING SHORELINE DETAIL.

ITEMS 32 THRU 36:

REFER TO THE COMPILATION REPORT FOR T-11972.

37. LANDMARKS AND AIDS:

ONE AERONAUTICAL AID, AN INTERSECTION TRIANGULATION STATION, IS LOCATED BEYOND THE LIMITS OF THIS PROJECT. FORM 567 IS SUBMITTED.

38. CONTROLS FOR FUTURE SURVEYS:

SIX PHOTO-HYDRO STATIONS WERE IDENTIFIED BY THE FIELD UNIT AND LOCATED DURING KELSH INSTRUMENT COMPILATION. THEIR NUMBERS AND DESCRIPTIONS ARE LISTED IN PARAGRAPH 49, NOTES FOR THE HYDROGRAPHER.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11974 TO THE SOUTH AND WITH T-11972 TO THE WEST. THERE IS NO JUNCTION OF PLANIMETRY WITH T-11967 ON THE NORTH. THERE IS NO CONTEMPORARY SURVEY TO THE EAST.

40. HORIZONTAL AND VERTICAL ACCURACY:

REFER TO THE COMPILATION REPORT FOR T-11972.

46. COMPARISON WITH EXISTING MAPS:

REFER TO THE COMPILATION REPORT FOR T-11972.

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH NAUTICAL CHART 4130, SCALE 1:80,000
AT LAT. 20° 51', 3RD EDITION DEC. 30, 1936, REVISED 4-26-62.


ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE.

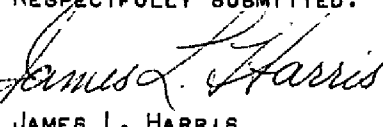
ITEMS TO BE CARRIED FORWARD:

NONE.

APPROVED:


FRED NATELLA, CAPT, C&GS
PORTLAND DISTRICT OFFICER

RESPECTFULLY SUBMITTED:


JAMES L. HARRIS
CARTOGRAPHER

49. NOTES FOR THE HYDROGRAPHER - T-11973

LISTED BELOW ARE SEVERAL OBJECTS SELECTED BY THE FIELD INSPECTOR FOR PHOTO-HYDRO SIGNALS AND LOCATED BY KELSH INSTRUMENT.

No.	DESCRIPTION	FIELD PHOTO No.
7301	ROCK BARES 3 FT. M.H.W.	60 W 2205
7302	ROCK BARES 6 FT. M.H.W.	60 W 2205
7303	OFFSHORE END ROCK PROJECTION	60 W 2205
7304	OFFSHORE END ROCK PROJECTION	60 W 2206
7305	LOW PINNACLE ROCK	60 W 2206
7306	POINT OF BLUFF	62 W 2457

PASS POINTS HAVE BEEN LOCATED AT OR NEAR THE WATER LEVEL ABOUT EVERY MILE ALONG THE SHORELINE AND THESE SHOULD BE USED WHEN LOCATING ADDITIONAL PHOTO-HYDRO SIGNALS IDENTIFIED DURING THE TIME OF THE HYDROGRAPHIC SURVEY.

PHOTOGRAMMETRIC OFFICE REVIEW

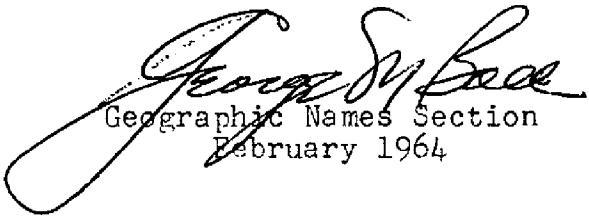
T-10353 11973

1. PROJECTION AND GRIDS ✓	2. TITLE ✓	3. MANUSCRIPT NUMBERS ✓	4. MANUSCRIPT SIZE ✓
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ✓	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) None		7. PHOTO HYDRO STATIONS ✓
8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES None	10. PHOTOGRAMMETRIC PLOT REPORT ✓	11. DETAIL POINTS None
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ✓	13. LOW-WATER LINE None	14. ROCKS, SHOALS, ETC. ✓	15. BRIDGES None
16. AIDS TO NAVIGATION None	17. LANDMARKS None	18. OTHER ALONGSHORE PHYSICAL FEATURES ✓	19. OTHER ALONGSHORE CULTURAL FEATURES None
PHYSICAL FEATURES			
20. WATER FEATURES ✓		21. NATURAL GROUND COVER ✓	22. PLANETABLE CONTOURS None
23. STEREOSCOPIC INSTRUMENT CONTOURS None	24. CONTOURS IN GENERAL None	25. SPOT ELEVATIONS None	26. OTHER PHYSICAL FEATURES ✓
CULTURAL FEATURES			
27. ROADS None	28. BUILDINGS None	29. RAILROADS None	30. OTHER CULTURAL FEATURES None
BOUNDARIES			
31. BOUNDARY LINES None		32. PUBLIC LAND LINES None	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ✓		34. JUNCTIONS ✓	35. LEGIBILITY OF THE MANUSCRIPT ✓
36. DISCREPANCY OVERLAY None	37. DESCRIPTIVE REPORT ✓	38. FIELD INSPECTION PHOTOGRAPHS ✓	39. FORMS ✓
40. REVIEWER D. N. Williams		SUPERVISOR, REVIEW SECTION OR UNIT Edward Deal	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER		SUPERVISOR	
43. REMARKS			

T-11973

48. Geographic Names List

Anapuka Cove
Five Needles
Honopu Bay
Honopu Gulch
Keone Bay
Lanai Island
Naupaka Point
Pacific Ocean


Geographic Names Section
February 1964

Review Report

Shoreline Maps

T-11966 through T-11976

July 1964

61. General Statement

These shoreline maps of Project PH-6202 Lanai, Hawaii were prepared to furnish hydro support-data and base maps for our nautical and aeronautical charting programs.

62. Comparison with Registered Topographic Surveys

T-3435	1:20,000	1914
T-4304	1: 5,000	1927
T-4304a	1: 2,500	1928
T-4745	1:20,000	1932
T-4780	1: 5,000	1931

Differences exist between these surveys - generally in the main shoreline and the shapes of some of the islands. The subject surveys are to supersede the above listed maps of common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies

Island of Lanai	1:62,500	1923
-----------------	----------	------

Because of the scale difference only a visual comparison can be made. The subject surveys are more complete and supersede the above survey for common area.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

4120	1:80,000	Edition 1942	Revised Feb.1963
4130	1:80,000	Edition 1936	Revised Apr.1962
4122	1: 2,500	Edition 1929	Revised Apr.1951

Differences exist. However, there are no items to be applied immediately.

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for Nautical Charting.

Reviewed by:

L. C. Lande
L. C. Lande

Approved by:

Charles L. Lamm
Chief, Photogrammetric Branch

Chief, Nautical Chart Division

M. E. Natto
Chief, Photogrammetry Division
Acting

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11973

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]