

# 11908

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-11908

### LOCALITY

State Hawaii

General locality Maui Island

Locality Nahiku

1962 1960-1963

### CHIEF OF PARTY

H. J. Seaborg, Honolulu District Office

W. E. Randall, Baltimore District Office

### LIBRARY & ARCHIVES

DATE \_\_\_\_\_

USCGM-DC 5087

# 11908

## DESCRIPTIVE REPORT - DATA RECORD

T-11908

PROJECT NO. (II): <b>PH 6012</b>		
FIELD OFFICE (II): <b>Honolulu, Hawaii</b>		CHIEF OF PARTY <b>H. J. Seaborg</b>
PHOTOGRAMMETRIC OFFICE (III): <b>Baltimore, Maryland</b>		OFFICER-IN-CHARGE <b>W. E. Randall</b>
INSTRUCTIONS DATED (II) (III): <b>14 November 1960</b> <b>28 November 1960</b> <b>13 June 1961</b> <b>16 January 1962</b>		
METHOD OF COMPILATION (III): <b>Kelsh Plotter</b>		
MANUSCRIPT SCALE (III): <b>1:10,000</b>		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): <b>1:5,000 Pantograph 1:10,000</b>
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): <b>Old Hawaiian</b>		VERTICAL DATUM (III): <b>MSL</b> MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>
REFERENCE STATION (III): <b>OPIKOULA (HGS) (HTS 1929) 1877</b>		
LAT.: <b>20° 49' 49.002"</b>	LONG.: <b>156° 05' 14.563"</b>	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): <b>y = 180,844.12      x = 697,822.23</b>		STATE <b>Hawaii</b>
		ZONE <b>2</b>
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): <b>J. C. Lajoie</b>		DATE: <b>Nov. 1961</b>
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): <b>Mean high water line located by Kelsh Plotter from October 1960 photography supplemented by panchromatic and color photography in 1961.</b>		
PROJECTION AND GRIDS RULED BY (IV): <b>A. E. Roundtree</b>		DATE <b>3-16-62</b>
PROJECTION AND GRIDS CHECKED BY (IV): <b>A. E. Roundtree</b>		DATE <b>3-17-62</b>
CONTROL PLOTTED BY (III): <b>H. R. Rudolph</b>		DATE <b>4-2-62</b>
CONTROL CHECKED BY (III): <b>B. Carr</b>		DATE <b>4-2-62</b>
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): <b>Aerotriangulation - Washington Office</b>		DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III): <b>E. L. Williams</b>		PLANIMETRY <b>E. L. Williams</b> DATE <b>5-62</b>
		CONTOURS <b>Inapplicable</b> DATE
MANUSCRIPT DELINEATED BY (III): <b>E. L. Williams</b>		DATE <b>5-62</b>
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): <b>D. M. Brant</b>		DATE <b>5-62</b>
REMARKS: <b>FIELD EDIT</b> <b>USC &amp; GSS PATH FINDER 1963</b> <b>FIELD EDIT SHEET SUBMITTED</b>		

## DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

nw Camera

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 2954 thru 2956	15 Oct. 1960	0923	1:25,000	1.8 ft. above MLLW
61 W 844 thru 846	24 Sept. 1961	0912	1:15,000	0.2 ft. above MLLW
60 W(C) 3125 thru 3128	19 Oct. 1960	0755	1:10,000	0.3 ft. above MLLW
62 W(C) 2311 thru 2316	26 Jan. 1962	1001	1:10,000	0.9 ft. above MLLW
Tides computed from Predicted tide tables.				

## TIDE (III)

Diurnal Range

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Honolulu, Hawaii		1.2	1.9
SUBORDINATE STATION: Hana, Hawaii		1.8	2.5
SUBORDINATE STATION:			

FINAL  
WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, Norfolk Regional Office

DATE: Nov. 1965

PROOF EDIT BY (IV):

DATE: Dec. 1965

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

1

RECOVERED:

1

IDENTIFIED:

#2

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

0

RECOVERED:

0

IDENTIFIED:

0

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

3

REMARKS:

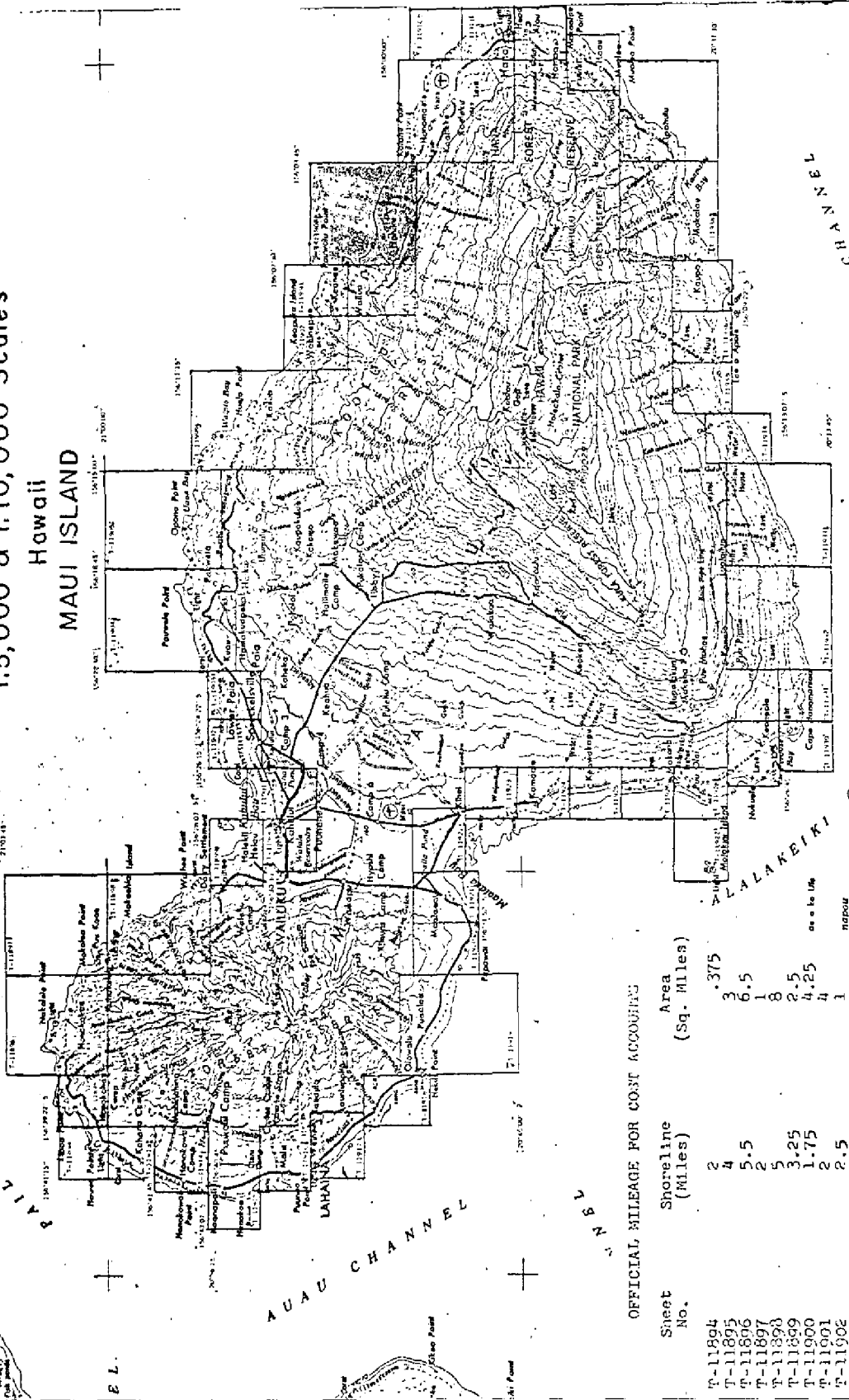
\* Includes a temporary station established.

COMPILATION RECORD	COMPLETION DATE	REMARKS
Along shore area for hydro	April 1962	superseded
Final Compilation	June 1964	



# 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	1
T-11903	2	2
T-11904	5	6
T-11905	4.5	4
T-11906	6.5	10
T-11907	7	7
T-11908	5	6
T-11909	4.7	16
T-11910	.75	.25
T-11911	2.7	2
T-11912	2.7	3
T-11913	2.2	4.5
T-11914	2.2	3
T-11915	2.5	2.2
T-11916	2.5	4
T-11917	2.7	2.6
T-11918	3	2
T-11919	4	6

### OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11923	3	3
T-11924	2.5	3
T-11925	2.5	2.5
T-11926	2.5	1.5
T-11927	1	1
T-11928	3	.04
T-11929	4.5	1.5
T-11930	1.5	3
T-11931	2.5	.25
T-11932	4.5	3
T-11933	5	2.5
T-11934	2.7	1.5
T-11935	2.5	1
T-11936	5	1
T-11937	5	1
T-11938	4.5	1.5
T-11939	2.5	3
T-11940	2.5	2.5
T-11941	2	2

CHANNEL

AU AU CHANNEL

LALAKEIKI

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-11908

Shoreline manuscript T-11908 is one of forty-nine similar maps in this project and covers a part of the coastline of Maui Island, Hawaii. This was a Kelsh project in advance of hydrographic surveys in the area. Field operations preceding compilation included recovery and identification of horizontal control and field inspection. The Kelsh compilation was at 1:10,000 scale from which a cronar positive showing shoreline, alongshore detail and pass points was furnished for preparation of the hydrographers boat sheet. 1:25,000 scale photographs taken October 15, 1960 were used for compilation. Ratio prints were provided for hydro support and field edit. The compilation manuscript is a vinylite sheet 3 3/4 minutes in latitude by 3 3/4 minutes in longitude from which the smooth map was drafted and reproduced on cronaflex. One cronar positive and one cronar negative are provided for record and registry.

FIELD INSPECTION REPORT  
T-11908

Please refer to the Field Inspection Report for Maui Island  
bound with the Descriptive Report for T-11991.





## COMPILATION REPORT T-11908

For additional data pertaining to this survey please refer to the Field Inspection Report bound with T-11991 and the Photogrammetric Plot Report bound with T-11907.

Items 31 thru 36

Please refer to the Compilation Report bound with T-11896.

37. LANDMARKS AND AIDS

There are no landmarks, aids to navigation or aeronautical aids within the compilation limits.

38. CONTROL FOR FUTURE SURVEYS

No control for future surveys was established.

39. JUNCTIONS

Satisfactory junctions were made with T-11992 on the west and with T-11909 on the east. There is no contemporary survey on the south; the Pacific Ocean is on the north.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Hana and Nahiku quadrangles, 1:24,000 scales, editions of 1957.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with nautical chart 4116, 1:250,000 scale, 12th edition, August 17, 1964.

10.  
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:

*S. Hollis*  
*W. Bull*  
Capt. C&GS  
Norfolk Regional Officer

T-11908

48. Geographic Names List:

The Geographic names listed below were furnished by the Washington Office on U.S.G.S. Keanae and Nahiku, Hawaii, 7½ minute quadrangles, 1:24,000 scale, editions of 1957.

Aluea Rocks	Waiaaka Stream
Hanawi Stream	Waihole Gulch
Heleleikeoha	Waioni Gulch
Honoluluunui Bay	Waiohue Bay
Kaelua	Waiohue Gulch
Kahawaihapapa Gulch	
Kalepalehua Gulch	
Kapaula Gulch	
Kapukaulua Point	
Keaa Beach	
Keaaiki Gulch	
Kopiliula Stream	
Kipakaone Bay	
Kuhiwa Gulch	
Makapipi Stream	
Manaalawe Point ? <i>st.</i>	
Manawaikeae Gulch	
Makoloaka Island	
Moko Huki	
Mokupapa	
Mokupipi	
Nakiku	
Opikoula Point	
Pacific Ocean	
Paipaia Point	
Papiha Point	
Paakea Gulch	
Puakea Gulch	

ALL NAMES APPROVED BY  
GEOGRAPHIC NAMES SECTION  
UNLESS OTHERWISE MARKED.

*A. J. Wright*

Ph-6012  
Maui Island, Hawaii  
Surveys T-11907 thru T-11909

19. NOTES FOR THE HYDROGRAPHER

A set of ratio prints has been prepared for use during photo-hydro support. Photography was taken in 1960 and 1961. Color photography, where available, was used as an aid in interpreting offshore details and foul lines.

The positions of the following hydrographic signal sites have been established photogrammetrically for the following surveys.

<u>Signal No.</u>	<u>Description</u>	<u>Photo. No.</u>
T-11907		
0701	High point at offshore end of rock	2511
0702	Lone coconut tree	2511
<p>Additional signals in this area will have to be selected from a launch as the shoreline is along high bluffs.</p>		
T-11908		
0801	Rag on lauhala tree	2956
0802	Offshore corner of concrete slab	2954
0803	Offshore of two lauhala trees	2954
T-11909		
0901	Flag at point of brush	2960
0902	Flag at end of fence	2960
0903	Flag on lone rock	2960
0904	Flag on pinnacle rock	2959
0905	Rag on dead lauhala tree	2958
0906	Rag on lauhala tree	2958
0907	North gable of house	2958
0908	Point of offshore rock	2957
0909	Flag on point	2957
0910	Flag on rock point	2957

FORM 182 (3-61)		PHOTOGRAMMETRIC OFFICE REVIEW		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
50		T. 11908			
1. PROJECTION AND GRIDS L.F.B.		2. TITLE L.F.B.		3. MANUSCRIPT NUMBERS L.F.B.	
				4. MANUSCRIPT SIZE L.F.B.	
CONTROL STATIONS	5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY L.F.B.		6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS) None		
	7. PHOTO HYDRO STATIONS None	8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES None	10. PHOTOGRAMMETRIC PLOT REPORT L.F.B.	
	11. DETAIL POINTS L.F.B.				
ALONGSHORE AREAS (Nautical Chart Data)	12. SHORELINE L.F.B.	13. LOW-WATER LINE L.F.B.	14. ROCKS, SHOALS, ETC. L.F.B.	15. BRIDGES None	
	16. AIDS TO NAVIGATION None	17. LANDMARKS None	18. OTHER ALONGSHORE PHYSICAL FEATURES L.F.B.		
	19. OTHER ALONGSHORE CULTURAL FEATURES L.F.B.				
PHYSICAL FEATURES	20. WATER FEATURES L.F.B.		21. NATURAL GROUND COVER L.F.B.		
	22. PLANETABLE CONTOURS None		23. STEREOSCOPIC INSTRUMENT CONTOURS None		
	24. CONTOURS IN GENERAL None		25. SPOT ELEVATIONS None		
	26. OTHER PHYSICAL FEATURES L.F.B.				
CULTURAL FEATURES	27. ROADS L.F.B.	28. BUILDINGS L.F.B.	29. RAILROADS None		
	30. OTHER CULTURAL FEATURES L.F.B.				
BOUNDARIES	31. BOUNDARY LINES None		32. PUBLIC LAND LINES None		
MISCELLANEOUS	33. GEOGRAPHIC NAMES L.F.B.		34. JUNCTIONS L.F.B.		
	35. LEGIBILITY OF THE MANUSCRIPT L.F.B.	36. DISCREPANCY OVERLAY L.F.B.	37. DESCRIPTIVE REPORT L.F.B.		
	38. FIELD INSPECTION PHOTOGRAPHS L.F.B.		39. FORMS L.F.B.		
	SIGNATURE OF REVIEWER Leo F. Beugnot		SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT Joseph Steinberg		
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 Leo F. Beugnot For. E. L. Williams			SIGNATURE OF SUPERVISOR Joseph Steinberg		

FIELD EDIT REPORT  
T-11908

No formal Field Inspection Report was received. Please refer to the two following Memorandums concerning field edit of this manuscript.



*Memorandum*

*24 11*

DATE: 8 July 1963

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

FROM : Commanding Officer  
USCGC 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 manuscript, 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 which 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 photographing.

8-11905	Edited - No changes
8-11906	Edited - Will be forwarded later
8-11907	Edited - Will be forwarded later
<u>8-11908</u>	Edited - Will be forwarded later
8-11909	Edited - Will be forwarded later
8-11910	Edited - Will be forwarded later
8-11911	Edited - Will be forwarded later
8-11912	Forwarded 9 July
8-11913	Edited - No recommended changes
8-11914	Edited - No recommended changes
8-11915	Edited - No recommended changes
8-11916	Forwarded 9 July
8-11917	Forwarded 9 July
8-11918	Forwarded 9 July
8-11919	Edited - Will be forwarded later
8-11920	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. Seaberg*  
H. J. Seaberg  
Captain, USCGC

*Memorandum*

*1081*  
*C 6314*

TO : Chief, Photogrammetry Division

DATE: January 24, 1964

*C 6314/w*

FROM : Commanding Officer  
USC&GS PATHFINDER  
705 Federal Office Bldg.  
Seattle 4, Washington 98104

SUBJECT: Field Edit data, Project 2103<sup>4</sup> (Ph-6012), Maui Island,  
Hawaii

Manuscripts T-II907 and T-II99I were corrected and sent 1/9/64 with transmittal letter PATH I-64. Manuscripts T-II906, T-II908 through T-II911 and T-II992 are being sent. Shoreline revision was necessary on T-II909 and T-II908 only.

Replying to 6314/in

*for* *S.L. Hollis*  
H. J. Seaborg Capt. USC&GS  
Ship PATHFINDER  
Seattle, Washington

*See*

*You will not receive any notification  
other than this letter re field edit of  
manuscripts with no changes noted. The  
~~transmittal~~ (T-II907) PROPOSEDLY copies that have  
TRANSMITTED ARE WITH NO CHANGES  
SENT BACK TO THE SHIP (T-II908, T-II909, T-II910, T-II911)  
THEY ARE IN GOOD ORDER.*

*Just*  
*1/31/64*



16.

REVIEW REPORT T-11908  
SHORELINE

61. GENERAL STATEMENT

See summary accompanying Descriptive Report

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A visual comparison was made with Registered Planetable survey 3274, 1:20,000 scale dated March 3, 1914.

Shoreline manuscript T-11908 supersedes the prior 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. quadrangles Keanae and Nahiku, Hawaii, 1:24,000 scale, editions of 1957.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheets H-8720-PF-10-3-63-GG and gg and with H-8721-PF-10-4-63. Two islands shown on boat sheet H-8720-PF-10-3-63-GG at latitude  $20^{\circ} 49' 54''$  longitude  $156^{\circ} 06' 12''$  and at latitude  $20^{\circ} 49' 55''$  longitude  $156^{\circ} 05' 55''$  are not visible on photograph 61W 845 and 61W 846 of September 24, 1961 taken at 0912 with the stage of tide at 0.2 ft. above MLLW. \*

maybe part of  
breakers symbol  
← 0805dg

The shoreline of the boat sheets and the manuscript are in good agreement.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with nautical chart 4116, 1:250,000 scale, August 17, 1964.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

\* INFORMATION REPORTED TO HYDRO BRANCH BY MEAN OF  
A "NOTES TO VERIFIER PAGE" ON AUG. 16, 1966

Reviewed by:

Leo F. Bengt

Approved by:

S. Hollis

J. Bull, Director, Atlantic Marine Center

Approved by:

Charles Leman

Chief, Cartographic Branch 568

L. J. Woodcock

Chief, Photogrammetry Division

John D. Boyer 2/21/68

Chief, Chart Division  
Marine

\_\_\_\_\_  
Chief, Operations Branch



NOTES TO VERIFIER  
H-8720 and H-8721  
(Comparison with T-11908)

The following information is included under side heading  
64 of the final review report for T-11908:

Comparison was made with a copy of boat sheets H-8720  
(PF-10-3-63-GG and gg) and with H-8721 (PF-10-4-63.  
Two islands shown on H-8720 at latitude  $20^{\circ}49'54''$  and  
longitude  $156^{\circ}06'12''$ , and latitude  $20^{\circ}49'55''$  and longitude  
 $156^{\circ}05'55''$  are not visible on photographs 61-W-845  
and 846 of September 24, 1961, taken at 0912 with a  
stage of tide at 0.2' above MLLW.

*MBB*  
*W.O. Review Unit*

### RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11908

## 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]