Original

11956

11956

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. ..... Office No. T-11956

LOCALITY

State HAWAII

General locality MOLOKAI

Locality HALENA

1960 - 1967

CHIEF OF PARTY

H. J. SEABORG

P. A. STARK, PHOTOGRAMMETRIC OFFICE

LIBRARY & ARCHIVES

DATE .....

USCOMM-DC 5087

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD
T - 11956

PROJECT NO. (II):

PH-6201

FIELD OFFICE (II): HONOLULU, HAWAII	CHIEF OF PARTY: H. J. SEABORG UNIT CHIEF: L. F. VAN SCOY
PHOTOGRAMMETRIC OFFICE (III): PORTLAND, OREGON	OFFICER-IN-CHARGE: P. A. STARK

INSTRUCTIONS DATED (II) (III):

	APR. 25, 1962	II
	MAY 31, 1962	III
AMENDMENT I:	DEC. 14, 1962	III
AMENDMENT II:	FEB. 20, 1963	III
AMENDMENT III:	JAN. 8, 1964	III

METHOD OF COMPILATION (III):

KELSH INSTRUMENT

MANUSCRIPT SCALE (III): 1:5000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:3000 PANTOGRAPH SCALE: 1:5000
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~~ High Water EXCEPT AS FOLLOWS: X *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):

THERE IS NO CONTROL STATION WITHIN THE LIMITS OF THIS MANUSCRIPT.

LAT.:	LONG.:	☐ ADJUSTED ☐ UNADJUSTED

PLANE COORDINATES (IV): Y = X =	STATE	ZONE

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.

3. 2

FORM C&GS-181b
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): L. F. VAN SCOY	DATE: JANUARY - OCTOBER 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): SEPT. 20, 1962 BY FIELD INSPECTION. COMPILATION BY KELSH INSTRUMENT.	
PROJECTION AND GRIDS RULED BY (IV): F.E.B.	DATE 12-12-62
PROJECTION AND GRIDS CHECKED BY (IV): W. MASULA	DATE 12-12-62
CONTROL PLOTTED BY (III): D. N. WILLIAMS	DATE 2-4-64
CONTROL CHECKED BY (III): R. H. MEYER	DATE 2-4-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): NONE RECEIVED.	DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III): PLANIMETRY L. L. GRAVES	DATE 2-12-64
CONTOURS NONE	DATE
MANUSCRIPT DELINEATED BY (III): SMOOTH DRAFT: C. C. HARRIS	DATE 2-20-64
SCRIBING BY (III): STICK-UP: C. C. HARRIS	DATE 4-3-64
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): ROUGH DRAFT: C. C. HARRIS ADVANCE: J. L. HARRIS	DATE 2-14-64 6-9-64
REMARKS:	

4. 3

FORM C&GS-181c
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&GS SINGLE LENS "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
61 W 702 THRU 704	9-23-61	08:30	1:15,000	0.1' ABOVE M.L.L.W.
RATIO PRINTS OF ABOVE AT 1:5000.				
60 W 2422 AND 2423	10-8-60	08:25	1:25,000	1.2' " "
RATIO PRINT OF 60 W 2422 AT 1:5000.				
COLOR PHOTOGRAPHY				
60 W 2679 THRU 2682	10-11-60	08:20	1:10,000	1.9' " "
				COMPUTED FROM PREDICTED TIDE TABLES

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	DIURNAL ~~SPRING~~ RANGE
REFERENCE STATION: HONOLULU, HAWAII		1.2	1.9
SUBORDINATE STATION: KOLO		1.3	2.0
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, Atlantic Marine Center — DATE: Nov. 1970

PROOF EDIT BY (IV): — DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 7 — RECOVERED: 1 — IDENTIFIED: 0

NUMBER OF BM(S) SEARCHED FOR (II): NONE — RECOVERED: — IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): 1

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): NONE

REMARKS:

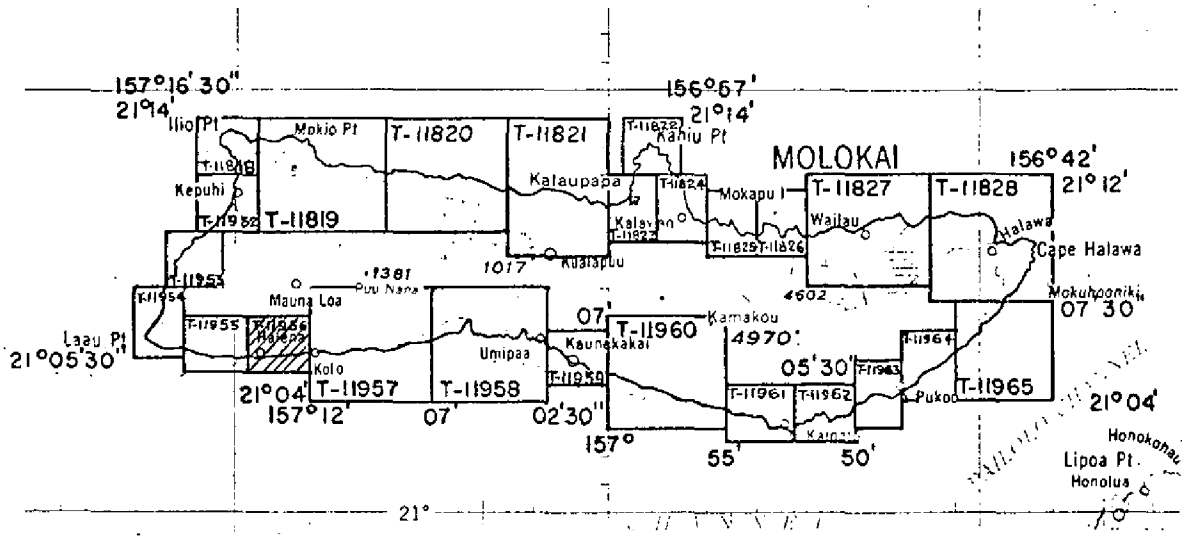
COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro	April 1964	
Final Review	Nov. 1970	

PROJECT PH-6201

SHORELINE MAPPING

1:5,000 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	4	4	11952	3	3
11819	6	6	11953	3	3
11820	6	6	11954	2	2
11821	4	4	11955	3	3
11822	3	3	11956	3	3
11823	1	1	11957	6	6
11824	3	3	11958	5	5
11825	3	3	11959	3	3
11826	3	3	11960	6	6
11827	6	6	11961	3	3
11828	9	9	11962	4	4
			11963	3	3
			11964	3	3
			11965	3	3
			Total	98	98

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-11956

Shoreline survey T-11956 is one of twenty-five similar surveys in project PH-6201. These surveys cover the entire coast of Molokai. This survey covers a part of the south coast in the vicinity of Halena. See page 5 of the Descriptive Report for the area within the project.

Field work preceding compilation consisted of identification of horizontal control, shoreline and field inspection and selection of landmarks for charts.

Compilation was at 1:5,000 scale by Kelsh Plotter using the photography of October 1960 and September 1961. Cronaflex copies of the manuscript along with specially prepared photographs and ozalids were subsequently provided for transfer of the shoreline to the boat sheet, photo-hydro support and field edit use.

Field edit of the manuscript was accomplished in conjunction with hydrography on boat sheet H-8969 (AR-10-3-67).

The compilation manuscript was a vinylite sheet 2 minutes in latitude by 2 minutes 30 seconds in longitude. After application of field edit data the manuscript was scribed and reproduced on cronaflex. Final review was in the Atlantic Marine Center in November 1970. One cronaflex positive and a negative of the final manuscript 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 Kamakou which is 4958 feet above sea level.

The climate of the island varies considerably depending on the elevation 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

Located on the Makanalua Peninsula is the small settlement of Kalaupapa. The settlement is maintained by the State of Hawaii, Department of Health for the treatment of Hansen's Disease (Leprosy). Special permiss-

Molokai VOR (MKK)
Puu Apalu, Tank
Ilio Pt., Coast Guard Loran Mast
Waiahewahewa, Aero Beacon Red Light
Laau Pt. Light
Kaunakakai Harbor, Entrance Range, 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. HELENA, 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. Part 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 tidal 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 doz-

(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, Aero 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 30 1962

Approved:
H. J. Seaborg

Respectfully submitted:
Leonard F. Van Scoy

Photogrammetric Plot Report
Project 21044
Molokai, Hawaii
August 1963

21. Area Covered

The bridging furnishes control for the compilation of five shoreline surveys on the southwest shore of Molokai Island. They are T-11954 through T-11956 at a scale of 1:5,000 and T-11957 and T-11958 at a scale of 1:10,000.

22. Method

Two strips, 10 and 11, were bridged analytically at a scale of 1:25,000. Strip 10 using photographs 61-W-695 through 710 was adjusted on four horizontal control points. Strip 11 was adjusted as a straight line using photographs 60-W-2427 through 2430 but this was adequate since only three models were involved.

23. Adequacy of Control

Control complied with project instructions. It was well distributed and was adequate. Closures to control and tie points for the two strips are shown on the attached aerotriangulation sketch.

24. Supplemental Data

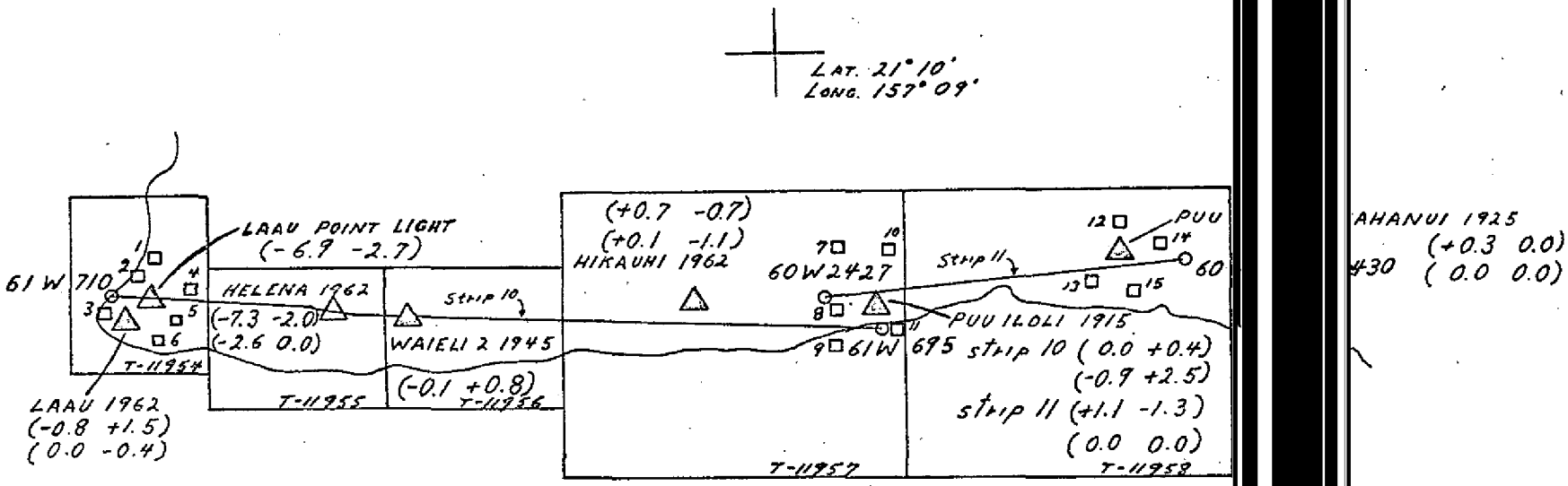
None

25. Photography

Photography was adequate as to coverage, overlap and definition.

Respectfully submitted,

Henry P. Eichert, Acting
Chief, Aerotriangulation
Section



△ CONTROL USED IN ADJUSTMENT

△ CONTROL USED AS CHECK

□ TIE POINTS

STRIP 9 & 10
1 (-1.8 -9.3) ⊕
2 (-5.2 -2.7) 5 (-4.5 -2.9)
3 (-0.1 +0.7) 6 (-6.8 +0.1)

STRIP 10 & 11
7 (+0.2 +4.1) 10 (-0.9 -0.6)
8 (+0.4 +2.6) 11 (+3.1 +2.8)
9 (+2.6 +2.7)

STRIP 11 & 2
12 (+9.5 -9.8) 14 (+5.0 -6.6)
13 (-2.2 +5.0) 15 (-2.5 +2.2)

AEROTRIANGULATION SKETCH
MOLOKAI ISLAND HAWAII
STRIPS 10 & 11
21044
AUGUST 1963

15

FORM C&GS-1
(3-64)
USCOMM-DC
6659-P64

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 11956 PROJECT NO. 21044 SCALE OF MAP 1:5000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS *(1 Ft. = 3048006 meter)* FORWARD (BACK)
NONE				
COMPUTED BY	DATE		CHECKED BY	DATE

16

COMPILATION REPORT

MAP MANUSCRIPT T-11956

PROJECT 21044

ITEMS 31 THRU 34:

REFER TO THE COMPILATION REPORT FOR T-11952.

35. SHORELINE AND ALONGSHORE DETAILS:

DATA FURNISHED BY THE FIELD UNIT WAS ADEQUATE FOR THE COMPILATION OF THE MEAN HIGH WATER LINE. APPROXIMATE LIMITS OF A SHALLOW FORESHORE AREA WAS DELINEATED FROM OFFICE INTERPRETATION OF THE COLOR PHOTOGRAPHY. NO LOW WATER LINE HAS BEEN SHOWN.

36. OFFSHORE DETAILS:

NONE.

37. LANDMARKS AND AIDS:

ONE LANDMARK SHOWN ON THIS MANUSCRIPT HAS BEEN RECOMMENDED FOR CHARTING. FORM 567 IS SUBMITTED:

38. CONTROL FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11955 TO THE WEST AND WITH T-11957 TO THE EAST. THERE IS NO CONTEMPORARY SURVEY TO THE NORTH. THE PACIFIC OCEAN IS ON THE SOUTH.

40. HORIZONTAL AND VERTICAL ACCURACY:

46. COMPARISON WITH EXISTING MAPS:

COMPARISON WAS MADE WITH THE U.S.G.S. 7½ MINUTE ILIO POINT, HAWAII, QUADRANGLE, SCALE 1:24,000, EDITION 1952.

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH NAUTICAL CHART 4120, SCALE 1:80,000 AT LAT. 21° 01', 1ST EDITION, REVISED FEB. 4, 1963.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE.

ITEMS TO BE CARRIED FORWARD:

NONE.

APPROVED:

P A Stark

P. A. STARK, CDR, C&GS
PORTLAND FIELD OFFICER

SUBMITTED:

James L Harris

JAMES L. HARRIS
CARTOGRAPHER

JLB.

September 11, 1970

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6201 (Molokai Island, Hawaii)

T-11956

Halena (village)

Halena Gulch

Kahinawai Gulch

Oneohilo Gulch

Pacific Ocean

Molokai

Approved by:

A. J. Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER:

NONE.

C&GS FORM 1002
(11-18-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-~~10353~~ 11956

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
✓	✓	✓	✓

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY *(Topographic stations)*	7. PHOTO HYDRO STATIONS
None	✓	Not Applicable

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
None	None	None	None

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
✓	None	✓	None

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
None	✓	✓	✓

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
✓	✓	Not Applicable

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
Not Applicable	Not Applicable	None	✓

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
✓	✓	None	✓

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
None	None

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
✓	✓	✓

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
None	✓	✓	✓

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT
C. C. Harris	Leo F. Beugnet

41. REMARKS *(See attached sheet)*

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

COMPILER	SUPERVISOR
J. L. Harris	Leo F. Beugnet

43. REMARKS

Field Edit Report
To Accompany T 11956

USC&GSS McARTHUR

Ronald L. Newsom
CDR, USESSA
Commanding Officer

51 METHODS

Field edit on manuscript T 11956 was done in conjunction with hydrography on boatsheet AR 10-3-67, H 8969. The shoreline was inspected from Launches and Skiffs. The MLLW was impossible to determine due to extensive offshore reefs and coral heads.

Field edit information was shown on three(3) field contact prints 61W701, 61W702 and 61W703 in violet ink and indexed on the field edit ozalid in violet ink. Some field edit information was shown directly on the discrepancy print, an ozlaid copy of T 11956, in violet ink.

52 ADEQUACY OF COMPILATION

Manuscript T 11956 was completely adequate for a hydrographic survey.

54 RECOMMENDATIONS

None

56 MISCELLANEOUS

The breaker line delineated on boatsheet AR 10-3-67 H 8969 closely follows the breakers shown on the photos. This command was informed of the wreckage of a Marine plane lost in the early 1940's in the general vicinity of Lat. 21°05'25", Long. 157°14'20". None of it is exposed above water. This wreck was not verified since it lies in an extensive shallow coral area which is almost impossible to navigate safely due to large swells.

REVIEW REPORT T-11956

SHORELINE

NOVEMBER 3, 1970

61. GENERAL STATEMENT:

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with copies of survey No. 3526, 1:20,000 scale, dated 1915 and 4116, 1:5,000 scale dated March 1925. The passage of time has made these surveys obsolete. They are superseded by T-11956 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. ILIO POINT, HAWAII, 8.5 by 7.5 minute quadrangle, 1:24,000 scale, edition of 1952. The shoreline of the two surveys appear to be in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with copies of boat sheet H-8969 (AR-10-3-67) and smooth sheet H-8977 (AR-5-2-68). The shoreline of the surveys is in good agreement.

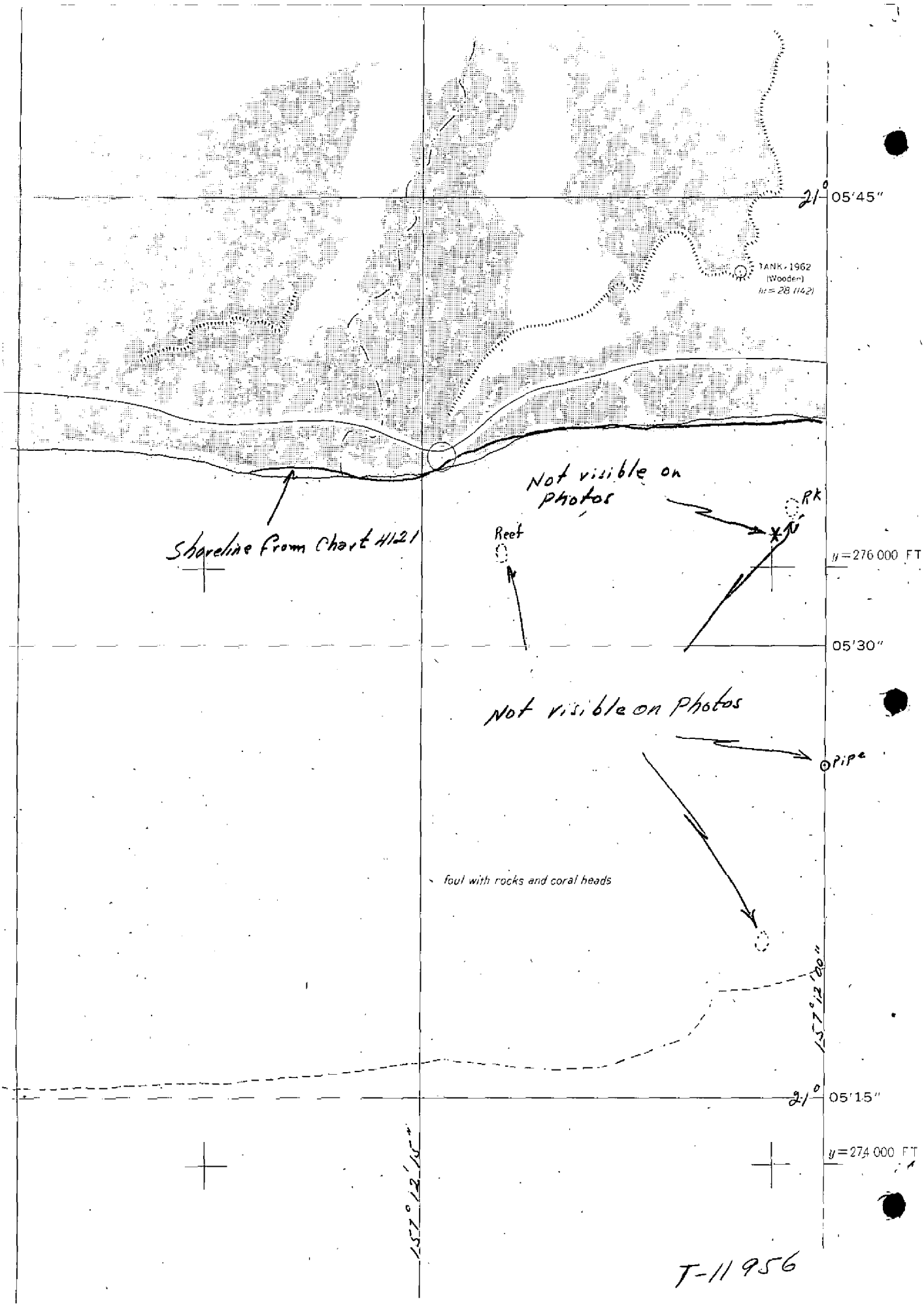
A rock shown on H-8977 at latitude 21°05'34" longitude 157°12'02" is not visible on the photographs of the area.

An area delineated as a coral reef on H-8977 in the area of latitude 21°05'20" longitude 157°12'10" appears to be completely submerged on the photographs.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with charts 4120, 3rd edition, October 14, 1968 and 4121, 6th edition, September 30, 1968. The pipe shown on chart 4121 at latitude 21°05'26" longitude 157°12'00" and the rocks westward of that longitude are not visible on photographs of the area. These and the difference in the shoreline between chart 4121 and this survey have been indicated on the comparison print in red.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:


21° 05'45"
TANK - 1962
(Wooden)
h = 28 (142)
Not visible on
Photos
RK
Shoreline from Chart 4121
Reef
y = 276 000 FT
05'30"
Not visible on Photos
Pipe
foul with rocks and coral heads
157° 12' 00"
21° 05'15"
y = 274 000 FT
157° 12' 15"

T-11956

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

BE CHARTED
~~BE DELETED~~ } STRIKE OUT TWO
~~BE REVISED~~

PORTLAND, OREGON 2-14- 1964

recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be d on ~~(deleted from)~~ the charts indicated.
e positions given have been checked after listing by J. L. HARRIS

P. A. STARK *Chief of Party.*

HAWAII

DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE ″ D.M. METERS	LONGITUDE ° ′	LONGITUDE ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
WOODEN Ht. 28' (142')		21 05	42.54 / 1308.2	157 12	31.81 / 91.8	OLD HAWAIIAN	KELSH INST.	9-18-62			X	4120
Tank was recommended for deletion thru L-452 (69) 8:567 form and was thus deleted. 2-18-72 JAG												

s 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 ks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be ted for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
TE SECONDS AND METERS

USCOMM-DC 16234-P61