DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: T. Hawaii

DESCRIPTIVE REPORT

Topographic Sheet No. A(T.51)

LOCALITY:

Maui Island

Makena Bay

1931

CHIEF OF PARTY:

O. W. Swainson, H.G. Eng
DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET OF

MAKEKA, MAUI, T. H.

Str. PIONEER

O. W. SWAINSON, CMDG.

INSTRUCTIONS

Topography in this area was done pursuant to instructions
dated August 19, and November 12, 1930, Project No. 69, Hawaiian
Islands.

GENERAL DESCRIPTION

The Coast is rocky in most places, there being a few stretches of
sand beach, parts of which have rocky ledges at water line. Algeroba
trees grow almost to the water line. These trees are small, about 15
feet high, and quite thick. North of Makena is a rocky point forming
the north side of Makena Bay. This point is not very prominent from
off shore, though is readily distinguished when one is near shore.
Puu Olai, or Olai Hill is about 1 mile south of Makena and is quite
prominent. It has the appearance of a cone from near Molokini Island
but from the west of Makena it appears as a double hill. This hill
is the only prominent landmark on the sheet.

LANDMARKS

Olai Hill, about 1 mile south of Makena is the most prominent
landmark in the vicinity.

There is a green roofed house at the south end of the sand ridge
on which are located Ed Rei, Pete and Al. This house is prominent from
the sea; from West to Northwest of the house, and is readily identified
by its situation at the south end of this beach.

CHARACTER OF CONTROL

\(\Delta\) Stone, \(\Delta\) Rough, and \(\Delta\) Puu Olai were used for control. A closed trae-
verse was run from \(\Delta\) Stone northward to \(\Theta\) Wag and back to \(\Delta\) Stone and
from \(\Delta\) Stone to \(\Theta\) Rough and from \(\Theta\) Rough to \(\Theta\) You. \(\Delta\) Puu Olai was used for
orientation on these traverses; each of which closed within require-
ments.

\(\Theta\) Wag, Rac, Ben, Pat, Sec, Me, were located by traverse or
were taken to them from Stone. The other signals were rodded in, as was
shoreline.
CLOSING ERRORS AND ADJUSTMENTS

Traverse from $\triangle$ Stone to $\odot$ Top ($\odot$ Wag) -- back to $\triangle$ Stone closed without error.

$\triangle$ Stone to $\triangle$ Rough closed with error of two meters, unadjusted. Traverse run from $\triangle$ Rough southward was not closed, but cuts from near $\odot$ Pat (on flat rock ledge) and from $\odot$ You to $\odot$ Me intersected the cut from $\triangle$ Stone to $\odot$ We in a point which checked rod reading from $\odot$ You to $\odot$ Me. This showed traverse to be without appreciable error.

DESCRIPTION OF AUXILIARY SURVEY METHODS

The rock northwest of $\triangle$ Stone was located by three cuts, intersecting in a point. The inshore rocks were located by one, two, or three cuts, and by proximity to some located rock by sketching.

$\odot$ Roc was located by five cuts, a small rock south of Gil was located by three cuts.

Rocks northwest of $\odot$ La were located by three cuts, that is, the lower right hand rock was, the others by a cut and sketching.

CHANGES IN PROMINENT OBJECTS

No changes were noted in prominent objects.

COMPARISON WITH PREVIOUS SURVEYS

The work agrees very well with previous surveys. The shoreline checks the old sheet, except for small irregularities that show up on a large scale sheet and were too small to be noted on a small scale.

The coast is now almost completely covered with algeroba trees and no elevations were obtained inland as it would cause undue delay. The contouring of the old sheet appears to be correct with the exception of two water courses near $\odot$ Can. These appear to flatten out as one goes inland. The small ponds near the south end of the sheet, east of $\odot$ See were noted by the party, but time was too short to locate same. They were located by previous survey.

The shoreline joins the previous survey satisfactorily.

NEW NAMES

No new names were given in the survey.

CHANGES IN SHORELINE

No changes in shoreline.

CHARACTER OF MARSHES

No marshes in area covered by this sheet.
STATISTICS

Statute miles of Roads   - 1.2
" " Shoreline           - 2.9

C. J. Wagner,
Jr. H. & G. Engr., C. & G. S.,
U.S.C. & G.S.S. PIONEER.

Approved and forwarded:

O. W. Swainson,
H. & G. Engineer, C. & G.S.,
Commanding U.S.C. & G.S.S. PIONEER.
<table>
<thead>
<tr>
<th>NAME</th>
<th>LAT.</th>
<th>LONG.</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wag</td>
<td>20 39</td>
<td>156 26</td>
<td>Banner.</td>
</tr>
<tr>
<td>Top</td>
<td>20 39</td>
<td>156 26</td>
<td>Round knob on rock.</td>
</tr>
<tr>
<td>We</td>
<td>20 39</td>
<td>156 26</td>
<td>Small rock.</td>
</tr>
<tr>
<td>Gil</td>
<td>20 39</td>
<td>156 26</td>
<td>Whitewash</td>
</tr>
<tr>
<td>Lim</td>
<td>20 39</td>
<td>156 26</td>
<td>Paint on rock.</td>
</tr>
<tr>
<td>Der</td>
<td>20 39</td>
<td>156 26</td>
<td>Mast at landing.</td>
</tr>
<tr>
<td>Way</td>
<td>20 39</td>
<td>155 26</td>
<td>Whitewash</td>
</tr>
<tr>
<td>Can</td>
<td>20 39</td>
<td>156 26</td>
<td>Whitewash</td>
</tr>
<tr>
<td>Roc</td>
<td>20 39</td>
<td>156 26</td>
<td>Highest rock in group.</td>
</tr>
<tr>
<td>Ban</td>
<td>20 39</td>
<td>156 26</td>
<td>Banner - 2&quot;x 4&quot;.</td>
</tr>
<tr>
<td>Go</td>
<td>20 39</td>
<td>156 26</td>
<td>Concrete church steeple.</td>
</tr>
<tr>
<td>Red</td>
<td>20 39</td>
<td>156 26</td>
<td>Telephone pole.</td>
</tr>
<tr>
<td>Pete</td>
<td>20 39</td>
<td>156 26</td>
<td>&quot;</td>
</tr>
<tr>
<td>Al</td>
<td>20 38</td>
<td>156 26</td>
<td>&quot;</td>
</tr>
<tr>
<td>La</td>
<td>20 38</td>
<td>156 26</td>
<td>Corner of lanai of small hut.</td>
</tr>
<tr>
<td>Pat</td>
<td>20 38</td>
<td>156 26</td>
<td>Small flag.</td>
</tr>
<tr>
<td>Will</td>
<td>20 38</td>
<td>156 26</td>
<td>&quot;</td>
</tr>
<tr>
<td>You</td>
<td>20 38</td>
<td>156 26</td>
<td>Banner.</td>
</tr>
<tr>
<td>See</td>
<td>20 38</td>
<td>156 27</td>
<td>Whitewash.</td>
</tr>
<tr>
<td>Me</td>
<td>20 39</td>
<td>156 27</td>
<td>Banner.</td>
</tr>
</tbody>
</table>
REVIEW OF TOPOGRAPHIC SURVEY No. 4744

Title (Par. 56) Makana Bay, East Molokai, Hawaiian Islands

Chief of Party (Par. 5) L.W. Stimson Surveyed by G.J. Wayner Inked by G.J. Wayner

Ship Pioneer Instructions dated Aug. 19, 1930 Surveyed in Jan. 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.) None shown on sheet

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 mountains. (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. Descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of LMs and DPs, 68.)

16. No list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) Descriptive Report has par. on this subject.

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

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

19. Junctions with contemporary surveys are adequate. T2679 (1904-5) covers this area on scale 1-10000.

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, 39, 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. Christiansen Nov. 16, 1933.

Examined and approved:

L. O. Robit.
Chief, Section of Field Records

J. H. Bridges
Chief, Section of Field Work

W. W. W. Pepper
Chief, Division of Charts

G. H. Pedersen
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 Letter A (T-51)

REGISTER NO. 4744

State Hawaiian Islands

General locality WAILUKU

Locality MAKANA BAY

Scale 1:5000 Date of survey January 1931

Vessel U. S. C. & G. S. S. PIONEER

Chief of Party W. Swainson

Surveyed by C. J. Wagner

Inked by C. J. Wagner

Heights in feet above MHW to ground tops of trees

Contour Approximate contour Form line interval 5 feet

Instructions dated August 19 and November 12, 1930

Remarks: 

U. S. GOVERNMENT PRINTING OFFICE 1930