Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

·	
	Shoreline(Photogrammetric) Office No. T-11823
	LOCALITY
State Hawa	ii
Jaie	
General locality	Molokai
Locality	
	19 61 - 1969
	CHIEF OF PARTY
Allen L. Po	well, Director, AMC
LIE	BRARY & ARCHIVES
DATE	

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

	Т	- 11823			
PROJECT NO. (II):	······································				
PH-6201					<u>. </u>
FIELD OFFICE (II):			CHIEF OF PARTY		
Honolulu, Hawaii			H. J. Seab	org	
PHOTOGRAMMETRIC OFFICE (III):			OFFICER-IN-CHAF	RGE	
Atlantic Marine Cente	r		Allen L. F	owell, D	irector, AMC
INSTRUCTIONS DATED (II) (III):					
Amendment I Amendment II Amendment III	April 25, 1962 May 31, 1962 December 14, 196 February 20, 196 January 8, 1964	III 2 III			
METHOD OF COMPILATION (III):					
Kelsh Instrument					
MANUSCRIPT SCALE (III):		STEREOSCO	PIC PLOTTING INS		LE (III):
1:5,000		i Dantom	l:3,00 caph Scale		
DATE RECEIVED IN WASHINGTON OFF	ICE (IV):		RTED TO NAUTICA		NCH (IV):
APPLIED TO CHART NO.		DATE:		DATE REGIST	ERED (IV):
GEOGRAPHIC DATUM (III):			VERTIGAL DATE	ራ የተ ሽት 	
			MEAN SEALE	L EXCEPT AS F	
Old Hawaiian			Elevations shown		-
			1.0., %;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	— ĝe()≰rmean lower	low water
REFERENCE STATION (III):	·		<u> </u>	-	
KAUHAKO (HGS), 1890					
LAT.:	LONG.:	 ;	X ADJUSTED	 ,	
21° 11' 24.761"	156° 58' 15.155"		UNADJUSTED		
PLANE COORDINATES (IV):			STATE		ZONE
\	· u _	1			
Y= 311,218.73	x = 396,355.62		Hawaii		2
ROMAN NUMERALS INDICATE WHETHE OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNI					

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):		DATE: January - October
Leonard F. VanScoy		1962
MEAN HIGH WATER LOCATION (III) (STATE DATE	AND METHOD OF LOCATION):	
August 30, 1962 by field insp Compilation by Kelsh Instrume		·
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		2-26-65
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		3-2-65
CONTROL PLOTTED BY (III):		DATE
L. L. Graves		5-4-65
CONTROL CHECKED BY (III):	•	DATE
. S. Place		5-4-65
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ENSION BY (III):	DATE
H. P. Eichert		December 1964
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	D. N. Williams	
	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (111):		DATE
J. L. Harris		6-14-65
SCRIBING BY (III):		DATE
B. L. Barge	·	11-25-69
Field Edit R. E. Scribing & Stick Up: B. Wi	Harris Smith Lson	6-14-64 10-21-69 12-29-69
Field Edit by: R. L. Newson	n	December 1968

DESCRIPTIVE REPORT - DATA RECORD

ERA (KIND OR SOURCE) (III):

	PH	OTOGRAPHS (III)				
NUMBER	DATE	TIME	SCALE	S.	TAGE OF TI	DE
61 W 780 thru 783	9-24-61	08:30	1:15,000	0.1' a	above MI	J.L.W
		TIDE (III)	ited from tabl		redicted	l tides Diurr
		IIDE (III)				AAWAR PIUTU
				RATIO OF RANGES	MEAN RANGE	RANGE
EFERENCE STATION:	Honolulu, Ha				1.2	1.9
BORDINATE STATION:	Waimanalo				1.1	1.8
UBORDINATE STATION:						
ASHINGTON OFFICE REVIEW BY	"Leo F. Beugnet	Alantic Mari	ne Center	DATE: Pugust	1970	
PROOF EDIT BY (IV):	<i>J.</i>			DATE:		
			RECOVERED:	IDENTIFIE	D:	
IUMBER OF TRIANGULATION STA	TIONS SEARCHED FOR	R (III): 5	5	0		

2

REMARKS:

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

T-11823

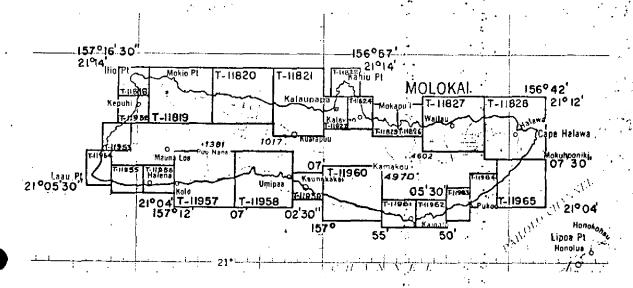
COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for Hydro	June 1967	Superseded
Field edit applied compilation complete	July 1969	
		·
,		

5

PROJECT PH-6201

SHORELINE MAPPING

15,000 AND 1:10,000 SCALES MOLOKAI ISLAND HAWAII



Official Mileage for Cost Accounts

Sheet No.	Shoreline Lin. Mi.	Area Sq. Mi.	Sheet No.	Shoreline Lin. Mi.	Area Sq. Mi.
11818 11819 11820 11821 11822 11823 11824 11825 11826 11827 11828	46643133369	46643133369	11952 11953 11954 11955 11956 11957 11958 11959 11960 11961 11963 11964 11965	33233653636343333	უ ოგოო6 5ო6 ო 4 ოოი
.	,		Total	98	98

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-11823

Shoreline survey T-11823 is one of twenty-five similar surveys in Project PH-6201. These surveys cover the entire coast of Molokai Island. This survey covers a part of the north coast in the vicinity of Kalaupapa.

Field work preceding compilation consisted of identification of horizontal control, shoreline and field inspection, identification of landmarks for charts, and selection of photo-hydro signal sites.

Compilation was at 1:5,000 scale by Kelsh Instrument, using the photography of September 24, 1961. Cronaflex copies of the manuscript, along with ozalid copies and specially prepared photographs, were provided for transfer of the shoreline to the boat sheet, location of photo-hydro signals, and field edit use.

The manuscript was a vinylite sheet 2 minutes 30 seconds in latitude by 2 minutes in longitude. The survey was field edited in December 1968. After application of field edit data, the manuscript was scribed and reproduced on cronaflex. Final review was in the Atlantic Marine Center in August 1970. A cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT

Map Manuscripts T-11952 thru 11965 T-11818 thru 11828

Project PH-6201

January - October 1962

2. AREAL FIELD INSPECTION

The area covered by this report encompasses the whole of the island of Molokai. This is the fifth largest of the group of islands that form the State of Hawaii. The island was originally formed by the eruption of two volcanos. One was located somewhere near the east end of the island and the other somewhere near the west end. Following these eruptions the numerous deep drainages were created by stream errosion and the ocean created the great cliffs along the north coast. A later eruption formed the Makanalua Peninsula on the north central coast. The Kauhako Crater remains as evidence of this eruption. The highest peak is Kanakou which is 4958 feet above sea level.

The climate of the island varies considerably depending on the elcvation and location in relation to the prevailing trade winds. The mean annual temperature at sea level is about 74 degrees. The temperature seldom varies more than 10 degrees except at the higher elevations. The yearly rainfall varies from about 7 inches around Kaunakakai to over 150 inches in the high mountain sections of the northeast.

The only port in use on the island is located at Kaunakakai. A small wharf connected to the shore by a long mole is used to load and unload barges, and serve small connected and private boats. At one time a rail-road connected the wharf to the area now known as Hoolehua Homesteads. It was abandoned soon after completion as the sugar plantation it was constructed to serve was a failure. The economy of the island is almost wholly dependant on the growing of pineapple and cattle ranching.

The wharf located at Kolo was used for a time to load pineapple from the Maunaloa area. It was later abandoned and since that time has been partially destroyed by fire. The wharf located at Komalo is now in poor condition and seldomed used except by an occasional small fishing or pleasure boat. The wharf located at Pukoo is no longer in evidence. Located at Maleolon is a small harbor protected by a breakwater. This is a private harbor and is used to load sand and cinder barges for shipment to Oahu. A small private airstrip is located along the easterly breakwater.

Located on the Makanalua Peninsula is the small settlement of Kalaupapa. The settlement is maintained by the State of Mayaii, Department of Health for the treatment of Hansen's Disease (Lepersey). Special permission must be obtained from the state before visiting this area. No facilities for serving the public are permitted on the peninsula. The U.S. Coast Guard maintains an isolated light station at the northern tip of the peninsula. The area is served by limited airplane service and supplies are brought in by barge at infrequent intervals. A small wharf protected by a short breakwater is located at the settlement. This area is isolated from the remainder of the island except for a foot trail that leads down the steep rocky cliffs from the top of the pali southwest of the settlement.

Shoreline around the island vary from the almost vertical rock cliffs along most of the north and east coast, to the narrow and relatively flat coastal areas along the south coast. Most of the south coast is protected by an offshore reef. A few sandy beaches are located along the south and west coasts. Most of the north coast is accessable only by boat and any landings there should be attempted with extreme caution.

Photography was adequate for the identification of horizontal control and shoreline inspection for most of the island. A few sections of the shoreline along the northeast coast of the island were in complete shadow from the most vertical cliffs.

The shoreline for the entire island was visually inspected an the mean high vater noted on the field photographs. The shoreline along the north coast except for the Makamalua Peninsula was inspected by cruising offshore in a small boat. The work was difficult due to the small size of the boat, the rough seas, and strong winds. A few lendings were made on the more prominent points along the northeast coast. The remainder of the island was inspected by walking the shoreline in the more accessable areas, and by observations from vantage points along bluffs and cliffs where the shoreline could not be otherwise visited. Scattered sections of the shoreline along the south coast were obscured by overhanging Keawe trees and dense growths of Mangrove trees.

3. HORIZONTAL CONTROL

(a) The following described intersection stations were located by traverse or triangulation as nautical aids, aeronautical aids, and landmarks.

Molokai Lighthouse Molokai Airport Beacon Waihuna, Aero Beacon Red Light Kaulapuu, Aero Beacon Red Light Molokai VOR (MKK)
Puu Apalu, Tank
Ilio Pt., Coast Guard Loran Mast
Waiahewahewa, Aero Beacon Red Light
Laau Pt. Light
Kaunakakai Harbor, Entrance Hange, Front Light
Kaunakakai Harbor, Entrance Range, Rear Light

- (b) No datum adjustments were made by the field party.
- (c) WAIELI 2, 1945 was the only control station identified that was not established by the Coast and Geodetic Survey. This station was established by the Territory of Hawaii and can be considered as third order accuracy. The station was destroyed before it could be tied to the 1962 work. HELEMA, 1962 which is located about a half mile west of this station was later identified. All other control stations identified were established by the Coast and Geodetic Survey or tied to by the geodetic party during the 1962 season. Many of the old stations could not be recovered and new stations had to be established to meet the control requirements.
- (d) Control stations were positively identified in all areas indicated on the control diagram.
- (e) All control stations within the limits of the project except for a few along the inaccessable northeast coast of the issland were searched for. Fart of this recovery was performed by the geodetic party located on the island. All station searched for were listed on Form 526 which was submitted to the Honolulu District Officer. A complete list of all stations reported lost on Form 526 would have to be obtained from the Honolulu District Officer or the Division of Geodesy. No stations that were listed as lost were identified for use in the plot.
- (g) The quality of identification of each station or substitute station has been indicated on the control station identification card. None of the identification was considered to be sub-standard.

4. VERTICAL CONTROL

The only vertical control requirement was the recovery of all tidal bench marks in the project area and identification of one mark in each of the groups.

All tidel bench marks listed at Pukoo, Kamalo, Kaunakakai, and Kolo were searched for. A total of 18 bench marks were searched for. All marks were listed on Form 685 which was submitted to the Honolulu District Officer.

A total of 13 U, S. Geological Survey bench marks were searched for. These marks were used in conjunction with the tellurometer traverse work on the island and for use in determining the elevation of landmarks. All marks were listed on Form 685 which was submitted to the Honolulu District Officer.

5. CONTOURS AND DRAINAGE

Contours not applicable

Drainage is self evident on the photographs. All streams except for a few in the larger valleys of the northeast coast and near the east end of the south coast are intermittent. During the wet season there are dozens of waterfalls cascading from the tops of the cliffs and rims of the valleys of the northeast coast. Marsh areas have been indicated on the field photographs.

6. WOODLAND COVER

The mountainous areas of the northeast part of the island is covered with a dense growth of native ferns and hardwoods. A large stand of planted softwoods is located along the top of the pali in the north central part of the island. Keawe trees which were introduced to the island about 100 years ago cover most of the remainder of the island except for the cultivated areas. Along the mud flats of the south coast there are scattered stands of introduced Mangrove trees.

7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high water line was indicated on the photographs. Along some sections of the northeast coast the shoreline was obscured due to the shadows created on the photographs from the almost vertical cliffs. In some areas of the south coast the shoreline was partially obscured by low overhanging Kiawe trees. In most cases this overhang was less than 10 meters and the approximate correct location was indicated on the photographs. Also along the south coast there are scattered stands of Mangrove trees. In these areas the mean high water line was indicated as apparent shoreline.

The shoreline along the north, east, and small areas of the west and southwest coast contain many areas of alongshore rocks, projecting reefs and ledges, and almost vertical bluffs. These features combined with a normally heavy serf breaking along the shore tend to confuse the location of the mean high water line on the photographs.

Where possible especially along the beach areas and the more accessable sections of the coast the location of the mean high water line was determined by measurements to near by objects.

- (b) The low water line was not indicated on the photographs.
- (c) Where possible the character of the foreshore was indicated on the photographs.
- (d) The north, east, and sections of the west and southwest coast is boardered by rocky cliffs. In some cases these cliffs are over 2000 feet high. Along most of the south coast, sections of the west coast, and the Moomomi area the land has a more gradual slope with a small relatively flat area adjacent to the coast.
- (e) The only unnatural features to be found in the project area were located at Kalaupapa, Kamalo, Kaunakakai, Kolo, and Haleolono. All information regarding these features was indicated on the field photographs.
 - (f) Not applicable
- (g) Along the south shore there are the remains of many fishponds. The stone walls for some of these have been completely leveled and for most of the others large sections of the walls have been leveled. The location of these fishponds is apparent on the photographs.

8. OFFSHORE FEATURES

Offshore rocks are located along many areas of the north, east, and sections of the west and southwest coast. Most of these rocks that are visible on the photographs are adjacent to the shore. In these areas it is probable that there are many rocks that are not visible on the photographs but are close enough to the surface of the water to consider the foreshore as being foul with submerged rocks. The height of many of the rocks along the shore were estimated at the time the shoreline was inspected.

A reef about 0.5 to 1.0 mile offshore is located along most of the south coast. Between the reef and the shore there are scattered areas of sand and many coral heads that project at low water.

9. LANDMARKS AND AIDS

- (a) All charted landmarks were investigated by the field party. A total of 13 old landmarks were deleted from the charts and four old landmarks were retained. A total of 11 new landmarks were selected for charting. The old landmarks which were to be deleted were indicated on the sections of the charts on which they appeared. These sections of the charts will be submitted with the field records. All old landmarks that were retained and the new landmarks selected for charting were listed on Form 567, and the elevation for each landmark was determined by the field party.
 - (b) No interior landmarks were seected for charting.

(c) The geographic positions for the following charted aeronautical aids was determined by traverse or triangulation during the 1962 field season.

Molokai, Airport Beacon Waiahewahewa, Aero Beacon Red Light Waihuna, Nero Beacon, Red Light Kualapuu, Aero Beacon, Red Light

The geographic position of one new aeronautical aid selected for charting was determined during the 1962 field season.

Molokai VOR (MKK)

All aeronautical aids to be charted were listed on Form 567 and the elevation for each aid was determined by the field party.

(d) The geographic positions of the following list of aids to navigation was determined by the field party during the 1962 season.

Molokai Lighthouse

Laau Pt. Light

Ilio Pt., Coast Guard Loran Mast

Kaunakakai Harbor, Entrance Range, Front Light

Kaunakakai Harbor, Entrance Range, Rear Light

All nautical aids to be charted were listed on Form 567 and the elevation for each aid was determined by the field party.

- (e) Not applicable
- 10. BOUNDARIES, MONUMENTS, AND LINES

Not applicable

11. OTHER CONTROL

No recoverable topographic stations were established.

In all areas where identifiable objects could be found photo hydro sites were selected. In some cases it will be necessary to locate a more suitable location for the hydrographic signals from the selected photo hydro sites.

12. OTHER INTERIOR FEATURES

All roads in the project area were classified on the field photographs in compliance with the project instructions.

All public buildings with their function was indicated on the field photographs.

The main airport serving the island is located south of the Hoolehua Homestead area in the central section of the island. A small airport for use by small aircraft is located on the Makanalua Peninsula. A small private airstrip is located at Haleolon near the southwest end of the island.

No bridges or overhead cable crossings over navigable water are located in the project area. There are no submerged cables connecting the island with other areas.

13. GEOGRAPHIC NAMES

Not Applicable

OCT 3 0 1962

Capt., C & G S V

Honolulu District Officer

Respectfully submitted:

Leonard F. Van Scoy

Supervisory Survey Technican

Unit Chief, C & G S

Aerotriangulation Report PH-6201 Molokai, Hawaii Strip 4

21. Area Covered

This report covers T-sheets 11821 and 11823 through 11828 along the Northeastern shore of Molokai Island.

22. Method

A horizontal bridge was run on the C-8 stereoplanigraph to provide control for compilation using photographs 62-W-1850 through 1865. The adjustment on the IBM 650 utilized four control stations with one station as a check. A supplemental straight line adjustment was made in the area of Strips #6 and #7.

23. Adequacy of Control

The horizontal control provided complied with project instructions in quantity but not in quality. Station Kikipua 2, 1962 was identified by only one sub-station and this point could not be positively identified. At station Mokohola 1962 two sub-stations plus the home station for Mokohola HGS (old station) were identified. Of these three points only Mokohola HGS (old station) was of any quality and it was doubtful. The adjustment of this strip holds all control within the accuracy of National Standards, however, tie points to Strips #6 and #7 plus a mathematical strain in the adjustment indicates a possible bad adjustment. In view of the above facts, it is requested that stations Kikipua 2, 1962 and Mokohola 1962 be re-identified and that T-sheets in this area be treated as preliminary sheets.

24. N.A.

25. Photography

The photography was adequate in coverage and overlay, however, the time of photography (09:45) along with the steep cliffs in the areas caused large and deep shadows. These shadows prevented picking points in many areas and caused considerable trouble in joining models.

26. In attempting to drop pass points for control of flight 62-W-1850 through 1865 it was found that due to shadows and extreme elevations only a few common points could be provided and these were along the shoreline. Since these points are insufficient to allow detailing by machine methods the shoreline must be delineated by graphic methods and additional points must be pricked by the hydro party.

Submitted by,

John D. Perrow, Jr.

Cartographer

Approved by

Henry P. Eichert

Chief, Aerotriangulation

Section

PH-6201 Molokai, Hawaii Strip 4

NOTES TO COMPILER

This strip was recomputed on the adjusted control which is now available. The points in the northeastern area moved only 2-3 feet and the junction with Strip #1 showed no appreciable change. The new adjusted positions should be used in preference to those provided earlier.

Photogrammetric Plot Report

Project 21044

Molokai, Hawaii

December, 1964

21. Area Covered

This report pertains to the remainder of the Island of Molokai. It covers surveys T-11818 thru T-11824.

22. Method

Three strips were bridged by analytic aerotriangulation. Strips 6 and 7 were at a scale of 1:15,000 and strip 8 at 1:25,000.

During the processing of the data for strip 8, distortions were evident at the eastern terminal. Model 2169-70 was eliminated from the bridge, and model 2170-2171 appeared to have distortions also in the center and north side although the two tie points on the south side of the model agreed well with strips 4 and 6. Fortunately these models were not needed as the area is adequately covered by strips 6 and 7.

23. Adequacy of Control

The failure of horizontal points in strip 8 to hold together beyond point 86110 and 11 was attributed at first to a possible datum difference. This could not be proved. When additional measurements and a study of the cantilever output indicated distortions in the bridge, this idea was discarded.

Although control point 10100 would not hold well with 86110 and 11 in strip 8, when 10100 was used as a terminal in strip 7, tie point 10403 agreed reasonably well with strip 8.

Control complied with project instructions and was adequate.

24. Supplemental Data

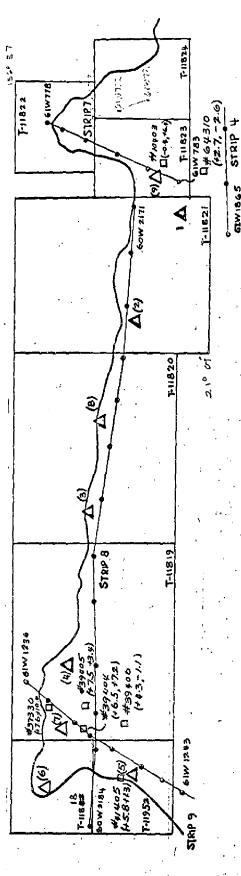
None

25. Photography

Photography was adequate with regard to coverage, overlap, and definition.

Respectfully submitted,

Henry P. Eichert, Acting Chief, Aerotriangulation Section



AEROTRIANGULATION SKETCH MOLOKAL ISLAND, HAWALL PROJECT 21044

LEGEND

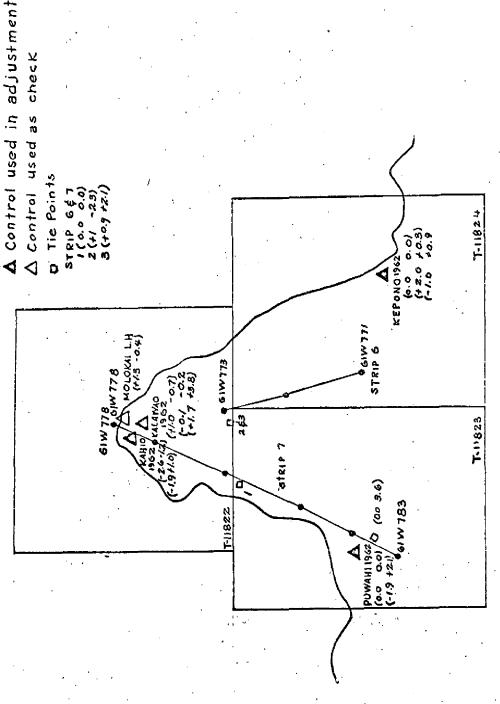
USED IN ADJUSTMENT CONTROL

USED AS CHECK CONTROL

TIE POINTS

(2) POHAK UNUI, 1888 (40.1,-1.2) SUB PLACE, +0.8) SUB PL BC 10.0,-3.3)
(3) MOO MOMI, 1962 SUB RAC-16,2.7) SUBPL BC 10,-5.3)
(4) LALMA (KAA) 1926 SUB PLACE, 4.9)
(5) POU O KAIKA, 1915 SUB PLACE, 2.1) SUBPL PCC, 40.1)
(6) SAND 1950 (SUBPLACE, 17.9) SUBPLACE, 16.8)
(7) KAEO 1926 SUBPLACE, 17.9) SUBPLACE, 16.9)
(8) PUU KAPELE, 1888 SUBPLACE, 1.2) SUBPLEC, 14.5.0) (1) HAHAEULA 2, 1962 S.b Pt.A (10.3, 10.9) S.b Pt.B (12.8,-1.1)

30) POWAHI 1962 Subflation, 20.0) 30). As for SAND 1950 more considered poor at the time of plate measurement



LEGEND

AEROTRIANGULATION SKETCH MOLOKAI ISLAND HAWAU PROJECT 21044



DESCRIPTIVE REPORT CONTROL RECORD

SOURCE OF INFORMATION (INDEX)
p.27
D.27
,
D• 6
p. 6
D. 5
DATE
4-26-65

COMPILATION REPORT

Map Manuscript T-11823

Project 21044

Items 31 thru 33:

Refer to the Compilation Report for T-11822.

34. Contours and drainage:

Contours are not applicable.

The only drainage field inspected is Waiahanau Stream located south of Kalaupapa.

Items 35 and 36:

Refer to the Compilation Report for T-11822.

37. Landmarks and aids:

Two aids and one landmark are shown on this manuscript.

Forms 567 are submitted.

38. Control for future surveys:

None.

39. Junctions:

Satisfactory junction was made with T-11821 to the west, with T-11822 to the north and with T-11824 to the east. There is no contemporary survey on the south.

40. Horizontal and vertical accuracy:

Items 46 and 47:

Refer to the Compilation Report for T-11822.

Approved:

Lee F. Beugnet for P. A. Stark, CDR, C&GS Portland Field Officer Submitted:

James L. Harris Cartographer GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6201

T-11823

HAWAII (title)

· KALAUPAPA

MAKANALUA PENINSULA

MOLOKAI

PACIFIC OCEAN

PUWAHI

WAIAHANAU STREAM

Approved by: a. J. Wraight (Chief Geographer)

Frepared by: F.W. Pickett (Carto. Technician)

T-11823

49. NOTES FOR THE HYDROGRAPHER:

Refer to Field Edit Ozalid.

The following list of Hydro. Signal Sites with descriptions were furnished by the Field Inspector, dated Aug. 30, 1962.

These are shown on the manuscript and cronapaque ratio prints for your use, if they are yet in existence.

2301 - CHURCH TOWER

2302 - WEST GABLE, SMALL YELLOW BUILDING

FORM C&GS-1002				S. DEPARTMENT OF COMMERCE
(9-66)	PHO	TOCHANNET	RIC OFFICE REVIEW	ESSA COAST AND GEODETIC SURVEY
	rno		11823	
· .				
I. PROJECTION AND GRIDS	2 TITLE		3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
Х	Х	·	Х	χ
CONTROL STATIONS				
5. HORIZONTAL CONTROL STA THIRD-ORDER OR HIGHER A	TIONS OF CCURACY	6. RECOVERAB	LE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY	7. PHOTO HYDRO STATIONS
χ		OF LESS TH (Topographic	stations) X	None
8. BENCH MARKS	9. PLOTTING (F SEXTANT	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
None	None	!	χ	None
ALONGSHORE AREAS (Neutice)	Chart Data)		<u> </u>	
12. SHORELINE	13. LOW-WATER	LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
	,,		,,	
X	None		X	None
16. AIDS TO NAVIGATION	17. LANDMARK	S	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
χ	χ		χ	X
PHYSICAL FEATURES				
20. WATER FEATURES		21, NATURAL	GROUND COVER	22. PLANETABLE CONTOURS
lχ		Not An	plicable	Not Applicable
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS	<u>^</u>	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
Not Applicable	Not Appl	icable.	None	х
CULTURAL FEATURES				
27. ROADS	28. BUILDINGS		29. RAILROADS	30. OTHER CULTURAL FEATURES
х	х		None	х
BOUNDARIES				
31. BOUNDARY LINES			32. PUBLIC LAND LINES None	
MISCELLANEOUS				
33. GEOGRAPHIC NAMES		34. JUNCTIONS	S	35. LEGIBILITY OF THE
,,		1	ν	
χ			χ	χ
36. DISCREPANCY ÖVERLAY	37, DESCRIPTI		38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
None	X		X	X
40. REVIEWER			SUPERVISOR, REVIEW SECTION	ON OR UNIT
James L. Har	ris			
41. REMARKS (See attached shee	<i>t)</i>			
FIELD COMPLETION ADDITION	S AND CORREC	TIONS TO THE M	ANUSCRIPT	
script is now complete exc	furnished by the	e field complet der item 43.		to the manuscript. The manu-
A. L. Shands	Dail 7/7/	/69	SUPERVISOR Albert	c. Rauck. J.
Reviewer: R.E.Smi			! Albert C. Rauck,	Jr.
43. REMARKS			1	
Field Edit applied	d from:			
1				
Field Phot				
Field Edit	ozalid T	-TT872		

Field Edit Report To Accompany T 11823

USC&GSS McARTHUR

Ronald L. Newsom CDR, USESSA Commanding Officer

51 METHODS

Field Edit on T 11823 was done in conjunction with hydrography on boatsheets AR 5-1-68, H 8976 and AR 10-2-68, H 8975. The shoreline was inspected from launches and skiffs. Field edit information was shown on one photo #61W781 in violet ink. Other field edit information is shown directly on the field edit ozalid copy of T 11823 in violet ink.

52 ADEQUACY

Manuscript T 11823 was completely adequate for a hydrographic survey.

54 RECOMMENDATIONS

None

REVIEW REPORT T-11823

SHORELINE

AUGUST 25, 1970

61. GENERAL STATEMENT

See Summary, which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

There were no prior registered surveys available for comparison purposes at the time of final review.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with USGS KAUNAKAKAI, HAWAII, 9.5 \times 7.5 minute quadrangle, 1:24,000 scale, dated 1952. The two surveys are in good general agreement.

The small island shown on the quadrangle at latitude 21°11.7', longitude 156°59.4' is not visible on the photographs that cover the area.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8976, AR-5-1-68. There are no conflicts between the surveys.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with Chart 4120, 3rd edition, October 14, 1968. Because of its scale the chart is necessarily generalized. No conflicts between the surveys were noted.

ADEQUACY OF RESULTS AND FUTURE SURVEYS 66.

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

Because of the lack of conflicts with other surveys, no comparison print is bound with this report.

Reviewed by:

Leo F. Beugnet Cartographer

Approved by:

Allen L. Powell, RADM, USESSA

Director, Atlantic Marine Center

Approved by:

Jack E. Huth

Photogrammetric Branchpy Photogrammetry Division

U.S. DEPARTMENT OF COMMERCE COAST AND GEC IC SURVEY

T-11823

June 14.

NONFLOATING AIDS OR LANDMARKS-FOR-CHARTS

TO BE CHARTED STRIKE OUT TWO

Portland, Oregon

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by James L. Harris

CHARTS Chief of Party. 4120 4139 OFFEHORE CHAR INSHORE CHART HARBOR CHART 12-2-6 T-11823 8-24-62 LOCATION P. A. Stark LOCATION AND SURVEY No. Photo = Hawaii DATUM P10 = 15,112 14.373 414.6 D. P. METER LONGITUDE * POSITION 156 50 35.657 1096.6 35,950 D.M. METERS &X15 LATITUDE # 21 11 21 11 0000 • BIGNAL 10 DESCRIPTION Range Front Light Kalaupapa Range Rear Light Kalaupapa CHARTING STATE

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted The data should be landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. rmation under each column heading should be given. red for the charts of the area and not by individual field survey sheets. ATE SECONDS AND METERS

USCOM! 16234-P61

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U.S. DEPARTMENT OF COMMERCE COAST AND GEG TIC SURVEY

MONELOATING AIDS OR LANDMARKS FOR CHARTS

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<u> 19 क</u>

June 14

T-11823

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (doloned-from)-the charts indicated. TO BE REVISED...

James L. Harris

The positions given have been checked after listing by

STRIKE OUT TWO

TO BE CHARTED

Portland, Oregon

CHARTS Chief of Party. 41.16 DATEMORE CHART P. A. Stark Hawaiihn T-11823 1965 LOCATION DATE OF LOCATION AND AND AND AND No. Photo DATUM **P10** D. P. METERS 15.542 448.3 LONGITUDE * POSITION 755.7 156 58 ۰ D.M. METERS 24.57 LATTTUDE. 21 11 0 BIGNAL Cross HT=19(419) DESCRIPTION Concrete Cross CHARTING CROSS STATE

16234-P61 The data should be ints form shall be prepared in accordance with hydrographic Manual, Publication 2012, 352; 1-72; 2-72; 7-10 to 24 inclusive; and 126; 77. Inclusive; and respected in accordance with reference of the shall show both the old and new positions. Information under each column heading should be given. greed for the charts of the area and not by individual field survey sheets.

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