

# 11934

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-11934

### LOCALITY

State Hawaii

General locality Maui Island

Locality Kahawaihapapa Point

1960 - 1963

### CHIEF OF PARTY

H. J. Seaborg, Honolulu District Office

W. E. Randall, Baltimore District Office

### LIBRARY & ARCHIVES

DATE 1967

USCOMM-DC 5087

11934

5,220

02.60 - 162

## DESCRIPTIVE REPORT - DATA RECORD

T -11934

PROJECT NO. (II):

Project 21034  
(PH-6012)

FIELD OFFICE (III):

Honolulu

CHIEF OF PARTY

H. J. Seaborg

PHOTOGRAMMETRIC OFFICE (III):

Baltimore

OFFICER-IN-CHARGE

William 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):

~~MEAN SEA LEVEL EXCEPT AS FOLLOWS:~~ MHW

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):

<sup>D</sup>  
SHORE ~~X~~ (HGS) 1881, 1950

LAT.:

20° 35' 12.118"

LONG.:

156° 18' 04.999"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

y = 92,160.31'

x = 624,938.01'

Hawaii

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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:  1961-1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  By Kelsh Instrument and annotations on field photographs		
PROJECTION AND GRIDS RULED BY (IV):  R.A.C.		DATE  12-7-60
PROJECTION AND GRIDS CHECKED BY (IV):  J.O.C.		DATE  12-7-60
CONTROL PLOTTED BY (III):  L. A. Senasack		DATE  2-26-62
CONTROL CHECKED BY (III):  L. O. Neterer		DATE  2-26-62
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  R. E. Fuechsel		DATE  February 1962
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY  J. D. Mc Evoy	DATE  April 1962
	CONTOURS  Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III):  C. A. Lipscomb		DATE  April 1962
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  D. M. Brant		DATE  4/62
REMARKS:  F.E. 1963		

DESCRIPTIVE REPORT - DATA RECORD

T-12934

CAMERA (KIND OR SOURCE) (III):

"W" Camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 2292	2 Oct. 1960	11:39	1:25,000	1.5 Ft above MLLW
60 W 2462 & 2463	8 Oct. 1960	09:10	1:25,000	1.5 Ft " "
61 W(C) 1128 thru 1131	25 Sept. 1961	10:02	1:10,000	0.2 Ft " "
The above computed from Predicted Tide Tables.				

TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Honolulu		1.2	1.9
SUBORDINATE STATION: Makena		1.5	2.1
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): *Atlantic Marine Center*  
*Leo F. Beugnet, Norfolk Regional Office*

DATE:  
Sept. 1965

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:  
None

IDENTIFIED:  
None

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

RECOVERED:  
None

IDENTIFIED  
None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

None

REMARKS:

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro	April, 1962	Superseded
Compilation completed	Dec. 1963	



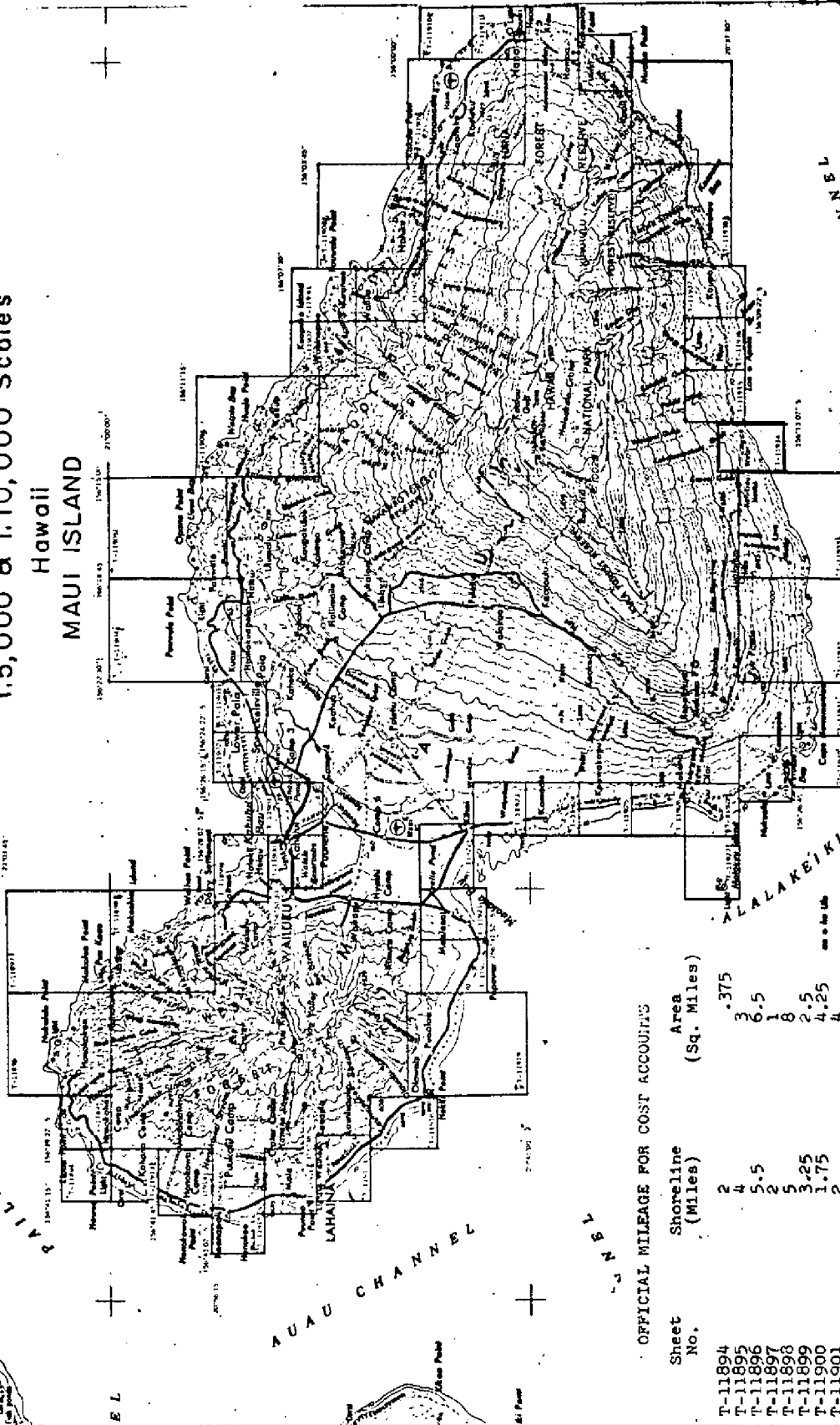
# PROJECT PH-6012

## Planimetric Mapping

1:5,000 & 1:10,000 Scales

Hawaii

MAUI ISLAND



### OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11894	2	.375
T-11895	4	3
T-11896	5.5	6.5
T-11897	2	1
T-11898	5	8
T-11899	3.25	2.5
T-11900	1.75	4.25
T-11901	2	4
T-11902	2.5	1
T-11903	2	2
T-11904	5	6
T-11905	4.5	4
T-11906	6.5	10
T-11907	7	7.8
T-11908	5	6
T-11909	4.7	16
T-11910	4.75	.25
T-11911	2.7	2
T-11912	27	3
T-11913	2.2	4.5
T-11914	2.5	2.2
T-11915	2.5	4
T-11916	2.5	4

### OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11922	3	3
T-11923	2	3
T-11924	2.5	2.5
T-11925	2.5	1.5
T-11926	2.5	1
T-11927	1	.04
T-11928	3	1.5
T-11931	2.5	1.5
T-11932	4.5	12
T-11933	5	8
T-11934	2.7	3
T-11935	2.5	4
T-11936	5	4
T-11937	5	4

CHANNEL

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-11934

Shoreline manuscript T-11934 covers a part of the coastline of Maui Island, Hawaii, in the vicinity of Kahawaihapapa Point. This is one of forty-nine similar maps which cover the shoreline of the island. The maps were compiled primarily for updating the shoreline on nautical charts and to provide photo-hydro signals for hydrographic surveys to be made in the area.

Field operations preceding compilation included recovery and/or establishment and identification of horizontal control; the selection of hydro signal sites and field inspection.

The maps were compiled by Kelsh plotter methods from 1:25,000 scale panchromatic photography taken on the 2nd and 8th of October 1960, supplemented by color photographs obtained 25th September 1961. Control established by Aerotriangulation was used to control the Kelsh models.

A cronaflex copy of the map manuscript showing shoreline, along-shore detail and shoreline pass points was furnished for preparation of the hydrographers boat sheet and for the location of photo-hydro signals by photogrammetric methods. 1:5,000 scale ratio photographs were furnished as part of the hydro support data and for field edit purposes.

The compilation manuscript is a vinylite sheet from which the smooth sheet was drafted and reproduced. One cronar positive and a cronar negative are provided for record and registry.

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FIELD INSPECTION REPORT PROJECT PH-6012  
Map Manuscript T-11934

Please refer to the Field Inspection report for Maui  
Island, Hawaii bound with the Descriptive Report for Map  
Manuscript T-11894.





PHOTOGRAMMETRIC PLOT REPORT  
T-11934

Please refer to the Photogrammetric Plot Report, Maui Island  
(East Half) Hawaii, dated February 1962, which is bound with the  
Descriptive Report for T-11931.

COMPILATION REPORT  
PROJECT PH-6012 (21034)  
Map Manuscript T-11934

31. DELINEATION

The Kelsh Plotter was used for delineation using the photography taken on October 2nd and October 8th, 1960.

32. CONTROL

Adequate supplemental control, based on identified horizontal control, was established by aerotriangulation for the setting of the Kelsh madels.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours - Inapplicable

Drainage was compiled by the Kelsh operator by analogy using the U.S.G.S. quadrangle as a guide.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline and alongshore details were delineated on the Kelsh Plotter in accordance with the field inspection notes provided on field inspection photographs.

36. OFFSHORE DETAILS

Details offshore of the MHWL were delineated from office interpretation of the photographs and are subject to verification by the hydrographer.

37. LANDMARKS AND AIDS

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

38. CONTROL FOR FUTURE SURVEYS

No supplemental control for future surveys was established.

39. JUNCTIONS

Satisfactory junctions were made with T-11933 on the west and T-11935 on the east. There is no contemporary survey on the north and it is bound on the south by Alenuihaha Channel.

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40. HORIZONTAL AND VERTICAL ACCURACY

Please refer to the Photogrammetric Plot Report bound with the Descriptive Report T-11894.

46. COMPARISON WITH EXISTING MAPS

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

47. COMPARISON WITH NAUTICAL CHARTS

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

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Respectfully submitted:

*Joseph Steinberg*  
For: Donald M. Brant  
Carto. (photo)

Approved and Forwarded:

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



GEOGRAPHIC NAMES

Ph 6012

T-11933

T-11934

- \* Kahaleaimakani Gulch
- \* Kahawaihapapa Point
- \* Kahikinui House
- \* Kepuni Gulch
- Kiakeana Point
- \* Manawainui Gulch
- Nakaohu Point
- \* Palaha Gulch
- \* Pukai Gulch
- Wekea Point

These Names Not Separated  
by T Number.

*Frank W. Rickett*  
All Names Approved  
by Office of Geography

Approved 1-20-66  
*A. J. Wright*

\* Appear on this manuscript



49. NOTES TO THE HYDROGRAPHER

The following photo-hydro signals, identified by the field inspection party, were located during compilation.

3401	Flag at corner of walls	60 W 2292
3402	Flag at N.W. corner of wall	60 W 2292
3403	Flag on end of rock outcrop	60 W 2292
3404	Flag at S.E. corner of old wall	60 W 2292
3405	Extreme end of sharp point (not flagged)	60 W 2292
3406	Flag at N.W. corner of old wall	60 W 2292
3407	Flag at break in wall	60 W 2292

## PHOTOGRAMMETRIC OFFICE REVIEW

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

T-11934

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1. PROJECTION AND GRIDS 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 DMB	14. ROCKS, SHOALS, ETC. DMB
	15. BRIDGES NONE		
	16. AIDS TO NAVIGATION DMB	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 <i>Joseph Steinberg</i> For: D.M. Bright		
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

USCOMM-DC 25553-P61



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FIELD EDIT REPORT  
T-11934

No formal Field Edit Report was received for this manuscript. It is assumed that it was field edited at the same time as its adjoining manuscripts T-11933 and T-11935. Please refer to the copy of the letter which follows and is the next page of this report.

# Memorandum

244 1015

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

DATE: 8 July 1963

FROM : Commanding Officer  
USC&GSS Pathfinder  
705 Federal Office Building  
Seattle, Washington

SUBJECT: Field Edit Report - OPR-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. Those 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 boat sheets now in Washington for photographing.

T-11905	Edited - No changes
T-11906	Edited - Will be forwarded later
T-11907	Edited - Will be forwarded later
T-11908	Edited - Will be forwarded later
T-11909	Edited - Will be forwarded later
T-11910	Edited - Will be forwarded later
T-11911	Edited - Will be forwarded later
T-11990	Forwarded 9 July
T-11931	Edited - No recommended changes
T-11932	Edited - No recommended changes
T-11933	Edited - No recommended changes
T-11935	Forwarded 9 July
T-11936	Forwarded 9 July
T-11937	Forwarded 9 July
T-11991	Edited - Will be forwarded later
T-11992	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.

*H. J. Seaborg*  
H. J. Seaborg  
Captain, USC&GS

REVIEW REPORT T-11934  
SHORELINE  
March 21, 1966

61. GENERAL STATEMENT

See summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with a copy of Registered Planetable survey No. 3276, made in 1912 at 1:20,000 scale, and approved March 30, 1914. The shoreline on map manuscript T-11934 is shown in greater detail than on the old planetable survey. No major discrepancies between the two surveys were noted.

Shoreline manuscript T-11934 supersedes the prior survey and should be used for all future nautical chart constructions.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

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

There are no discrepancies of importance between the two maps. Map manuscript T-11934, being at a much larger scale, shows the shoreline and alongshore area in greater detail than does the U.S.G.S. quadrangle.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

None. See Notes to Verifier.

65. COMPARISON WITH NAUTICAL CHARTS

The only chart that covers the area (chart 4116) is at 1:250,000 scale. Because of the difference in scales only a visual comparison was made between the chart and manuscript.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

No items were noted which require investigation by future surveys in the area.

Reviewed by:

Leo F. Beugnet  
Leo F. Beugnet

Approved by:

J. Bull  
J. Bull  
Director, Atlantic Marine Center

Approved by:

Charles L. Luman  
Chief, Cartographic Branch  
Photogrammetric

L. F. Woodcock  
Chief, Photogrammetry Division

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Chief, Chart Division

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Chief, Operations Division

NOTES TO VERIFIER

No contemporary hydrographic surveys, in the area of this manuscript, were available at the time of Final Review.

