

4744

U. S. COAST & GEODETIC SURVEY  
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Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *T. Hawaii*

11-5613

DESCRIPTIVE REPORT.  
4744  
Topographic Sheet No. *A (T-51)*

LOCALITY:

*Maui Island*

*Makena Bay*

1931

CHIEF OF PARTY:

*O. W. Swainson, H. & G. Engr.*

DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET OF

MAKENA, 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 @ Red, 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

Δ Stone, Δ Rough, and Δ Puu Olai were used for control. A closed traverse was run from Δ Stone northward to @ Wag and back to Δ Stone and from Δ Stone to Δ Rough and from Δ Rough to @ You. Δ Puu Olai was used for orientation on these traverses, each of which closed within requirements.

@ Wag, Rac, Ban, Pat, Sec, Me, were located by traverse or taken to them from Stone. The other signals were rodded in, as w shoreline.

### CLOSING ERRORS AND ADJUSTMENTS

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

$\Delta$  Stone to  $\Delta$  Rough closed with error of two meters, unadjusted. Traverse run from  $\Delta$  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  $\Delta$  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  $\Delta$  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  $\odot$  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 ~~survey~~ 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*  
C. J. Wagner,  
Jr. H. & G. Engr., C. & G. S.,  
U.S.C. & G.S.S. PIONEER.

Approved and forwarded:

*O. W. Swainson*  
O. W. Swainson,  
H. & G. Engineer, C. & G.S.,  
Commanding U.S.C. & G.S.S. PIONEER.

LIST OF TOPOGRAPHIC  
POSITIONS

NAME	LAT. 0 ' "	LONG. 0 ' "	REMARKS
Wag	20 39	156 26	Banner.
Top	20 39	156 26	Round knob on rock.
We	20 39	156 26	Small rock.
Gil	20 39	156 26	Whitewash
Lik	20 39	156 26	Paint on rock.
Der	20 39	156 26	Mast at landing.
Way	20 39	156 26	Whitewash
Can	20 39	156 26	Whitewash
Roc	20 39	156 26	Highest rock in group.
Ban	20 39	156 26	Banner - 2"x 4".
Go	20 39	156 26	Concrete church steeple.
Red	20 39	156 26	Telephone pole.
Pete	20 38	156 26	"
Al	20 38	156 26	"
La	20 38	156 26	Corner of lanai of small hut.
Pat	20 38	156 26	Small flag.
Will	20 38	156 26	"
You	20 38	156 26	Banner.
See	20 38	156 27	Whitewash.
Me	20 38	156 27	Banner.

## REVIEW OF TOPOGRAPHIC SURVEY No. 4744

Title (Par. 56) *Makana Bay, Enderby, Hawaiian Islands*Chief of Party *Q. W. Swinson* Surveyed by *B. J. Wagner* Inked by *B. J. Wagner*Ship *Pioneer* Instructions dated *Aug. 19, 1930*  
*Nov. 12, 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.)  
*none shown on sheet*
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 aere-topography relative to type of photographs, method of compilation and type of ground control.~~
15. *No* descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DP's, 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 *Old 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. Christman* Nov. 16, 1933.

Examined and approved:

*L. O. Lobert*  
Chief, Section of Field Records

*B. V. Jordan*  
Chief, Section of Field Work

*W. H. Raper*  
Chief, Division of Charts

*G. H. Rude*  
Chief, Division of Hyd. and Top.

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TOPOGRAPHIC TITLE SHEET

Acc. No. \_\_\_\_\_

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 Is.

General locality ~~MAUI~~ Maui

Locality MAKENA BAY

Scale 1-5000 Date of survey January, 19 31

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

Chief of Party O. W. Swainson

Surveyed by C. J. Wagner

Inked by C. J. Wagner

Heights in feet above MHW to ground to tops of trees

Contour Approximate contour Form line interval --- feet

Instructions dated August 19 and November 12, 1930

Remarks: \_\_\_\_\_