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<th>Field No.</th>
<th>Office No.</th>
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<tbody>
<tr>
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<td>T-11826</td>
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</table>

**LOCALITY**

State: Hawaii

General locality: Molokai

Locality: Pelekunu Bay

**1961-1968**

CHIEF OF PARTY

Allen L. Powell, Director, AMC

**LIBRARY & ARCHIVES**

DATE

USCOMCWD 37022-P66
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<th>FIELD OFFICE (III):</th>
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<td>H. J. Seaborg</td>
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<td>PHOTOGRAMMETRIC OFFICE (III):</td>
<td>OFFICER-IN-CHARGE</td>
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<td>Atlantic Marine Center</td>
<td>Allen L. Powell, Director, AMC</td>
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**FIELD OFFICE (III):**
Honolulu, Hawaii

**PHOTOGRAMMETRIC OFFICE (III):**
Atlantic Marine Center

**INSTRUCTIONS DATED (III):**
- Field
- Office Compilation
  - Amendment I: April 25, 1962
  - Amendment II: May 31, 1962
  - Amendment III: December 14, 1962
  - Amendment IV: February 20, 1963

**METHOD OF COMPILED (III):**
- Wild B-8 Plotter & Graphic

**MANUSCRIPT SCALE (III):**
- 1:5,000

**STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):**
- 1:15,000 Pantographed to 1:5,000

**DATE RECEIVED IN WASHINGTON OFFICE (IV):**

**DATE REPORTED TO NAUTICAL CHART BRANCH (IV):**

**APPLIED TO CHART NO.:**

**DATE: **

**DATE REGISTERED (IV):**

**GEOGRAPHIC DATUM (III):**
- Old Hawaiian

**REFERENCE STATION (III):**
- MOKOHOLA (HGS) 1962

**LAT.:**
- 21° 10' 28.954" (890.5m)

**LONG.:**
- 156° 52' 42.164" (1216.3m)

**VERTICAL DATUM (III):**
- High Water

**PLANE COORDINATES (IV):**
- Y = 305,638.9 ft.
- X = 427,968.5 ft.

**STATE:**
- Hawaii

**ZONE:**
- 2

*Roman numerals indicate whether the item is to be entered by (i) Field Party, (ii) Photogrammetric Office, or (iv) Washington Office.*

*When entering names of personnel on this record give the surname and initials, not initials only.*
FIELD INSPECTION BY (III):  
L. F. Van Scoy  

MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

Wild B-8 Plotter, October 1962  
Graphic, September 1961

APPLICATIONS AND GRIDS RULED BY (IV):  
A. E. Roundtree  

APPLICATIONS AND GRIDS CHECKED BY (IV):  

CONTROL PLOTTED BY (III):

Portland Photogrammetric Office  

CONTROL CHECKED BY (III):

Portland Photogrammetric Office  

RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  
H. P. Eichert  

STEREOSCOPIC INSTRUMENT COMPILATION (III):  
A. L. Shands  
Reviewed by: C. H. Bishop

PLANIOMETRY

DATE: 9-13-67

CONTOURS

DATE: 9-13-67

Inapplicable

MANUSCRIPT Delineated by (III):  
C. H. Bishop  

SCRIBING BY (III):  
B. Wilson  

PHOTOGRAFMETRIC OFFICE REVIEW BY (III):

Compilation:  
C. H. Bishop  

Field Edit:  
K. E. Smith  

Scribing and stick up:  
K. E. Smith

DATE: 10-31-67

DATE: 10-24-69

DATE: 12-23-69

REMARKS:

* Stereoscopic compilation consisted of setting the models at 1:10,000 scale and dropping points common to the bridging photographs and hydrographic support photographs on a worksheet. These points were transferred by pantograph to the 1:5,000 scale manuscript and details compiled by graphic methods.

Field edit by: Ronald L. Newsom  
Date: Jan., April 1968
**PHOTOGRAPHS (III)**

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<tr>
<th>NUMBER</th>
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<th>TIME</th>
<th>SCALE</th>
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<td>62-W-1858</td>
<td>2 Oct. 1962</td>
<td>0847</td>
<td>1:25,000</td>
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**TIDE (III) PREDICTED**

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<th>EXTREME RANGE</th>
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**WASHINGTON OFFICE REVIEW BY (IV):**

Leo F. Bague, Atlanta Marine Center

**DATE:** Sept. 1970

**REMARKS:**

Number of triangulation stations searched for (III): 3

Number of BMS searched for (III): None

Number of recoverable photo stations established (III): None

Number of temporary photo hydro stations established (III): 3
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<th>Completion Date</th>
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### Official Mileage for Cost Accounts

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<td><strong>98</strong></td>
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SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-11826

Shoreline survey T-11826 is one of twenty-five similar surveys in project MH-6201. The surveys of this project cover the entire shoreline of Molokai Island. This survey covers that part of the north shore extending from Haupu Bay eastward to Waipu.

Field work preceding compilation consisted of identification of horizontal control, shoreline and field inspection and selection of photo-hydro signal sites. There were no fixed aids to navigation or landmarks for charts within the compilation limits.

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

The manuscript was a vinylite sheet 2 minutes 15 seconds in latitude by 2 minutes in longitude. After application of field edit, which was accomplished in December 1968, the manuscript was scribed and reproduced on cronaflex. Final review was in the Atlantic Marine Center in September 1970. One cronaflex positive and a negative of the final reviewed manuscript are forwarded for record and registry.
FIELD INSPECTION REPORT

Ian Kamesurits
T-1152 thru 1155
T-11518 thru 11526

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 volcanoes. 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 erosion and the ocean created the great cliffs along the north coast. A later eruption formed the Kamaalua Peninsula on the north central coast. The Kaunalea Crater remains as evidence of this eruption. The highest peak is Kaunakau which is 4952 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 barges, and serve small commercial and private boats. At one time a railroad 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 dependent on the growing of pineapple and cattle ranching.

The wharf located at Kolo was used for a time to load pineapple from the Kaunakea area. It was later abandoned and since that time has been partially destroyed by fire. The wharf located at Kamalo is now in poor condition and seldom used except by an occasional small fishing or pleasure boat. The wharf located at Huluoo is no longer in evidence. Located at Kaunakau 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 Makalau Peninsula is the small settlement of Kalou-
papa. The settlement is maintained by the State of Hawaii, Department of
Health for the treatment of Hansen's Disease (Leprosy). Special permiss-
on must be obtained from the state before visiting this area. No facil-
ities 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 break-
water 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 accessible 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 shade
from the most vertical cliffs.

The shoreline for the entire island was visually inspected on the
mean high water noted on the field photographs. The shoreline along the
north coast except for the Makalau 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 landings 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 accessible areas,
and by observations from vantage points along cliffs and cliffs where the
shoreline could not be otherwise visited. Scattered sections of the shore-
line along the south coast were obscured by overhanging leaves trees and
dense growths of mangrove trees.

3. HORIZONTAL CONTROL

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

Molokai Lighthouse
Molokai Airport Beacon
Maunakea, Aero Beacon Red Light
Kauai, Aero Beacon Red Light
(b) No datum adjustments were made by the field party.

(c) WATELI 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. MALEMA, 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 inaccessible northeast coast of the island were searched for. Part of this recovery was performed by the geodetic party located on the island. All stations 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 655 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 635 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. Harsh 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 palo in the north central part of the island. Kesee 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 cast on the photographs from the almost vertical cliffs. In some areas of the south coast the shoreline was partially obscured by low overhanging Klace 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 surf 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 accessible 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 bordered 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 Ho'okini 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 Halaupapa, Kamalo, Kaunakakai, Kolo, and Ma'alohono. 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.

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

Holoaai, Airport Beacon
Waiahealama, Aero Beacon Red Light
Waihuna, Aero Beacon, Red Light
Kualapuu, Loro Beacon, Red Light

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

Holoaai VOR (频率)

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.

Holoaai Lighthouse
Loau Pt. Light
Ilio Pt., Coast Guard Loran Vast
Kaumukai Harbor, Entrance Range, Front Light
Kaumukai 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 photograph 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 Haleoloh 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 MALES

Not Applicable

Approved: OCT 30 1962

H. S. Seaborg
Capt., C & G S
Honolulu District Officer

Respectfully submitted:

Leonard F. Van Scy
Supervisory Survey Technician
Unit Chief, C & G S
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. Ferrow, Jr.
Cartographer

Approved by,
Henry F. Eichert
Chief, Aerotriangulation Section
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.
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<th>STATION</th>
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<th>DATUM</th>
<th>LATITUDE OR Y COORDINATE</th>
<th>LONGITUDE OR X COORDINATE</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 0.3048006 meter)</th>
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<td>Old Hawaiian</td>
<td>21° 10' 28.954''</td>
<td>156° 52' 42.164''</td>
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COMPUTED BY CHB   DATE 9/22/67   CHECKED BY RJP   DATE 10/10/69
31. **DELINEATION:**

Two flights of photographs taken at different times and dates were used for compilation.

The bridging photographs were flown between 0830 and 0900 hours on January 19, 1962 at a scale of 1:25,000. These proved to be very inadequate for shoreline compilation. The flight line was considerably south of the shoreline; therefore, part of the shoreline was obscured by overhanging bluffs and much of it was in deep shadow, making identification of the mean high water line extremely difficult, if not impossible.

The photographs used for hydrographic support were flown around noon on September 24, 1961 at 1:15,000 scale. The line of flight was along the shoreline. The mean high water line was viewed from a better vantage point and in much better light than the bridging photographs.

Because of the range of elevation in the stereoscopic models exceeded the vertical range of the B-8 Plotter at 1:5,000 scale, the models could not be set and scaled to the manuscript. However, they could be set at 1:10,000 scale and this was done. The aerotriangulation control points were plotted at 1:10,000 scale on a clean sheet of mylar and the models scaled to this worksheet. Points common to the bridging photographs and the hydrographic support photographs were dropped and then transferred from the worksheet to the 1:5,000 scale manuscript by pantograph. The centers of the hydrographic support photographs were then located by resection and the mean high water line, shoreline details and photo-hydro points were compiled graphically.

32. **CONTROL:**


33. **SUPPLEMENTAL DATA:**

None.
34. **CONTOURS AND DRAINAGE:**

Contours are not applicable.

One stream was delineated a short distance back from the shoreline.

35. **SHORELINE AND ALONGSHORE DETAILS:**

Shoreline and alongshore details were compiled graphically from ratio prints of 1:15,000 scale photographs.

Field inspection was adequate for delineation of the mean high water line.

36. **OFFSHORE DETAILS:**

Offshore details are Mokolea Rock and Mokohola Island.

37. **LANDMARKS AND AIDS:**

38. **CONTROL FOR FUTURE SURVEYS:**

None.

39. **JUNCTIONS:**

Satisfactory junctions were made with T-11825 to the west and T-11827 to the east. There are no contemporary surveys to the north and south.

40. **HORIZONTAL AND VERTICAL ACCURACY:**

No statement.

46. **COMPARISON WITH EXISTING MAPS:**

Comparison was made with USGS Quadrangle KAMALO, HAWAII, ISLAND OF MOLOKAI, Scale 1:24,000 dated 1952.
47. **COMPARISON WITH NAUTICAL CHARTS:**

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

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:**

None.

**ITEMS TO BE CARRIED FORWARD:**

None.

Submitted by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer  
1 November 1967

Approved:

*Allen L. Powell*

Allen L. Powell, Director, AMC
Job PH-6201
Molokai Island, Hawaii
Supplement to Compilation Report

Because of the extreme elevations encountered in models along the northeast shore of Molokai, it was impossible to compile the shoreline by normal methods on the B-8 plotters. The methods used are described in the Compilation Reports for PH-6201, T-11825, T-11826, and T-11827.

In order to verify this work, three models (62-W-1853-1854), (62-W-1855-1856), and (62-W-1856-1857) were set on the C-3 Stereoplanigraph, and scaled to the original bridge points. Shoreline detail, offshore rocks, etc. were checked and found to be of National Map Accuracy Standards. Only in model 62-W-1853-1854 was it necessary to hold only the four points nearer the shoreline. The two interior points were an extreme elevation, and were disregarded as probably in error, because the aerotriangulation adjustment used at that time did not include a simultaneous vertical adjustment.

Submitted by:
John D. Perrow, Jr.

Approved by:
Henry F. Eichert
Chief, Aerotriangulation Section
GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6201
T-11826

Ananoio
Anokaiole
Haukio
Haupu
Haupu Bay
Hawaii (title)
Kaholaiki Bay
Kaneaimoa Point
Kapahu Point
Keawanui
Kipu
Lelikoa
Mokohola Island

Mokolea Rock
Mokumanu
Molokai
Nanini
Pacific Ocean
Paueono
Pauonuakea
Pelekunu
Pelekunu Bay
Pelekunu Stream
Umilehi Point
Waaula
Waipu

Approved by:
A. J. Wraight
Chief Geographer

Prepared by:
F. W. Pickett
Cartographic Technician
49. NOTES FOR THE HYDROGRAPHER:

1. See FIELD EDIT OZALID.

2. Two flights of photographs taken at different times and dates were used for compilation.

   The bridging photographs were flown at 1:25,000 scale on January 19, 1962. This flight was flown considerably south of the shoreline and the exposures were made around 0830 hours. Therefore, part of the shoreline is obscured by overhang and much of it is in deep shadow, making identification of the mean high water line extremely difficult, if not impossible.

   The photographs used for hydro support were flown at 1:15,000 scale on September 24, 1961. This flight line was flown along the shoreline around noon. The mean high water line was viewed from a much better vantage point and in much better light than the bridging photographs.

   Stereoscopic models of the bridging photographs could not be scaled to the 1:5,000 scale manuscripts. However, they could scale at 1:10,000 scale. This was done and points common to the 1:25,000 scale photographs and the 1:15,000 scale photographs were located. These common points were transferred to the 1:5,000 scale manuscripts. Centers of the ratio prints of the 1:15,000 scale photographs were located by resection, and the mean high water line and other details were compiled graphically.

3. There are no photo-hydro points on T-11825.

4. The following is a list of photo-hydro points shown on T-11826 and the cronaque ratio prints for your use if they are still in existence:

<table>
<thead>
<tr>
<th>Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2601</td>
<td>Offshore end of walkway.</td>
</tr>
<tr>
<td>2602</td>
<td>Lone 20 ft. lahalla tree.</td>
</tr>
<tr>
<td>2603</td>
<td>Lone lahalla tree.</td>
</tr>
</tbody>
</table>
## PHOTOGRAVMETRIC OFFICE REVIEW

### T. 11826

<table>
<thead>
<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

### CONTROL STATIONS

<table>
<thead>
<tr>
<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>X</td>
<td>CHB</td>
</tr>
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</table>

### BENCH MARKS

<table>
<thead>
<tr>
<th>8. BENCH MARKS</th>
<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>Bridge - W. O.</td>
<td>X</td>
</tr>
</tbody>
</table>

### ALONGSHORE AREAS (Nautical Chart Data)

<table>
<thead>
<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
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### AID TO NAVIGATION

<table>
<thead>
<tr>
<th>16. AIDS TO NAVIGATION</th>
<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
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<td></td>
<td></td>
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</tbody>
</table>

### PHYSICAL FEATURES

<table>
<thead>
<tr>
<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
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</tr>
</tbody>
</table>

### STEREOSCOPIC INSTRUMENT CONTOURS

<table>
<thead>
<tr>
<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</table>

### CULTURAL FEATURES

<table>
<thead>
<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
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### BOUNDARIES

<table>
<thead>
<tr>
<th>31. BOUNDARY LINES</th>
<th>32. PUBLIC LAND LINES</th>
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</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
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</table>

### MISCELLANEOUS

<table>
<thead>
<tr>
<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

### MISCELLANEOUS

<table>
<thead>
<tr>
<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CHB</td>
<td>CHB</td>
<td>CHB</td>
</tr>
</tbody>
</table>

### REVIEWER

**Charles H. Bishop**

**C. H. Bishop** 10/31/67  **Albert C. Rauck, Jr.**

### FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

**Compiler**

A. L. Shands  6/27/69  **Supervisor**  Albert C. Rauck, Jr.

**Rev. by:**  R. E. Smith  10/24/67  Albert C. Rauck, Jr.

### REMARKS

Field edit applied from:

Field photos 61-W-1003, 61-W-1004 and 61-W-1006 and on Field edit ozalid of T-11826.
Field Edit Report
To Accompany T 11826

USC&GSS McARTHUR
Ronald L. Newsom
CDR, USESSA
Commanding Officer

51 METHODS

Field Edit on Manuscript T 11826 was accomplished in conjunction with hydrography on boatsheets AR-20-1-68, H 8981, AR 20-4-68 H 8995 and AR 5-3-68, H 8983. The shoreline was inspected from launches and skiffs. The MLLW line was impossible to determine due to heavy swell. Field edit information was shown on three photos #61W1003, #61W1004, and #61W1006 in violet ink and on the field edit ozalid copy of T 11826 in violet ink. The photos were indexed on the field edit ozalid in violet.

52 ADEQUACY OF COMPILATION

Manuscript T 11826 was completely adequate for a hydrographic survey.

54 RECOMMENDATIONS

None
61. **GENERAL STATEMENT**
   See Summary, which is page 6 of the Descriptive Report.

62. **COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS**
   There was no registered topographic survey available for comparison purposes at the time of final review.

63. **COMPARISON WITH MAPS OF OTHER AGENCIES**
   Comparison was made with U.S.G.S. KAMALO, HAWAII 7.5 x 8.5 minute quadrangle, 1:24,000 scale, edition of 1952. The two surveys are in good general agreement. The U.S.G.S. quadrangle is necessarily generalized because of its scale.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS**
   Comparison was made with copies of boat sheets H-8983 (AR-5-3-68), H-8981 (AR-20-1-68) and H-8995 (AR-20-4-68). No major discrepancies were noted. All differences have been noted on the comparison print in purple.

65. **COMPARISON WITH NAUTICAL CHARTS**
   A visual comparison was made with Chart 4130, 6th edition, revised February 10, 1969. The surveys appear to be in good general agreement with the exception that the chart shows no rocks close inshore to the mean high water line.
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

Please refer to the compilation report, pages 18 and 21 of the Descriptive Report.

Reviewed by:
Leo F. Beugnet
Leo F. Beugnet
Cartographer

Approved by:
Allen L. Powell, RADM, NOAA
Director, Atlantic Marine Center

Approved by:
Charles Thurn, Jack E. Kuhl
Chief, Photogrammetric Branch, Chief, Photogrammetry Division
Rock outcrop located by hydrographer, on H-8983, not visible on photos because of shadows.
No rocks in this area are on
Boat Sheet H-8795 (MR-20-4-68)