11931

Diag. Cht. No. 4116.

Form 504

U. S. DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. Ph6012 Office No. T-11931

LOCALITY

State Hawaii

General locality Maui Island

Pohakueaea Point

Locality Kamanamana Point - Pohakueaea Pt.

1962....1960-1963

CHIEF OF PARTY

H. J. Seaborg, Honolulu District Office W. E. Randall, Baltimore District Office

LIBRARY & ARCHIVES

DATE . 1967

USCOMM-DC 508

0 2 60 - 1963

FORM C&GS-181e (12-61) U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

| | T | -11931 | RECORD | | |
|--|------------------|------------------|--|---|-----------------------------------|
| PROJECT NO. (II): PH-6012 (21034) | | | <u></u> | | |
| FIELD OFFICE (II): | | | CHIEF OF PARTY | , | |
| Honolulu, Hawaii | | | , | | |
| | | | H. J. Seak | | |
| PHOTOGRAMMETRIC OFFICE (III): | | | OFFICER-IN-CHAI | | |
| Baltimore, Maryland | | | W. E. Rand | Ball | ··· <u>·</u> ···· |
| instructions dated (ii) (iii): 14 November 28 November 13 June 19 16 January | er 1960 961 | | | | |
| METHOD OF COMPILATION (III): | | | | | · |
| | h Plotter | | - | | |
| MANUSCRIPT SCALE (III): | t trooper. | STEREOSCO | PIC PLOTTING INS | TRUMENT SCA | LE (III): |
| 1:5,000 | | | | | |
| DATE RECEIVED IN WASHINGTON OFF | 1:5,000 | ORTED TO NAUTICA | L CHART BRA | NCH (IV): | |
| | | | | | - |
| 450455 50 54455 40 | | DATE: | | DATE REGIS | TERED (IV) |
| APPLIED TO CHART NO. | : | DATE: | | DATE REGIS | TERED (IV). |
| | | | · · · · · · · · · · · · · · · · · · · | | |
| GEOGRAPHIC DATUM (III): Old Hawaijan | | | VERTICAL DATU MEAN SEA LEVE Elevations shown Elevations shown i.e., mean low wat | L EXCEPT AS as (25) refer to as <u>(5)</u> refer to s | mean high water counding datum |
| | | | | | |
| REFERENCE STATION (III): | | | <u> </u> | | |
| PUU O KANALOA (H | 1929), 1931 | | | | |
| LAT.: | | ADJUSTED | | | |
| 20° 36' 21.117″ | 156° 25' 15.908″ | | UNADJUSTED | | |
| PLANE COORDINATES (LV): | <u> </u> | | STATE | | ZONE |
| = 99,044.80 FT | ×= 583,986.69 FT | | Hawaii | | 2 |
| ROMAN NUMERALS INDICATE WHETHE OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONN | | | | | |

U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

| DESCR | RIFTIVE REPORT - DATA RECORD | |
|--|------------------------------------|--------------|
| FIELD INSPECTION BY (III): | | DATE: |
| J. C. Lajoye | | Nov. 1961 |
| MEAN HIGH WATER LOCATION (III) (STATE DATE | AND METHOD OF LOCATION): | |
| Located Photogrammetrically by 1962 photography. | from Photography of 5 October 1960 | supplemented |
| PROJECTION AND GRIDS RULED BY (IV): | | DATE |
| R.A.C. | | 11/30/60 |
| PROJECTION AND GRIDS CHECKED BY (IV): | | DATE |
| R.A.C. | | 11/30/60 |
| CONTROL PLOTTED BY (III): | | DATE |
| L. A. Senasa | ck | 2/27/62 |
| CONTROL CHECKED BY (III): | | DATE |
| L. O. Netere | r | 2/27/62 |
| RADIAL PLOT OR STEREOSCOPIC CONTROL EXTE | ENSION BY (III): | DATE |
| R. E. Fuechs | el | 2/62 |
| STEREOSCOPIC INSTRUMENT COMPILATION (III): | PLANIMETRY | DATE |
| | D. M. Brant | 3/62 |
| D. M. Brant | CONTOURS | DATE |
| | Inapplicable | |
| MANUSCRIPT DELINEATED BY (SIS): | | DATE |
| L. A. Senasack | | 6/62 |
| SCRIBING BY (III): | | DATE |
| PHOTOGRAMMETRIC OFFICE REVIEW BY (III): | | DATE |
| D. M. Brant | | 6/62 |
| REMARKS: FIELD EOIT 1 | १७ उ | |

DESCRIPTIVE REPORT - DATA RECORD

AMERA (KIND OR SOURCE) (III):

"W" Camera

| "W" Camera | | | | | | | |
|---|---|-----------------------------|--|--------------------|---------------------------------|------------------|--|
| | PH | OTOGRAPHS (III) | | | | | |
| NUMBER | DATE | TIME | SCALE | S | TAGE OF TI | DE | |
| 62-W-2024 & 2025 62-W-2041 60-W-2286 60-W(C)3372 thru | 19 Jan 1962 19 Jan 1962 2 Oct 1960 27 Oct 1960 | 1313 1322 1136 850 | 1:15000 1:15000 1:25000 1:10000 | 0.7 ab | ove MLLV ove MLLV ove MHW | I | |
| 3374 60-W(C)3437 thru 29 Oct 1960 844 1:10000 1.2 above MLLW | | | | | | | |
| 60-W(C)3427 & 3428 61-W(C)1109 thru 1113 | 29 Oct 1960 25 Sept 1961 | 837 957 | 1:10000 | 1 | ove MLLV ove MLLV | _ | |
| | | TIDE (III) | | | | Diurnal | |
| | From Predicted | Tide Tables | | RATIO OF RANGES | MEAN RANGE | SPRING. RANGE | |
| | lulu, Hawaii | | | | 1.2 | 1.9 | |
| BORDINATE STATION: Make | na, Hawaii | | | | 1.5 | 2.1 | |
| SUBORDINATE STATION: | | | • | | | | |
| WASHINGTON OFFICE REVIEW BY | (iv): Leo F. Beu | gnet, Norfol | k Regional Offic | DATE: | t. 1965 | | |
| PROOF EDIT BY (IV): | | | | DATE: | | | |
| NUMBER OF TRIANGULATION ST | ATIONS SEARCHED FOR | R (II): None | RECOVERED: None | identifie None | | | |
| NUMBER OF BM(S) SEARCHED FO | OR (II): | None | RECOVERED: None | IDENTIFIE None | D | | |
| NUMBER OF RECOVERABLE PHO | TO STATIONS ESTABLE | | None | | | | |
| NUMBER OF TEMPORARY PHOTO | HYDRO STATIONS EST | ABLISHED (III): | 3 | | | | |
| REMARKS: | | | | | | | |

4.

Alongshore area for hydro

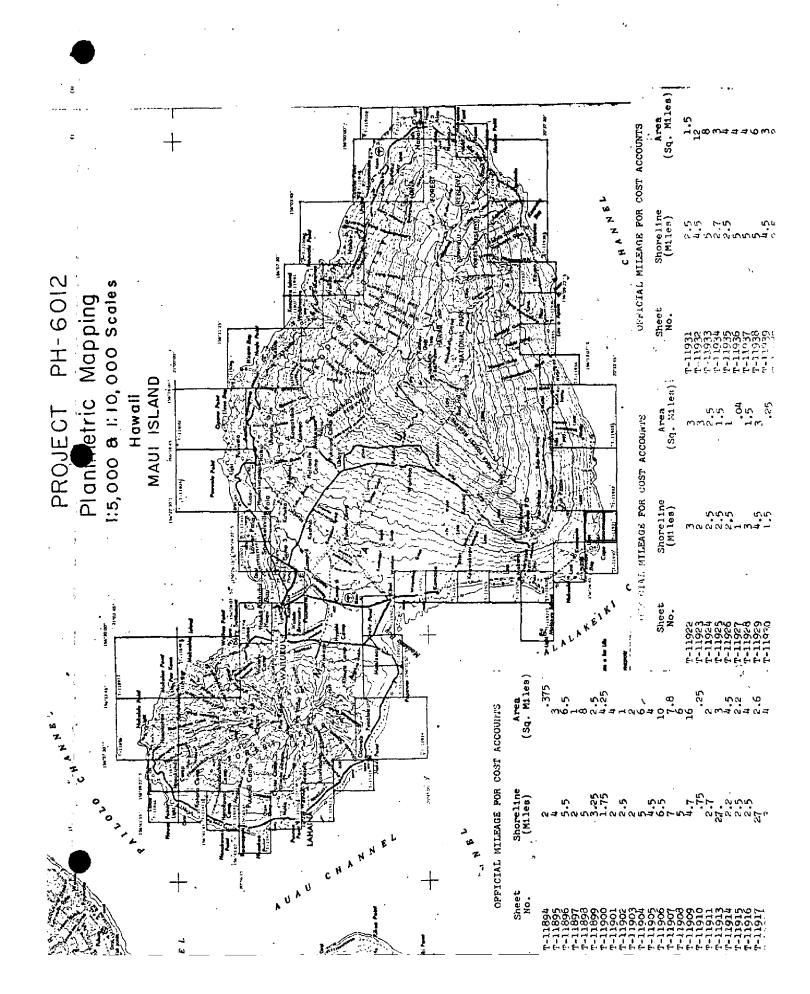
Smooth drafting compilation completed

COMPLETION DATE REMARKS

March 1962 superseded

December 1963

-



SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT T-11931

Shoreline manuscript T-11931 is one of forty-nine similar maps in this project and covers a part of the coastline of Maui Island. This was a Kelsh project in advance of hydrographic surveys in the area. The field operations preceding compilation included recovery and identification of horizontal control and field inspection. The Kelsh compilation was at 1:5,000 from 1:25,000 scale photography obtained October 2, 1960 and 1:15,000 scale obtained January 19, 1962. A cronaflex positive showing shoreline, alongshore detail and shoreline pass points was furnished for preparation of the hydrographer's boat sheet and the location of hydrographic signals. 1:5,000 scale ratio prints were furnished for hydro support and field edit purposes. The compilation manuscript is a vinylite sheet 1 minute 52.5 seconds in latitude by 1 minute 52.5 seconds in longitude from which the smooth sheet was drafted and reproduced on cronaflex. One cronar positive and one cronar negative are provided for record and registry.



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 between, formed by two mountains with a fertile valley 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 blaffs around Mt. Haleakala and on the east side of the West Haui 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.

Fhotography 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 walk inf along the high waterline, and delineating the waterline supported by measurements from prominent objects. Where is 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 desend 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. |
| Kanului Harbor Entrance Range, Pront Light. | d.n.m. |
| Kahului Harbor Entrance Hange, Rear Light. | d.n.m. |
| Kanului Airport Control Tower, Beacon | d.n.m. |
| V O R OGG Lahaina Lighthouse E (USE) | d.n.m. d.n.m. d.m. |
| EAST FOINT | d.m. |
| WEST POINT | d.m. |

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

Ample (temp)

Camp (temp)

Ditch (temp)

Malay (temp)

State (temp)

Grove (temp)

Pau (temp)

Poter (temp)

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

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

Hydro Sig. 2301

Hydro Sig. 2303

Hydro Sig. 2305

FOL

CAN

MAY

U.S. JU ART MEDICE THE PICE COLOR SURVEY SOASE AND MADEEN SURVEY BY SHENGER AND BY SO COLOR SO COLOR

| RED | Hydro Sig. 2401 | HAY |
|------|-----------------|----------|
| PAR | | FON |
| ES . | CAR | NAHUNA 2 |
| DALI | PAR | eve |
| 30B | HAT | 600 |

- (b) Thore were no datum adjustments made by the field party.
- (e) All control was either established by the Coast and Coodetic
- (d) All stations required by the project diagram were recovered and identified except where specific permission was received from the Mashington Office to substitute one station for another.
- (e) Control adjacent to the shoreline and that within the area of photogrammetric coverage was scarched 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 sards were submitted for all stations required by the project diagrams.

L. VERTICAL CONTROL

Tidal bonch marks at Kahului, Lahaina, Mala Waarf, Aihoi, and Makena were searched for and recovered.

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

No vortical points were required for eterocacopic mapping.

5. CONTOURS AND DRAINAGE

The area below the 15 foot contour on sheet T-11900 was contoured ed 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 Kapului Harbor.

brainage is all intermittent. Natural drainage patterns have been interrupted by various drainage canals, reservoirs, and catch basins to su plement the irrigation systems of the various plantations. Only overflow water runs of casionally in the natural drainage gulones.

b. W. OLA: WV. R

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 rod, an ornamental tree, line the roads occasionally.

In the area covered by sheet 1-11906 and easterly to sheet T-11939, which is in the rainy portion of the island, trees grow professive Types are eucalyptus, kekvi, koa, mango, c const and kamane with a heavy projectal undergrowth of guava and other brush.

7. SHOR THE AND AI NOSLOBE THAT RES

- (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

- 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, althou h Maui is represented as having more beach area than any other of the Hawaiian islands. From a few miles north of Kahului to monolua Bay the shore is composed of high cliffs and low rocky bluffs. From honolua hay, through Lahaina and slightly south of Mowalu the shore is low with sandy beaches between rocky headlands. From the beginning of the cliffs at the south end of the hest Maui Mange to Mc Bregor 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 sendy with a few rocky projections which act as groins to hold the sand.

From the recent lava flow south of Pun 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 Puniki High vertical bluffs predominate. The only sand beach in the ontiro area is located several miles southeast of the village of Hana.

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 Nahiku except by decending 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 recomtly 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 hero.

Mala Wharf, located a few miles north of Lahaina, was used to lead sugar and pineapple during the days of staemer traffic but the large concrete wharf is in poor repair and has been closed by the Board of "arbor 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 nousing are available hero.

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

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 party. It was noted on the field photographs that the hydrographic 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 567 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, bydro 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 l 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 Nene 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.

Respectfully submitted

John C. Lajoye \
Super. Sur. Tech.

8 September 1962

| MAP T. 11931 | | PROJE | PROJECT NO PH-6012 | SCALE OF MAP 1:5 | 1:5,000 | SCALE FACTOR | JR . |
|----------------------------------|-------------------------------------|----------------|--|---|---------|---|---|
| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE | DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK) | DATUM | N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE JIN METERS FORWARD (BACK) | FACTOR DISTANCE FROM GRID OR PROJECTION L. JN METERS FORWARD (BACK) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | THERE HIGHER | THERE IS NO HO | IS NO HORIZONTAL CONTROL OF THIRD WITHIN THE LIMITS OF THIS MANUSC | OF THIRD - ORDER ACCURACY OR S MANUSCRIPT. | | | |
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| | | | | | | | |
| | | | | | | | 16. |
| 1 FT3048006 METER COMPUTED BY | | DA | DATE | CHECKED BY: | | DATE | M . 2388 |

PHOTOGRAMMETRIC PLOT REPORT ISLAND OF MAUI (EAST HALF) HAWAII

Project PH-6212 February 1962

21. AREA COVERED

T-11905 through T-11911; T-11929 through T-11939; T-11989 through T-11992

22. METHOD

Six stereoplanigraph bridges, designated as strips #8 through #13, were run in order to provide pass points for use in Kelsh compilation of the project. Additional points along the shoreline were provided, for possible use in conjunction with hydrographic surveys in the area.

This project covers the entire eastern half of the island of Maui, and adjoins a similar project of March 1961, which covers the western half of the island. On that earlier phase, the numbers assigned to the stereoplanigraph bridges were #1 through #7.

Strip #13 was adjusted on a linear basis. All other strips in this project (eastern half of the island) were adjusted by a least-squares solution on the IBM 650 computer. Numerous ties between strips were used as checks on adjustments. A pass point from strip #9 was used in the adjustment of strip #11. Where strip #11 duplicates the coverage of strip #9, the former should be used in compilation.

Satisfactory ties with the project of March 1961, were made on both the north and the south coasts. Also, satisfactory adjustments were obtained for all strips in this part of the Maui Island project.

23. ADEQUACY OF CONTROL

The horizontal control provided complied with project instructions, and was adequate. The following control failed to hold in bridging: Δ PUHILELE, 1950-SUB. A; Δ MAKAALAE, 1950-SUB. B; Δ PUUHINAI 2, 1950-SUB PTS. 1, 2, and 3. They are to be disregarded in compilation. The problem with

PUHILELE-SUB A is entirely one of interpretation. In strip #8, two different possible positions for the point were read, one of which held in bridging, and the other failed to hold. In strip #9, the single position read for the point failed to hold. The number and geographical location of other control in this area is such that this station may be disregarded.

No specific cause has been found for the failure of MAKAALAE-SUB B to hold. Its companion sub. pt. held, and therefore, SUB B may be disregarded.

The sub. pts. of PUUHINAI 2 had a questionable starting azimuth due to the lack of agreement among several solar azimuth observations. The sub. points did not hold in the adjustment.

24. SUPPLEMENTAL DATA

None

25. PHOTOGRAPHY

The photography used in bridging was adequate in all respects.

Submitted by

Robert E. Frechsel

Approved

Everett H. Ramey, Chief Aerotriangulation Section

COMPILATION REPORT MAP MANUSCRIPT T-11931

31. DELINEATION

The Kelsh Plotter was used for delineation with photography taken in 1960 and 1962.

32. CONTROL

Adequate supplemental control, based on field identified horizontal control, was established by aerotriangulation in the Washington office.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was compiled by the Kelsh operator.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were delineated with the Kelsh Plotter using field inspection notes and by analogy.

36. OFFSHORE DETAILS

There are no offshore details!

37. LANDMARKS AND AIDS

There are no landmarks, fixed aids to mavigation or aeronautical aids within the limits of this survey.

38. CONTROL FOR FUTURE SURVEYS

None established.

39. JUNCTIONS

Satisfactory junctions were made with T-11930 on the west and with T-11932 on the east. There is no contemporary surveys on the north or south.

40. HORIZONTAL AND VERTICAL ACCURACY

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

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Makena, Hawaii $7\frac{1}{2}$ minute quadrangle.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 4116, 12th edition, dated August 17, 1964.

ITEMS TO BE APPLIED TO CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Ford: Donald M. Brant Carto. (Photo.)

Approved:

Capt. C&GS

Norfolk Regional Office

GEOGRAPHIC NAMES

Ph 6012

T-11931 T-11932

Alalakeiki Channel
Cape Hanamaioa
Cape Kinau
Halua Pond
Hanamanioa Light
Kalaeloa Point
Kalulu Point

Kamanamana Point

Kanahena

Kanahena Point

Kanaloa Point

Kauhioaiakini Pond

Keawakapu

Keoneoio

Kinau

La Perouse Bay

Makena

Maluaka Point

Nahuna

* Pohakueaea Point

Pohaku Paea

Puu o Kanaloa

Puu Olai

Names on Makena Quadrangle not separated by T number.

All Names Approved by Office of Geography

approved a-j. Wraight 1-20-66

* Names appear on T-11931

49. NOTES TO THE HYDROGRAPHER

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

| 3101 | Flag at south end of rock | 60 W 2285 |
|---------------|---------------------------------------|-----------|
| 3102 | Flag at N.E. corner of old foundation | 60 W 2285 |
| 3 1 03 | S.E. corner of rock wall | 60 W 2285 |

| FORM 182 | 50 | Pi | ното | GRAMMETRIC OFF | | U. | S. DEPARTMENT COAST AND GEO | |
|----------------------|-----------|-------------------------|----------|---------------------|------------------------------------|-------------|---------------------------------|------------------------------|
| | | | | T· 11931 | | | <u></u> <u> </u> | |
| I. PROJECTION | | 2 TITLE |)MB | | | - | 3. MANUSCRIPT NUMBERS DMB | 4. MANUSCRIPT SIZE DMB |
| • | ORHI | GHER ACCURACY | STATIO | NS OF THIRD-ORDER | 6. RECOVERABLE THIRD-ORDER | | TAL STATIONS O | |
| CONTROL | <u> </u> | DMB | | | NONE | | | |
| STATIONS | 7. PHOT | O HYDRO STATIONS | 8. BE | NCH MARKS | 9. PLOTTING OF | SEXTANT | 10. PHOTOGR | AMMETRIC PORT |
| | | DMB | <u> </u> | NONE | NONE | | DMB | |
| | | IL POINTS | | | | | | |
| ALONGSHORE AREAS | 12. SHOR | eline DMB | 13. LO | W-WATER LINE DMB | 14. ROCKS, SHOAL | | 15. BRIDGES NONE | |
| (Nautical Chart | İ | TO NAVIGATION | | 17. LANDMARKS | | 18. OTHE | R ALONGSHORE URES | PHYSICAL |
| Date) | | NONE | | DMB_ | _ | DME | | |
| | | r alongshore cu DMB | LTURA | L FEATURES | | | | · , |
| | | R FEATURES OMB | | • | 21. NATURAL GRO | UND COVI | ER | |
| PHYSICAL FEATURES | 22 PLAN | ETABLE CONTOUR | 8 | | 23. STEREOSCOPIO | INSTRUM | ENT CONTOUR | 3 |
| | , | JONE | | • | NONE | | | |
| | <u> </u> | OURS IN GENERAL | | <u> </u> | 25. SPOT ELEVATI | ONS | | |
| | | JONE | | | NONE | | | |
| | 26. OTHE | R PHYSICAL FEATL OMB | IRES | | NONE | | | |
| | | | | | | | | |
| CULTURAL | 27. ROAD | s DMB | | 28. BUILDINGS | D M B | 29. RAIL | NONE | |
| FEATURES | 30. OTHE | R CULTURAL FEAT | URES | L | | <u> </u> | | |
| | n |)MB | | | | <u>.</u> - | | |
| BOUNDARIES | 31. BOUN | DARY LINES | | | 32. PUBLIC LAND | LINES | • | |
| | N | ONE | | | NONE | - <u>-</u> | | |
| MISCEL- | 33. GEOG | RAPHIC NAMES | | | | 34. JUNC | TIONS | |
| LANEOUS | מ | MB | | | € | ות | fB. | |
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FIELD EDIT REPORT T-11931

No formal Field Edit Report was received. Please refer to the letter pertaining to the field edit of manuscripts on Maui Island which is the following page of this report.

FORM CD-121" * UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMON 1884

DATE: 8 July 1963

COAST AND GEODETIC SURVEY / 24n

TO!

The Director

Coast and Goodetic Survey U.S.Dopartment of Commerce Washington 25, D.C.

FROM : Commanding Officer UCCUCCS Pathwinder

70) lodoral Carico Building

Soctile, Meshington

SUBJECT: Field Edit Ropert - OFR-419

During the first half of the 1963 field season, Pathfinder personnal field edited the impuseripts listed below for accuracy and octale tenes. All recommended changes have been noted on the blackling improcedons in rod and groon ink. In general, the manucoripts wore found to be very reliable with only miner descrepancies .boten pries

Four manageripts with noted changes are being forwarded to the Cashington Office on July 9. Those manuscripts with no recommended charges have been noted below. The remaining manuscripts will be forwarded as seen as to have had an opportunity to compare than with the boat phooto now in Machington for photographying.

| T-11905 | Rilited - No changes |
|--|---|
| T-11905 | Mited - Will be forwarded later |
| 2-11937 | Mitod - Will be forwarded later |
| T-11 903 | Edited - Will be forwarded later |
| T-11 939 | Edited - Will be forwarded later |
| T-11910 | Edited - Will be forwarded later |
| 7-11911 | Edited - Will be forwarded later |
| T-11930 | Forwarded 9 July |
| | |
| T-11931 | (Mited - No roccompanied changes) |
| T-11 931 T-11 932 | |
| | Mitted - In recommend changes |
| 7-11/92 | Mited - No recommend changes |
| ?-11 932 ?-11 933 | Edited - No recommend changes Edited - No recommended changes Edited - No recommended changes |
| 7-11 592 7-11 593 7-1 3653 | Edited - Ho recommended changes Edited - Ho recommended changes Edited - Ho recommended changes Forwarded 9 July |
| 7-11 /92 7-11 /93 7-1 1/93 7-11 /96 | Edited - Ho recommended changes Edited - Ho recommended changes Edited - Ho recommended changes Forwarded 9 July Forwarded 9 July |

It is requested that these manuscripts be returned to the Ship as soon as is practical as they will be needed for smooth plotting.

REVIEW REPORT T-11931 SHORELINE MARCH 16, 1966

61. GENERAL STATEMENT

See summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with a copy of Registered Planetable Survey No. 3276, 1:20,000 scale, made in 1912 and approved March 30,1914. Because of the differences in scales of the two maps only a visual comparison was made. No major discrepancies between the two surveys were noted although the general shape of the shoreline on the planetable manuscript is necessarily somewhat generalized.

Map manuscript T-11931 supersedes the planetable survey and should be used for all future chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. Quadrangle Makena, Hawaii, 1:24,000 scale, edition of 1954. The shoreline of the U.S.G.S. Quadrangle is generalized and does not show all of the offshore rocks and foul areas.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8718 (PF-10-1-63). The shoreline of the boat sheet was apparently taken from a cronaflex reduction of the map manuscript and no discrepancies are evident.

65. COMPARISON WITH NAUTICAL CHARTS

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

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

There are no items to be verified by future surveys.

Reviewed by:

Approved by:

CAPT., USESSA

Director, Atlantic Marine Center

Approved by:

Cartographic Branch

Chief, Chart Division

Chief, Operations Division

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11931

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.

| CHART | DATE | CARTOGRAPHER | REMARKS |
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