

11968

Diag. Cht. No. 4116.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. 21045 Office No. T-11968

LOCALITY

State HAWAII

General locality LANAI ISLAND

Locality MAUNALEI

1960-1962

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE JAN 11 1965

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T - 11968

PROJECT NO. (II):

21045

FIELD OFFICE (II):

HONOLULU, HAWAII

CHIEF OF PARTY

WILBUR R. PORTER

UNIT CHIEF

L. F. VAN SOY

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:

1:10,000

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):

GIL 2, 1962

LAT.:

20° 55' 04.04"

LONG.:

156° 54' 13.70"

☐ ADJUSTED☒ UNADJUSTED

PLANE COORDINATES (IV):

Y = 212,312.90

X = 419,058.17

STATE

HAWAII


ZONE

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 (II): 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 6-26-63
PROJECTION AND GRIDS CHECKED BY (IV): 		DATE 6-27-63
CONTROL PLOTTED BY (III): D.N. WILLIAMS		DATE 7-30-63
CONTROL CHECKED BY (III): L.L. GRAVES		DATE 7-30-63
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): HENRY P. EICHERT		DATE AUGUST 1963
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L. L. GRAVES	DATE 8-23-63
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): SMOOTH DRAFT: C.C. HARRIS		DATE 9-10-63
SCRIBING BY (III): STICK-UP C.C. HARRIS		DATE 10-11-62
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): ROUGH DRAFT: J.L. HARRIS ADVANCE: J.E. DEAL		DATE 8-30-63 10-12-63
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&GS SINGLE LENS "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 2216 THRU 2218	10-2-60	10:25	1:25,000	0.8' ABOVE M.L.L.W.
60 W 3203 THRU 3207	10-21-60	10:08	1:25,000	0.4' " "
COLOR PHOTOGRAPHS 60 W 3251 THRU 3260	10-22-60	08:40	1:10,000	1.3' " "
				COMPUTED FROM PRE- DICTED TIDE TABLES.

TIDE (III)

		RATIO OF RANGES	MEAN RANGE	DURNAL RANGE
REFERENCE STATION:	HONOLULU		1.2	1.9
SUBORDINATE STATION:	KAMALO HARBOR, MOLOKAI		1.4	2.1
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV):		DATE:		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	5	RECOVERED:	5	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): 8				

REMARKS:

FIELD INSPECTION REPORT

MAP MANUSCRIPT T-11968

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-11968

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-11968

PROJECT NO. 21045

SCALE OF MAP

1:10,000

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: L.L.G.

DATE 7-18-63

CHECKED BY: D.N.W.

DATE 7-19-63

COMM-DC-57843

COMPILATION REPORT
MAP MANUSCRIPT T-11968
PROJECT 21045

ITEMS 31 THRU 36:

REFER TO THE COMPILATION REPORT FOR T-11972.

37. LANDMARKS AND AIDS:

TWO INTERSECTION TRIANGULATION STATIONS HAVE BEEN RECOMMENDED FOR CHARTING AS LANDMARKS. FORM 567 IS SUBMITTED:

38. CONTROLS FOR FUTURE SURVEYS:

EIGHT PHOTO-HYDRO STATIONS WERE IDENTIFIED BY THE FIELD PARTY 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-11967 TO THE WEST AND WITH T-11969 TO THE EAST. KALOHI CHANNEL IS ON THE NORTH. THERE IS NO CONTEMPORARY SURVEY TO THE SOUTH.

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 4-23-62.


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:

EIGHT PHOTO-HYDRO STATIONS ARE SHOWN ON THIS MANUSCRIPT AND LISTED BELOW. THEY WERE IDENTIFIED BY THE FIELD PARTY AND LOCATED BY THE KELSH OPERATOR DURING COMPILATION.

No.	DESCRIPTION	FIELD PHOTO No.
6801	WEST CORNER LARGE CLUMP BUSHES	60 W 2216
6802	CORNER LARGE CLUMP BUSHES	"
6803	CENTER LARGE BUSH	60 W 2217
6804	N.E. CORNER SMALL WHITE HOUSE	"
6805	CENTER SMALL BUSH	"
6806	NORTH END CLUMP OF BRUSH	60 W 3204
6807	END OF CLUMP OF BRUSH	"
6808	END OF LARGE CLUMP OF BRUSH	"

THE POSITIONS OF WRECK, 1931 AND KUAHUA BEACH, SHIPWRECK STERNHOUSE, FLAGPOLE, 1962 SHOULD BE VERIFIED DURING PHOTO-HYDRO SUPPORT OPERATIONS. THESE POSITIONS ARE NOT IN AGREEMENT WITH THE LOCATIONS OF THESE OBJECTS OBTAINED FROM THE FIELD INSPECTION ON 1960 PHOTOGRAPHY. BOTH POSITIONS OF EACH OF THESE TWO OBJECTS HAVE BEEN SHOWN ON THE MANUSCRIPT. RELOCATION OF THESE WRECKS BY THE HYDROGRAPHER WILL DETERMINE IF THERE HAS BEEN SHIFTING SINCE THE TRIANGULATION WORK IN 1962.

NONE OF THE LIMIT LINES SHOWN ARE INTENDED TO REPRESENT APPROXIMATE LOWER LOW-WATER LINES, BUT ARE SHOWN TO ASSIST THE HYDROGRAPHER WHEN NAVIGATING CLOSE TO THE SHORE.

WHEN USING SHORELINE PASS POINTS ON A SINGLE PHOTOGRAPH TO LOCATE ADDITIONAL PHOTO-HYDRO SIGNALS, THE PHOTOGRAPHS SHOULD BE EXAMINED BY USE OF THE STEREOSCOPE SO THAT IT MAY BE DETERMINED WHICH POINTS OF THE SAME ELEVATIONS AS THAT OF A POINT TO BE LOCATED MAY BE USED.

PHOTOGRAMMETRIC OFFICE REVIEW

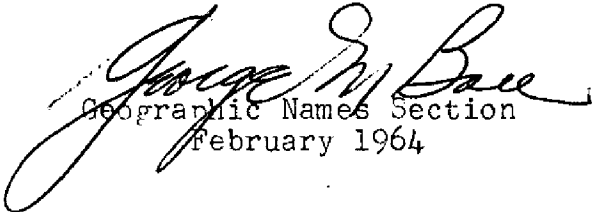
T-18243 11968

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 ✓	18. OTHER ALONGSHORE PHYSICAL FEATURES ✓	19. OTHER ALONGSHORE CULTURAL FEATURES ✓
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 ✓	28. BUILDINGS ✓	29. RAILROADS None	30. OTHER CULTURAL FEATURES ✓
BOUNDARIES			
31. BOUNDARY LINES None		32. PUBLIC LAND LINES None	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ✓	34. JUNCTIONS ✓		35. LEGIBILITY OF THE MANUSCRIPT ✓
36. DISCREPANCY OVERLAY ✓	37. DESCRIPTIVE REPORT ✓	38. FIELD INSPECTION PHOTOGRAPHS ✓	39. FORMS ✓
40. REVIEWER J. L. Harris		SUPERVISOR, REVIEW SECTION OR UNIT	
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-11968

48. Geographic Names List

Auau Channel
Halulu
Halulu Gulch
Hi Point
Hinuhinu Pali
Kahokunui
Kalohi Channel
Kaiolohia Bay
Kuahua Gulch
Kuahua Point
Kukui Point
Lanai Island
Maunalei
Maunalei Gulch
Wahane Gulch
Waiakapuaa Point


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
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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. Dande
L. C. Dande

Approved by:

Charles Hemen Chief, Photogrammetric Branch Chief, Nautical Chart Division

J. W. Bough 1/7/65
Chief, Photogrammetry Division

Field Edit Report
To Accompany T 11968

USC&GSS McARTHUR

Ronald L. Newsom
Commanding Officer

51 METHODS

Field edit on T 11958 was done in conjunction with hydrography on boatsheet AR 10-4-68, H 8998. Shoreline was inspected from launches and skiffs. The MLLW line was impossible to determine due to off shore reefs and heavy surf.

The field edit information was shown on three photographs 6OW2216, 6OW2217 and 6OW3204 in violet ink and indexed on the field edit ozalid in violet ink. Some field edit was shown directly on the field edit ozalid in violet ink.

52 ADEQUACY

Manuscript T 11968 was completely adequate for a hydrographic survey.

54 RECOMMENDATIONS

Several additional wrecks were located that are not shown on the charts. Charts 4120 and 4130 should be up dated to show this additional information.

NOTE : This report and the photos and F.E. ozalid mentioned above were forwarded to the Rockville Office by the Norfolk office on March 18, 1971. No data requiring application by photogrammetric methods was furnished. An area of mooring poles was outlined on photo 6ow 2217 was called to the attention of the Hydro Review Section - located offshore from the town of Maunalei. The photos and the F.E. ozalid will be filed in the Federal Records Center with other PH-6202 Data.

JMS