

11913

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-11913

LOCALITY

State Hawaii

General locality Maui Island

Locality Kahana Point - Napili Bay

1960 1962

CHIEF OF PARTY

H. J. Seaborg - Honolulu District Office

Miller J. Tonkel - Baltimore District Office

LIBRARY & ARCHIVES

DATE 1967

USCOM-DC 5087

10/10/60 - 1162

11913

DESCRIPTIVE REPORT - DATA RECORD

T -11913

PROJECT NO. (II):

PH-6012

FIELD OFFICE (III):

Honolulu, Hawaii

CHIEF OF PARTY

H. J. Seaborg

PHOTOGRAMMETRIC OFFICE (III):

Baltimore District Office

OFFICER-IN-CHARGE

Miller J. Tonkel

INSTRUCTIONS DATED (II) (III):

14 November 1960
28 November 1960
13 June 1961
27 December 1961
16 January 1962
1 April 1963

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:

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):

HAWEA (HGS) 1882

LAT.:

21° 00' 23.155"

LONG.:

156° 40' 08.423"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

= 244, 469. 34

x = 499, 201. 95

STATE

Hawaii

ZONE

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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.

FORM C&GS-181b
(12-61)U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEYDESCRIPTIVE REPORT - DATA RECORD
T-11913

FIELD INSPECTION BY (II): John C. Lajoie		DATE: 1961-1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Delineated by Kelsh plotter using Field inspection photographs as a reference.		
PROJECTION AND GRIDS RULED BY (IV): RAC		DATE: Oct. 1960
PROJECTION AND GRIDS CHECKED BY (IV): JDC		DATE: Oct. 1960
CONTROL PLOTTED BY (III): D. M. Brant		DATE: March 1961
CONTROL CHECKED BY (III): H. P. Eichert		DATE: March 1961
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Washington Office - W. A. Kuncis		DATE: March 1961
STEREOSCOPIC INSTRUMENT COMPILATION (III): D. M. Brant	PLANIMETRY D. M. Brant	DATE: April 1961
	CONTOURS Inapplicable	DATE:
MANUSCRIPT DELINEATED BY (III): L. A. Senasack		DATE: Nov. 1961
SERIES BY (III): Drafting C. A. Lipscomb		DATE: July 1963
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. M. Brant		DATE: July 1963
REMARKS: FIELD EDIT - 1962		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

"W" Camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 2600	10 Oct. 1960	0902	1:25,000	0.5 ft. above MHW
60 W 2606 & 2607	10 Oct. 1960	0914	1:25,000	0.5 ft. above MHW

TIDE (III) From Predicted Tide Tables Diurnal

	RATIO OF RANGES	MEAN RANGE	SEMI RANGE
REFERENCE STATION: Honolulu, Hawaii		1.2	1.9
COORDINATE STATION: Lahaina, Hawaii		1.3	2.0
SUBORDINATE STATION:			

WASHINGTON OFFICE ^{FINAL} REVIEW BY (IV): D. M. Brant, Baltimore District Office

DATE: March 1964

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

None

RECOVERED:

None

IDENTIFIED:

None

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

None

RECOVERED:

None

IDENTIFIED:

None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

6

REMARKS:

COMPILATION RECORD

COMPLETION DATE

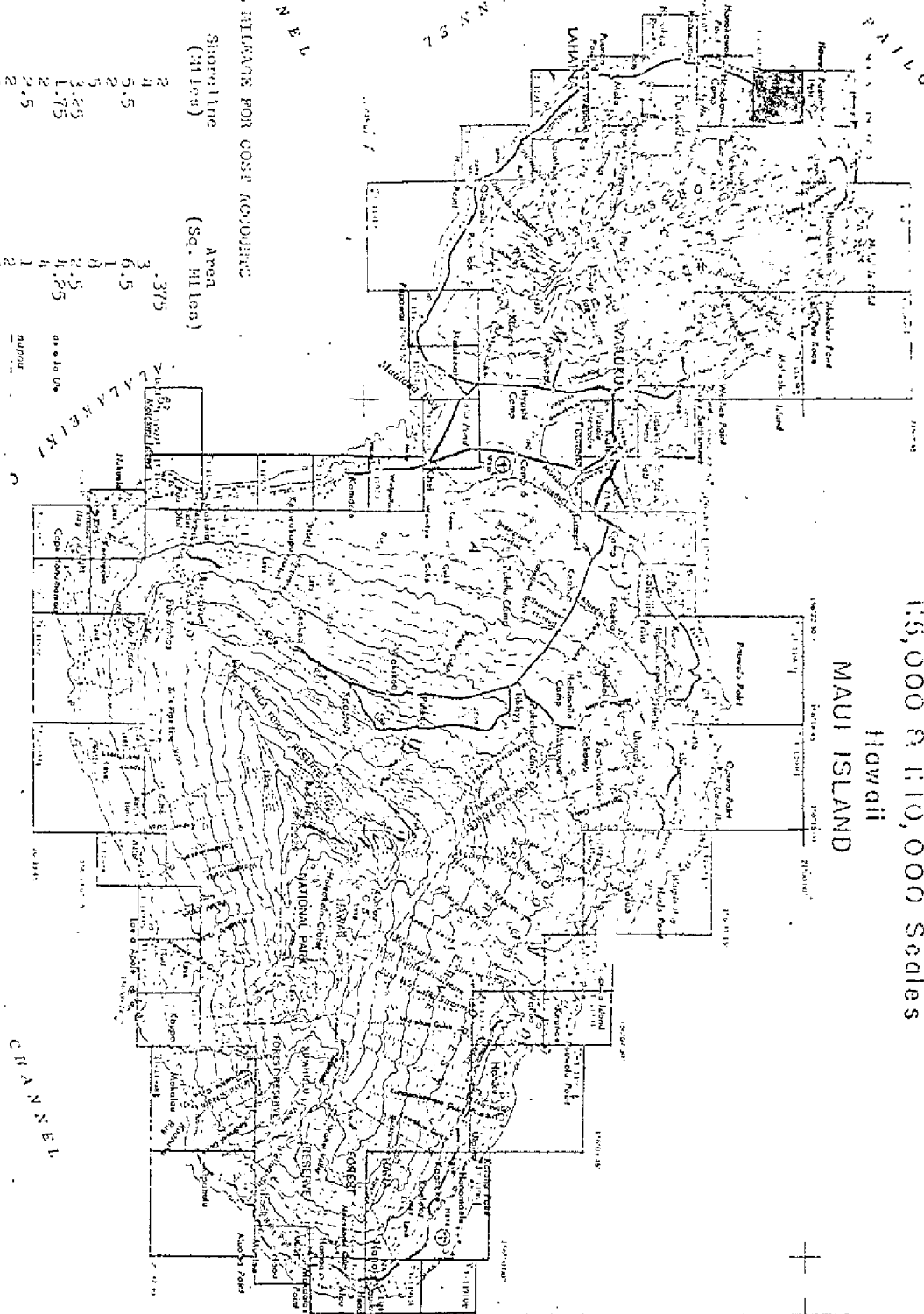
REMARKS

Shoreline furnished for hydro	Nov. 8, 1961	superseded
Final Compilation	July, 1963	

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PLANNED Planimetric Mapping 1:5,000 & 1:10,000 Scales

Hawaii MAUI ISLAND



OFFICIAL MILEAGE FOR COST ACCOUNTING

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11394	2	3.75
T-11395	2	3
T-11396	2	6.5
T-11397	2	1
T-11398	2	3.25
T-11399	2	1.75
T-11400	2	2.5
T-11401	2	2.5
T-11402	2	2
T-11403	2	6
T-11404	2	4
T-11405	2	10
T-11406	2	7.8
T-11407	2	15
T-11408	2	2.5
T-11409	2	2.7
T-11410	2	3
T-11411	2	4.5
T-11412	2	2.2
T-11413	2	4
T-11414	2	2.6
T-11415	2	4
T-11416	2	6
T-11417	2	6
T-11418	2	6
T-11419	2	6

OFFICIAL MILEAGE FOR COST ACCOUNTING

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11392	3	3
T-11393	3	3
T-11394	3	2.5
T-11395	3	2.5
T-11396	3	2.5
T-11397	3	1
T-11398	3	1.04
T-11399	3	1.5
T-11400	3	2.5
T-11401	3	2.5
T-11402	3	2.5
T-11403	3	2.5
T-11404	3	2.5
T-11405	3	2.5
T-11406	3	2.5
T-11407	3	2.5
T-11408	3	2.5
T-11409	3	2.5
T-11410	3	2.5
T-11411	3	2.5
T-11412	3	2.5
T-11413	3	2.5
T-11414	3	2.5
T-11415	3	2.5
T-11416	3	2.5
T-11417	3	2.5
T-11418	3	2.5
T-11419	3	2.5

OFFICIAL MILEAGE FOR COST ACCOUNTING

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11391	3	1.5
T-11392	3	1.5
T-11393	3	2.7
T-11394	3	2.5
T-11395	3	2.5
T-11396	3	2.5
T-11397	3	2.5
T-11398	3	2.5
T-11399	3	2.5
T-11400	3	2.5
T-11401	3	2.5
T-11402	3	2.5
T-11403	3	2.5
T-11404	3	2.5
T-11405	3	2.5
T-11406	3	2.5
T-11407	3	2.5
T-11408	3	2.5
T-11409	3	2.5
T-11410	3	2.5
T-11411	3	2.5
T-11412	3	2.5
T-11413	3	2.5
T-11414	3	2.5
T-11415	3	2.5
T-11416	3	2.5
T-11417	3	2.5
T-11418	3	2.5
T-11419	3	2.5

6.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-11913

Shoreline survey T-11913 (1:5,000 scale) is one of 49 similar surveys in project PH-6012. This survey covers a part of the north-west shore of Maui Island, Hawaii from latitude $20^{\circ} 58' 07.5''$ northward to latitude $21^{\circ} 00' 00''$. See page 5 of this report for the location of the sheet in the project.

This was a stereoscopic instrument project, in advance of hydrographic surveys to be made in the same area. The Zeiss Stereoplanigraph was used for bridging of Control. Compilation was by Kelsh Plotter using the 1:25,000 scale photography taken with the "W" Camera in October, 1960.

The field operations preceding compilation included field inspection, recovery, and/or establishment and identification of horizontal control and the identification of photo-hydro signals. The survey was field edited in June 1961.

The manuscript is a vinylite sheet $01^{\circ} 52.5''$ in latitude by $01^{\circ} 52.5''$ in longitude. Compilation was by method 3 of Photogrammetric Instructions 55 revised 20 May 1959. The Registry copy of the manuscript will consist of a cronar film positive and a film negative.

FIELD INSPECTION REPORT
PROJECT PH-6012
MAUI ISLAND, HAWAII

2. AREAL FIELD INSPECTION:

The area covered by this report encompasses the whole of the Island of Maui, second largest of the Hawaiian Islands. It is formed by two mountains with a fertile valley ^{/between,} devoted to the cultivation of sugar cane and pineapple. The island is shaped like a Shinto priest in prayer with the head at the western end formed by the West Maui range of mountains and the body at the eastern end formed by Mt. Haleakala which rises over 10,000 feet above sea level.

The climate varies from the tropical rain forest at the eastern end of the island near Hana, to the barren lava fields along the south slopes of Mt. Haleakala. Rain seldom falls on the south coasts and thus the disintegration of the lava is a slow process.

Shoreline conditions vary from the stark lava bluffs around Mt. Haleakala and on the east side of the West Maui Range, to the sandy beaches along the valley between the mountains and on the western or lee shores of the island.

The area is cooled by trade winds from the north and east accentuated by the Venturi effect caused by the valley between the mountains and, in the exposed areas, waves beat continuously on the rocky cliffs. On the western shores around Lahaina and on Maalaea Bay, only a "kona" or southerly storm infrequently disturbs this peaceful area.

Kahului is the principal port on the island. It is protected by a breakwater and serves as a port of call for large ocean going

vessels which bring in freight and load out processed pineapple and raw sugar. It is also the port of call for tug and barge service from Honolulu.

Photography was adequate for the identification of control and for field and shoreline inspection. In some areas which were cloud covered in the 1960 photography, 1962 reflight photographs which were furnished to the hydrographic party were secured and the shoreline and interior inspected and inked on those photos.

Shoreline inspection along the lava fields at the south side of the east portion of the island is somewhat sketchy. Areas that were impassable due to broken lava, large crevases, or lack of trails, were left to be inspected from a launch when one becomes available. The shoreline may be delineated at the edge of the lava but additional hydrographic signal sites must be selected from the seaward side.

Shoreline inspection in the beach areas was accomplished by walking along the high waterline, and delineating the waterline supported by measurements from prominent objects. Where it was possible, as in the case of low bluffs, the shoreline was inspected from the top of the bank. In the areas of high rocky bluffs and cliffs, it was not possible to get anywhere near the shoreline and inspection was carried out by leaning over the precipitous bluffs, which descend almost vertically to the high water line. In every area except the sandy beaches mentioned, and even in the lava fields at the south portion of the island, the high waterline lies at the base of bluff and is confused by along shore rocks and breaking surf, and off-shore reefs.

3. HORIZONTAL CONTROL

(a) The following marked or recoverable intersection stations were located by triangulation as nautical aids, aeronautical aids, or as additional photogrammetric control:

Kahului Harbor Entrance East Breakwater Light	d.n.m.
Kahului Harbor Entrance West Breakwater Light	d.n.m.
Kahului Harbor Entrance Range, Front Light.	d.n.m.
Kahului Harbor Entrance Range, Rear Light.	d.n.m.
Kahului Airport Control Tower, Beacon	d.n.m.
V O R OGG	d.n.m.
Lahaina Lighthouse	d.n.m.
E (USE)	d.m.
EAST POINT	d.m.
WEST POINT	d.m.

The following temporary stations were established for supplemental control of aerial photographs and were not marked:

Apple (temp)	State (temp)
Camp (temp)	Grove (temp)
Ditch (temp)	Pau (temp)
Malay (temp)	Power (temp)

Pau and Power were established to determine a position for Lahaina Lighthouse.

The following hydrographic signals were located by theodolite cuts either to establish signals in obscured areas or to provide a check on signal sites established by photogrammetric methods:

Hydro Sig. 2301	Hydro Sig. 2303	Hydro Sig. 2305
POL	CAN	MAY

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DEPARTMENT OF THE ARMY
COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

RED	Hydre Sig. 2401	HAY
PAR	QEE	VON
REG	CAR	MAHUNA 2
DAN	PAR	KVE
JOE	HAN	GOO

(b) There were no datum adjustments made by the field party.

(c) All control was either established by the Coast and Geodetic Survey or was tied to Coast Survey control by previous surveys.

(d) All stations required by the project diagram were recovered and identified except where specific permission was received from the Washington Office to substitute one station for another.

(e) Control adjacent to the shoreline and that within the area of photogrammetric coverage was searched for and Form 526 has been submitted for all stations. Stations outside the area covered by the photographs were not searched for due to heavy brush and undergrowth in the interior of the island.

(f) Control station identification cards were submitted for all stations required by the project diagrams.

4. VERTICAL CONTROL

Tidal bench marks at Kahului, Lahaina, Mala Wharf, Kihei, and Makena were searched for and recovered.

Tidal bench marks at Hana were searched for but due to changes in the area, they were not recovered.

No vertical points were required for stereoscopic mapping.

5. CONTOURS AND DRAINAGE

The area below the 15 foot contour on sheet T-11900 was contoured as required by the project instructions. The area was contoured using the photograph, a Wild T-2, and topo rod. Elevations for the contouring were established by closed loops from the tidal bench marks at Kanului Harbor.

Drainage is all intermittent. Natural drainage patterns have been interrupted by various drainage canals, reservoirs, and catch basins to supplement the irrigation systems of the various plantations. Only overflow water runs occasionally in the natural drainage gulches.

6. WOODLAND COVER

The woodland cover over the major part of the island is low brush although in the dry areas, keawe trees are clumped along the shore. Monkey pod, an ornamental tree, line the roads occasionally.

In the area covered by sheet T-11906 and easterly to sheet T-11939, which is in the rainy portion of the island, trees grow profusely. Types are eucalyptus, kukui, koa, mango, coconut and kamane with a heavy tropical undergrowth of guava and other brush.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high waterline was delineated on the photographs where it was possible to visit it. In areas of high bluff, inspection was done by viewing the area from the top of bluff. As in most cliff areas, there are many along shore rocks and high surf.

(b) The low waterline was not inspected

(c) The foreshore in the bluff areas is confused due to many along shore rocks. The continuous surf along the north, east and south sides of the islands served to confuse the high waterline on the photographs. In the sandy areas of the western and northern shore, the beach is protected by a coral reef which was found by the hydrographer, and which is visible on the photograph. In the Kihei area, offshore rock piles, the remains of old fish pond walls, are visible on the photographs. Offshore rocky reefs are found in some areas and, where seen, were noted on the field photographs.

(d) Bluffs and cliffs form the largest portion of the shoreline, although Maui is represented as having more beach area than any other of the Hawaiian Islands. From a few miles north of Kahului to Honolulu Bay the shore is composed of high cliffs and low rocky bluffs. From Honolulu Bay, through Lahaina and slightly south of Olowalu the shore is low with sandy beaches between rocky headlands. From the beginning of the cliffs at the south end of the West Maui Range to Mc Gregor Point, the shore is again rocky and precipitous. At Maalaea, and continuing south past Makena to about a mile south of Puu Olai, the shore is protected and sandy with a few rocky projections which act as groins to hold the sand.

From the recent lava flow south of Puu Olai and continuing south and east toward Hana, the shoreline is rocky with bluffs ranging from 10 to 150 feet. In the area near Kaupo, Kipahulu, and Puuiki High vertical bluffs predominate. The only sand beach in the entire area is located several miles southeast of the village of Hana.

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From Hana west to Kuau, or into sheet T-11903 the vertical cliffs range from 50 to 200 feet in height and there are no beach areas and no place to approach the high waterline from the beach side except at Keanae or Mahiku except by descending the vertical bluffs by ropes.

(e) Kahului Harbor, as mentioned in the Areal Description, is the principal and only commercial port in the island. It has recently been dredged, is well jettied and has wharfage and facilities for ocean going vessels.

Hana Harbor is partially protected by natural rock projections but is open to some trade directions. It was used as a stop for interisland steamer traffic, and prior to World War 2, when the sugar plantation at Hana was under cultivation, cargo was loaded out of this port. Since the discontinuing of steamer traffic between the islands, only an occasional fuel barge or fishing boat use the large concrete pier located here.

Mala Wharf, located a few miles north of Lahaina, was used to load sugar and pineapple during the days of steamer traffic but the large concrete wharf is in poor repair and has been closed by the Board of Harbor Commissioners.

Lahaina, once the seat of the Hawaiian kings, and the oldest town in the island, is the site of a protected small boat harbor. Fuel, food, and housing are available here.

Maalaea is the site of a small boat harbor used mainly by fishing boats. It is well jettied and fuel and supplies are available.

In the olden days, when steamers made the rounds of the island

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and water transportation was at its height, there were other places where cargo was unloaded by boom and where whaleboat landings were made. Principal among these were Nuu Landing, Kaupo, and Nahiku. These have now been abandoned and only the remains of the old concrete foundations and the old mooring bolts remain.

(f) There are no overhead or submarine cables in the area covered by the project.

(g) There are no other shoreline structures.

8. OFFSHORE FEATURES

No offshore rocks were actually visited by the photogrammetric party. It was noted on the field photographs that the hydrographic party be asked to determine the heights of offshore rocks. Where heights were indicated on the photographs, they were estimated from shore.

9. LANDMARKS AND AIDS.

Landmarks, nautical and aeronautical aids in Strips 1 to 7 were listed on Form 507 and forwarded with the field inspection photos. Other landmarks should be reported by the hydrographic party.

10. BOUNDARIES, MONUMENTS and LINES.

Investigation of boundaries, monuments and lines were not included in the instructions for the project.

11. OTHER CONTROL

No recoverable topographic stations were established. Where hydrographic or photogrammetric control by geodetic methods was required, only temporarily marked stations were used.

In areas which were inaccessible to the field party, hydro signal sites were not selected. It was requested that the hydrographic

party make a launch available to the photogrammetrist for the inspection of shoreline and the selection of hydro signal sites in these areas.

12. OTHER INTERIOR FEATURES

Roads within the area adjacent to the shoreline were classified as dfl, ddl and sdl. Class 1 structures were not noted. Class 2 structures, churches and public buildings were noted.

The principal airport, Kahului Airport, is located about 3 miles east of Kahului Harbor. There is a paved airstrip at Hana used by D C 3 and small private aircraft. A small dirt strip is located at Kaanapali, about 6 miles north of Lahaina and is used by small private aircraft. The abandoned Naval Airstrip at Puu Mene is not used.

There are no bridges or cables over navigable waters. No trace was found of the shore ends of any submarine cables.

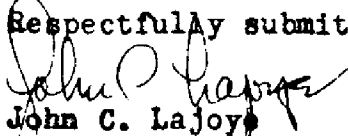
13. GEOGRAPHIC NAMES

No geographic names investigation was required by the project instructions.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

There were no special reports, or supplemental data.

8 September 1962

Respectfully submitted

 John C. Lajoie
 Super. Sur. Tech.

PHOTOGRAMMETRIC PLOT REPORT

Please refer to the Photogrammetric Plot Report for Maui Island, Hawaii dated March 1961 which is bound with Descriptive Report T-11894.

COMPILATION REPORT
SURVEYS T-11913 thru T-11918

31. DELINEATION

Stereoscopic instrument (Kelsh Plotter) methods were used for compilation with photography taken in 1960. Where 1961 photography was available it was compared with the 1960 compilation and when changes of importance were found the 1960 compilation was revised (by graphic methods) with the 1961 photography.

A minor change in shoreline was made on T-11915 in the vicinity of Kaanapali. New roads and other details were also delineated from the 1961 photography.

32. CONTROL

The identification, density and placement of horizontal control was adequate.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours - Inapplicable
Drainage was delineated by stereoscopic methods.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate except for survey T-11916 where the shoreline inspection was omitted. Beginning at the south limits of survey T-11916 north to latitude $20^{\circ} 23' 45''$ the high-water line and alongshore details were delineated from office interpretation of the photography.

The mean high water line was delineated using the reference distances from prominent objects where they were recorded on the field inspection photographs. The date of these measurements was not noted.

36. OFFSHORE DETAILS

Details offshore were delineated from photo interpretation of the photographs and any field inspection supplied. Details offshore are subject to change by the hydrographer.

37. LANDMARKS AND AIDS

There is one non-floating aid on Survey T-11916. Form 567 is submitted with this report.

38. CONTROL FOR FUTURE SURVEYS

There are no Recoverable Topographic Stations on these surveys.

An incomplete copy of these surveys showing the shoreline along with a set of ratio photographs with shoreline points and field identified photo-hydro signals was prepared and submitted for the use of the hydrographic party. These signals were removed from the final survey.

39. JUNCTIONS

Junctions are in agreement with adjoining surveys for T-11913 thru T-11918. See layout bound in this report.

40. HORIZONTAL AND VERTICAL ACCURACY

See Photogrammetric Plot Report bound with the Descriptive Report for Surveys T-11894.

41 through 45 - Inapplicable

46. COMPARISON WITH EXISTING MAPS

Surveys T-11913 through T-11918 were compared with the following U.S.G.S. Quadrangles:

Honolua, Hawaii 1:24,000 scale 1956
Lahaina, Hawaii 1:24,000 scale 1956
Olowalu, Hawaii 1:24,000 scale 1955

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Nautical Chart Number 4130, scale 1:80,000, 4th edition, August 31, 1964.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Approved and Forwarded:

J. H. Hollis
for Miller J. Tonkel
CDR. C. & G.S.
Baltimore District Officer

Respectfully submitted:

15 October 1963

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

T-11913

48. Geographic Names List

Alaeloa Point

Haukoe Point
Honokeana Bay

Kaelekii Point
Kaia Point
Kahana Camp
Kahana Point
Kahana Stream
Kalaeokaea Point
Kaopala
Keonenui

Napili Bay

George M. Ball
Geographic Names Section
19 November 1963

49. NOTES FOR THE HYDROGRAPHER

The following hydro signal location sites, selected during field inspection, were located during compilation:

Signal No.	Description	Photo. No.
1301	Southwest corner of roof of cabin	60 W 2600
1302	West gable of old house	60 W 2600
1303	Church steeple	60 W 2600
1304	Offshore gable, green roofed house	60 W 2600
1305	TV antenna, water gable, green roofed yellow house	60 W 2600
1404	North end of bridge railing	60 W 2599

FORM 182 (3-61)		PHOTOGRAMMETRIC OFFICE REVIEW		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
50		T-11913			
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 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 <i>Leo F. Brant</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 <i>Leo F. Brant, for DM Brant</i>			SIGNATURE OF SUPERVISOR <i>Joseph Steinberg</i>		

FIELD EDIT REPORT
T-11913

Please refer to the Field Edit Report for Maui Island, Hawaii
(strips 1 through 7) bound with the Descriptive Report for sheet T-11894.

REVIEW REPORT T-11913
SHORELINE
March, 1964

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with Registered Planetable survey No. 3269 of 1912, 1:20,000 scale, approved March 30, 1914.

This map supersedes the above listed survey for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. quadrangle HONOLUA, HAWAII, 1:24,000 scale, edition of 1956. The two maps are in good agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

H-8685	1:5,000	1962
H-8578	1:10,000	1961
H-8678	1:20,000	1962

Survey H-8685 shows a rock awash between Alaeloa Point and Honokeana Bay near Lat. $20^{\circ} 59.5'$ Long. $156^{\circ} 40.3'$. Examination of photographs 60 W 2600 and 2601, 1:25,000 scale obtained 10 October 1960 at 0902 with the stage of tide 1.8 ft. above MLLW shows no rock at this location.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with instructions and meets the National Standard of Map Accuracy.

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