

11937

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-6012 Office No. T-11937

LOCALITY

State Hawaii

11937

DESCRIPTIVE REPORT - DATA RECORD

T-11937

PROJECT NO. (II):

PH-6012
(21034)

FIELD OFFICE (III):

Honolulu, Hawaii

CHIEF OF PARTY

H. J. Seaborg

PHOTOGRAMMETRIC OFFICE (III):

Baltimore, Maryland

OFFICER-IN-CHARGE

W. E. Randall

INSTRUCTIONS DATED (II) (III):

14 November 1960
28 November 1960
13 June 1961
16 January 1962

METHOD OF COMPILATION (III):

Kelsh Plotter

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:5,000

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):

M H W
~~MEAN SEA LEVEL EXCEPT AS FOLLOWS:~~

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):

KA LAE O KA ILIO (HGS), 1885, 1950

LAT.:

20° 37' 17.943"

LONG.:

156° 08' 34.026"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

= 105,002.98'

x = 679,146.18'

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): J. C. Lajoie | | DATE: Jan. 1962 |
| MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Kelsh plotter from annotations on 1960 photography and office interpretation of 1961 photography. | | |
| PROJECTION AND GRIDS RULED BY (IV): R.A.C. | | DATE 12/7/60 |
| PROJECTION AND GRIDS CHECKED BY (IV): J.D.C. | | DATE 12/7/60 |
| CONTROL PLOTTED BY (III): E. L. Williams | | DATE 3/30/62 |
| CONTROL CHECKED BY (III): H.P. | | DATE 3/30/62 |
| RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): | | DATE |
| STEREOSCOPIC INSTRUMENT COMPILATION (III): E. L. Williams | PLANIMETRY E. L. Williams | DATE April 1962 |
| | CONTOURS Inapplicable | DATE |
| MANUSCRIPT DELINEATED BY (III): C. A. Lipscomb | | DATE Jan. 1964 |
| SCRIBING BY (III): | | DATE |
| PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. M. Brant | | DATE Jan. 1964 |
| REMARKS: FIELD EDIT 1963 | | |

| COMPILATION RECORD | COMPLETION DATE | REMARKS |
|-------------------------------|-----------------|------------|
| Shoreline furnished for hydro | April, 1962 | superseded |
| Final Compilation Completed | Jan. 1964 | |
| | | |
| | | |
| | | |

PH-6012
Mapping
9,000 Scales

MI
AND



CHANN
OFFICIAL MILEAGE FOR COST ACCOUNTS

Area
(Sq. Miles)
1.5
18
3
4
4
6

Shoreline
(Miles)
2.5
4.5
5.7
2.5
2.5
2.5

Sheet
No.

T-11931
T-11932
T-11933
T-11934
T-11935
T-11936
T-11937
T-11938
T-11939

FOR COST ACCOUNTS

Area
(Sq. Miles)

3.3
2.5
1.5
1.04
1.5
1.3

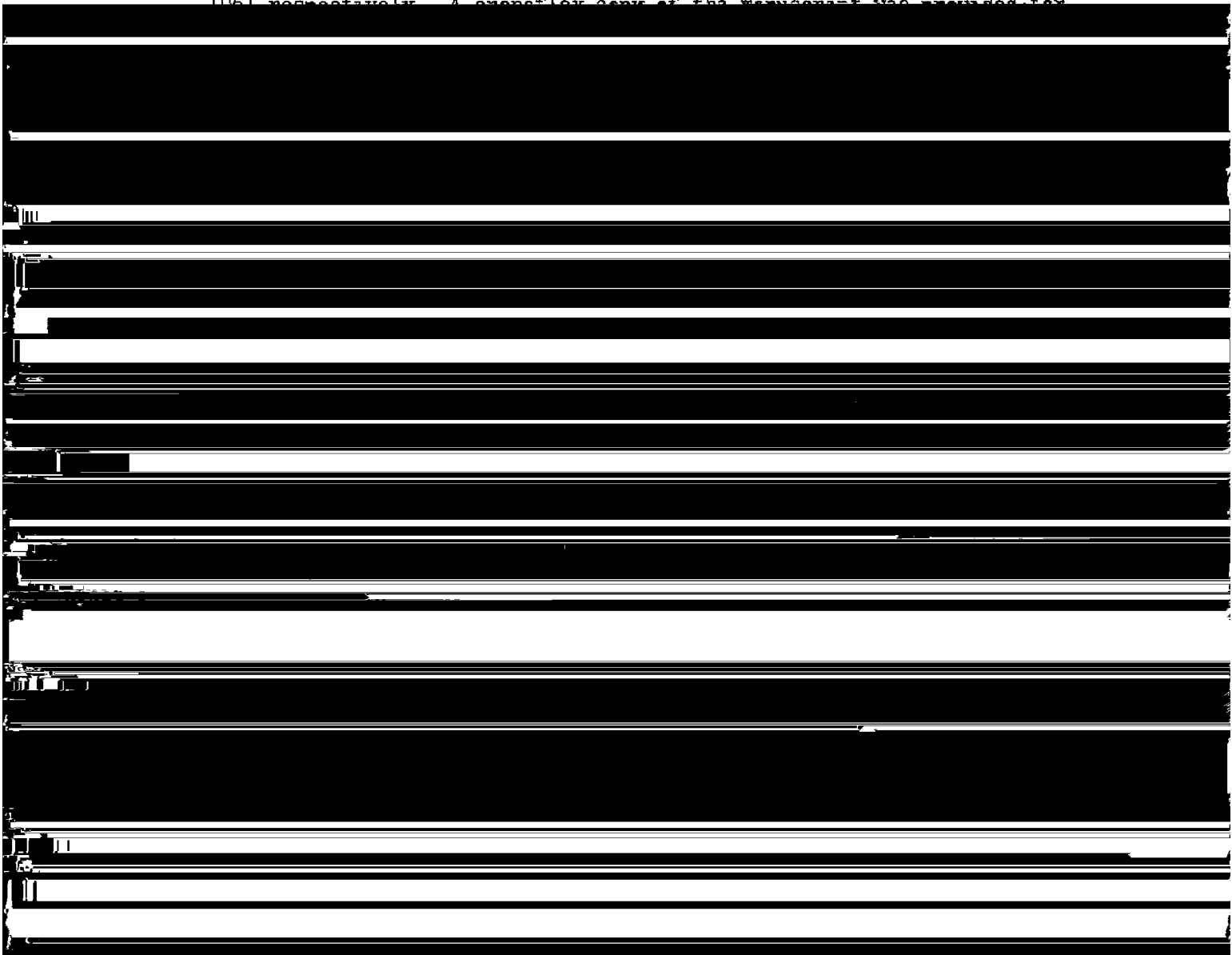
Line
(Sq. Miles)
2.5
2.5
2.5
1.3
4.5

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-11937

Shoreline manuscript T-11937 covers a part of the coastline of Maui Island, Hawaii. This is one of forty-nine similar maps compiled by Kelsh methods primarily to obtain new shoreline for nautical chart purposes and to provide photo-hydro support data for hydrographic surveys to be made in the area.

Field operations preceding compilation included the recovery and identification of horizontal control and field inspection. No photo-hydro signal sites were selected.

Kelsh compilation was at 1:5,000 scale from 1:25,000 and 1:15,000 scale panchromatic photography obtained 8 October 1960 and 25 September 1961 respectively. A cross-refer copy of the manuscript was provided for



FIELD INSPECTION REPORT
Map Manuscript T-11937

Please refer to the Field Inspection report bound
with the Descriptive Report for T-11894.

PHOTOGRAMMETRIC PLOT REPORT
ISLAND OF MAUI (EAST HALF)
HAWAII

Project PH-6212
February 1962

21. AREA COVERED

T-11905 through T-11911; T-11929 through T-11939;
T-11989 through T-11992

22. METHOD

Six stereoplanigraph bridges, designated as strips #8 through #13, were run in order to provide pass points for use in Kelsh compilation of the project. Additional points along the shoreline were provided, for possible use in conjunction with hydrographic surveys in the area.

This project covers the entire eastern half of the island of Maui, and adjoins a similar project of March 1961, which covers the western half of the island. On that earlier phase, the numbers assigned to the stereoplanigraph bridges were #1 through #7.

Strip #13 was adjusted on a linear basis. All other strips in this project (eastern half of the island) were adjusted by a least-squares solution on the IBM 650 computer. Numerous ties between strips were used as checks on adjustments. A pass point from strip #9 was used in the adjustment of strip #11. Where strip #11 duplicates the coverage of strip #9, the former should be used in compilation.

Satisfactory ties with the project of March 1961, were made on both the north and the south coasts. Also, satisfactory adjustments were obtained for all strips in this part of the Maui Island project.

23. ADEQUACY OF CONTROL

The horizontal control provided complied with project instructions, and was adequate. The following control failed to hold in bridging: Δ PUHILELE, 1950-SUB. A; Δ MAKAAALAE, 1950-SUB. B; Δ PUUHINAI 2, 1950-SUB PTS. 1, 2, and 3. They are to be disregarded in compilation. The problem with

PUHILELE-SUB A is entirely one of interpretation. In strip #8, two different possible positions for the point were read, one of which held in bridging, and the other failed to hold. In strip #9, the single position read for the point failed to hold. The number and geographical location of other control in this area is such that this station may be disregarded.

No specific cause has been found for the failure of



11

COMPILATION REPORT Map Manuscript T-11937

ITEMS 31 THRU 36

Please refer to the Compilation Report bound with the Descriptive Report for map manuscript T-11934.

37. LANDMARKS AND AIDS

There are no landmarks or non-floating aids to navigation within the limits of this map.

38.. CONTROL FOR FUTURE SURVEYS

No supplemental control was established for control of future surveys.

39. JUNCTIONS

Satisfactory junctions were made with T-11936 on the west and T-11938 on the east. Alenuihaha Channel is on the south, there is no contemporary survey on the north.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report bound with the Report for T-11894.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Kaupo, Hawaii quadrangle, 1:24,000 scale, edition of 1957.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 4116, scale 1:250,000, 11th edition published April 16, 1941 and revised January 9, 1961.

ITEMS TO BE APPLIED TO CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Respectfully submitted:

Joseph Steinberg
For: Donald M. Brant
Carto. (Photo.)

Approved:

J. Bull
J. Bull
Capt. C&GS
Norfolk Regional Officer

T-11937

48. Geographic Names List:

The Geographic names listed below were furnished by the Washington Office on U.S.G.S. Kaupo, Hawaii 7½ minute quadrangle, scale 1:24,000, edition of 1957.

Alenuihaha Channel

Kailio Point

Kalama Bay

Kamanawa Bay

Kamanawa Point

Kaupo

Makaakini Point

Mamalu Bay

Pacific Ocean

Pukaauhuhu

Waiuha Bay

ALL NAMES
GEOGRAPHICAL NAMES SECTION
UNLESS OTHERWISE MARKED.

A. J. Wright

49. NOTES TO THE HYDROGRAPHER

No photo-hydro signal sites were selected by the field inspection party.

PHOTOGRAMMETRIC OFFICE REVIEW

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

50

T. 11937

| | | | | | |
|--|--|--------------------------------|--|---|------------------------------|
| 1. PROJECTION AND DMB | | 2. TITLE DMB | | 3. MANUSCRIPT NUMBERS DMB | 4. MANUSCRIPT SIZE DMB |
| CONTROL STATIONS | 5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY DMB | | 6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS) NONE | | |
| | 7. PHOTO HYDRO STATIONS DMB | 8. BENCH MARKS NONE | 9. PLOTTING OF SEXTANT FIXES NONE | 10. PHOTOGRAMMETRIC PLOT REPORT DMB | |
| | 11. DETAIL POINTS DMB | | | | |
| ALONGSHORE AREAS (Nautical Chart Data) | 12. SHORELINE DMB | 13. LOW-WATER LINE NONE | 14. ROCKS, SHOALS, ETC. DMB | 15. BRIDGES NONE | |
| | 16. AIDS TO NAVIGATION NONE | 17. LANDMARKS NONE | 18. OTHER ALONGSHORE PHYSICAL FEATURES DMB | | |
| | 19. OTHER ALONGSHORE CULTURAL FEATURES DMB | | | | |
| PHYSICAL FEATURES | 20. WATER FEATURES DMB | | 21. NATURAL GROUND COVER DMB | | |
| | 22. PLANETABLE CONTOURS NONE | | 23. STEREOSCOPIC INSTRUMENT CONTOURS NONE | | |
| | 24. CONTOURS IN GENERAL NONE | | 25. SPOT ELEVATIONS NONE | | |
| | 26. OTHER PHYSICAL FEATURES DMB | | | | |
| CULTURAL FEATURES | 27. ROADS DMB | 28. BUILDINGS DMB | 29. RAILROADS NONE | | |
| | 30. OTHER CULTURAL FEATURES DMB | | | | |
| BOUNDARIES | 31. BOUNDARY LINES NONE | | 32. PUBLIC LAND LINES NONE | | |
| | | | | | |
| MISCEL- LANEOUS | 33. GEOGRAPHIC NAMES DMB | | | 34. JUNCTIONS DMB | |
| | 35. LEGIBILITY OF THE MANUSCRIPT DMB | 36. DISCREPANCY OVERLAY DMB | | 37. DESCRIPTIVE REPORT DMB | |
| | 38. FIELD INSPECTION PHOTOGRAPHS DMB | | 39. FORMS DMB | | |
| | SIGNATURE OF REVIEWER For: D. M. Brant <i>Joseph Steinberg</i> | | SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT <i>Joseph Steinberg</i> | | |
| 40. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side. | | | | | |
| SIGNATURE OF COMPILER | | | SIGNATURE OF SUPERVISOR <i>Joseph Steinberg</i> | | |

USE REVERSE SIDE FOR REMARKS

USCGM-DC 28383-P61

15

Field Edit Report
T-11937

No formal field edit report was received. Please refer to the attached letter which is the following page of this report.

Memorandum

16

244-10

TO : The Director
Coast and Geodetic Survey
U.S. Department of Commerce
Washington 25, D.C.

DATE: 8 July 1963

FROM : Commanding Officer
USCGC Pathfinder
705 Federal Office Building
Seattle, Washington

SUBJECT: Field Edit Report - GFR-419

During the first half of the 1963 field season, Pathfinder personnel field edited the manuscripts listed below for accuracy and completeness. All recommended changes have been noted on the blackline impressions in red and green ink. In general, the manuscripts were found to be very reliable with only minor discrepancies being noted.

Four manuscripts with noted changes are being forwarded to the Washington Office on July 9. These manuscripts with no recommended changes have been noted below. The remaining manuscripts will be forwarded as soon as we have had an opportunity to compare them with the best sheets now in Washington for photoreproducing.

| | |
|----------------|----------------------------------|
| T-11985 | Edited - No changes |
| T-11986 | Edited - Will be forwarded later |
| T-11987 | Edited - Will be forwarded later |
| T-11988 | Edited - Will be forwarded later |
| T-11989 | Edited - Will be forwarded later |
| T-11990 | Edited - Will be forwarded later |
| T-11991 | Edited - Will be forwarded later |
| T-11992 | Forwarded 9 July |
| T-11993 | Edited - No recommended changes |
| T-11994 | Edited - No recommended changes |
| T-11995 | Edited - No recommended changes |
| T-11996 | Forwarded 9 July |
| T-11997 | Forwarded 9 July |
| <u>T-11998</u> | Forwarded 9 July |
| T-11999 | Edited - Will be forwarded later |
| T-12000 | Edited - Will be forwarded later |

It is requested that these manuscripts be returned to the Ship as soon as is practical as they will be needed for smooth plotting.

36 Seaborg
H.J. Seaborg
Captain, USCGC

REVIEW REPORT
SHORELINE
March 25, 1966

61. GENERAL STATEMENT

See summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with Registered Planetable Survey No. 3275, 1:20,000 scale made in 1912 and approved June 4, 1914.

Because of the larger scale of this manuscript the MHWL and along-shore features are shown in greater detail. Rocks and foul areas which do not appear on the planetable survey have been noted on the comparison print. Map Manuscript T-11937 supersedes the old planetable survey and should be used for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. quadrangle Kaupo, Hawaii, 1:24,000 scale, edition of 1957. The shoreline and alongshore details on the U.S.G.S. quadrangle have been generalized. The shoreline on Map Manuscript T-11937 is more depictive of the coastline.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8825 (PF-10-6-63). The MHWL on the boat sheet was evidently taken from a reduction of the manuscript, however, the foul lines shown on the boat sheet and manuscript are not in agreement. These differences have been noted on the comparison print.

Some data for reducing rock heights to sounding datum was provided on the boat sheet by the hydrographer. Data was not provided for all of the rocks shown on the map manuscript.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 4116, 1:250,000 scale. This is the only chart that covers the area and is at too small a scale to show all of the rocks and other alongshore detail.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Future surveys in the area should provide the necessary data for the reduction of rock heights to sounding datum.

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

J. Bull
J. Bull, CAPT., USESSA
Director, Atlantic Marine Center

Approved by:

Charles L. Sherrin
Chief, Cartographic Branch A.S.B.
Photogrammetric

Chief, Chart Division

L. F. Woodcock
Chief, Photogrammetry Division

Chief, Operations Division

