DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: Hawaii

DESCRIPTIVE REPORT
Topographic Sheet No. M 2 4759
Hydrographic

LOCALITY
Nakapuna Point and vicinity
Oahu Island, Hawaii.

1937

CHIEF OF PARTY
Hubert A. Patton
DESCRIPTIVE REPORT

to accompany

SHEET M2

Makapuu Point & Vicinity

INSTRUCTIONS:

The work on this sheet was done in cooperation with the U. S. Army, and in accordance with verbal instructions from the Department Engineer, Hawaiian Department, and his representatives. They wished to expedite the work as much as possible, and wished for a development of possible landing places for troops. This area had been surveyed in 1928 by Lieut. R. R. Hand (see Sheets #4377 and #4378). Photostats of these sheets were furnished this party, but on account of the distortion, the signals could not be transferred accurately. Accordingly, the current survey party re-located all signals and also the waterline.

METHODS & EQUIPMENT:

Standard Coast Survey methods were used. The usual plane table equipment was employed. The field work was executed by Sgt. L. A. Wirtz, of the U. S. Army, after suitable training by the undersigned.

CLOSING ERRORS:

The traverse from Triangulation Station Blow to Triangulation Station Cove had a closing error of one meter.

From Triangulation Station Cove to Signal END, the traverse could not be tied in with any station without expending more time than the Army desired. On Hydrographic Sheet #4830, a small area one-half mile west of Makapuu Point had been omitted by the previous survey. It being the area in front of a good sand beach, it was decided to re-locate a few signals in that vicinity. Signals HA and HY were recovered and their positions transferred to the topographic sheet. The orientation and distance between the signals was investigated in the field and found to check. The additional signals and shoreline were then located.

CHARACTER OF CONTROL:

Control was furnished by five triangulation stations.

Respectfully submitted,

Hubert A. Peton
Lieutenant,
Chief of Party.
<table>
<thead>
<tr>
<th>Object and Description</th>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tallest rock on point</td>
<td>21°17′</td>
<td>949</td>
<td>157°40′</td>
<td>239</td>
<td>5′</td>
</tr>
<tr>
<td>S.W. Cor. of shack</td>
<td>21 17</td>
<td>1294</td>
<td>157 39</td>
<td>1581</td>
<td></td>
</tr>
<tr>
<td>South post of old gate, 8″×8″</td>
<td>21 17</td>
<td>1385</td>
<td>157 39</td>
<td>1399</td>
<td>10</td>
</tr>
<tr>
<td>South corner, rock heiau</td>
<td>21 17</td>
<td>1432</td>
<td>157 39</td>
<td>1186</td>
<td>4</td>
</tr>
<tr>
<td>Southeast corner, green house</td>
<td>21 17</td>
<td>1660</td>
<td>157 39</td>
<td>1215</td>
<td></td>
</tr>
<tr>
<td>Water tank, SE one of three</td>
<td>21 17</td>
<td>1757</td>
<td>157 39</td>
<td>1217</td>
<td>20 approx</td>
</tr>
<tr>
<td>Water tank, NW one of three</td>
<td>21 17</td>
<td>1785</td>
<td>157 39</td>
<td>1225</td>
<td>30 &quot;</td>
</tr>
<tr>
<td>Prominent rock, with small cave</td>
<td>21 17</td>
<td>1814</td>
<td>157 39</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Big pinnacle rock, west one of two</td>
<td>21 18</td>
<td>125</td>
<td>157 39</td>
<td>718</td>
<td></td>
</tr>
</tbody>
</table>
LANDMARKS FOR CHARTS

Honolulu, Fort Shafter, Hawaii

January 16th, 1932

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Robert A. Paton
Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LATITUDE</td>
<td>LONGITUDE</td>
<td>DATUM</td>
</tr>
<tr>
<td></td>
<td>o   D. M. METERS</td>
<td>o   D. P. METERS</td>
<td></td>
</tr>
<tr>
<td>Shocks (I'm)</td>
<td>21 17 1294</td>
<td>157 59 1581</td>
<td>1950</td>
</tr>
<tr>
<td>Green House (Hw)</td>
<td>21 17 1660</td>
<td>157 39 1215</td>
<td>&quot;</td>
</tr>
<tr>
<td>Water tank</td>
<td>21 17 1763</td>
<td>157 59 1225</td>
<td>&quot;</td>
</tr>
<tr>
<td>Pinnochòrook</td>
<td>21 16 125</td>
<td>157 39 713</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
REVIEW OF TOPOGRAPHIC SURVEY No. 4759

Title (Par. 56) Vicinity of Makapuu Point, S.E. Coast of Oahu, Hawaii

Chief of Party H. A. Paton
Surveyed by J. C. C. Ingrid
Inked by H. A. Paton

Ship CHIONA party Instructions dated July 14, 1931 Surveyed in Dec. 1931

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None submitted

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountaine. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 68.) and plotting checked.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is Old Hawaiian and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 29, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by R.J. Christmas Feb. 14, 1934

Examined and approved:

[Signatures]

Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hyd. and Top.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. M. g.
REGISTER NO. 4759

State. Hawaiian Is.

General locality. S.E. Coast of Oahu

Locality. Vicinity of Makapuu Pt., vicinity

Scale 1:5000 Date of survey. December, 1931

Vessel. Inshore Hydrographic Survey of Oahu

Chief of Party. Hubert A. Paton, Lieut.

Surveyed by. Leonard A. Wirtz, Sgt. U.S.A.

Inked by. Hubert A. Paton

Heights in feet above to ground to tops of trees

Contour. Approximate contour. Form line interval feet

Instructions dated July 14th, 1931

Remarks: Surveyed in cooperation with the U. S. Army to relocate hydrographic signals. See Sheet # 4377 and # 4378