

4758

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

Oct. 4 1933

Acc. No.

State: Hawaii

DESCRIPTIVE REPORT

Topographic } Sheet No. M 1 4758
Hydrographic }

LOCALITY

Hanalei Bay and Vicinity

Oahu, Hawaii

1931

CHIEF OF PARTY

Hubert A. Paton, Lieut.

U. S. GOVERNMENT PRINTING OFFICE: 1920

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(h), EXECUTIVE ORDER 12356

Descriptive Report

to accompany

Sheet M₁

Hanauma Bay
and vicinity

Oahu, Hawaii

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. The Army wished to expedite the work as much as possible and to develop only those places suitable for landing troops.

This area had been surveyed by Lieut. E. R. Hand in 1928. On account of the excessive distortion in the photostat copy of his sheet (#4377) furnished this party, it was necessary to resurvey the entire shoreline, while locating the new hydrographic signals. A good many of the old signals were recovered and the same names given to them. See Sheet M₂ for the remainder of the area on Sheet # 4377.

T-4759

CHARACTER OF CONTROL:

Seven triangulation stations were used to control this survey. A scheme of graphic triangulation was expanded into Hanauma Bay and toward Koko Head, using signals PIPE, JAP, PIL, and two un-named signals southwest and northwest of PIL.

CLOSING ERRORS:

A traverse was started at signal TRI, it being located by one shot from the graphic scheme. The traverse to the west could be run as far as signal ULT. The connection with the topography on Sheet "L" was sketched in, a distance of 120 meters, for an actual closure could not be made on account of the steep cliffs. The shore line was accurately located for 220 meters east of signal TRI.

A three point problem was used at signal CAT and a traverse extended to the west which closed without error.

The entire shore line in Hanauma Bay was located by intersections and three point problems. From signal JAP to Triangulation Station Blow, a traverse was run which had zero closure.

CHANGES:

There have been no apparent changes in the shore line since the last survey. The sand beach in the vicinity of signal LEN changes slightly after each storm but after a short time it resumes it's former appearance.

CHARACTER OF SHORELINE:

Lava deposits in this area have produced a precipitous and dangerous shoreline. There is but little protection from the Northeast trade winds and a heavy surf pounds on the shore most of the time. An occasional swell, larger than the average, sometimes sweeps over the projecting points causing the death of the fishermen. Recently small concrete warning signs have been erected along the shore.

METHODS & EQUIPMENT:

Standard Coast Survey methods and equipment were used.

Respectfully submitted,

Hubert A. Paton

Hubert A. Paton,
Lieut. U.S.C. & G. S.

PLANE TABLE POSITIONS

SHEET M₂

Object and description	Lat.	D.M. ⁴	Long.	D.P.	Height ²
Tall Mast, R.C.A. radio station	21°17'	412	157°42'	87	
Taller Mast, " " "	21 17	507	157 41	1543	
Observation post, center of tower	21 16	6	157 42	692	30'
Pil, rock cairn & post set in conc.	21 16	138	157 41	1367	8
Warning sign.	21 16	497	157 41	1698	7
Cor, SE cor. of pavilion.	21 16	918	157 41	1677	
If, lone boulder, 50 meters NE of sand beach	21 16	1011	157 41	1560	6
Pipe, cable support, top of cliff.	21 16	1010	157 41	1670	8
B.M.3, Standard bench mark.	21 16	1034	157 41	1464	
Bil, warning sign.	21 16	1022	157 41	1399	7
Hole in buttress, black rock.	21 16	982	157 41	1336	
Jap, post set in concrete.	21 16	681	157 41	914	8
Blow Hole	21 17	227	157 40	1296	
Pipe	21 16	1240	157 41	1029	2
Warn, warning sign.	21 17	257	157 40	1304	
Cul, south end of colvert pipe, middle one of three.	21 17	378	157 40	1264	
Ard, NE end of guard blocks.	21 17	437	157 40	1228	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Honolulu, Fort Shafter, T. H.

January 14th, 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.

Hubert A. Paton

Hubert A. Paton

Chief of Party.

[illegible]

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. 4758

Title (Par. 56) *Hanauma Bay and vicinity, S.E. Coast of Oahu, Hawaiian Islands*

Chief of Party *H.A. Paton* Surveyed by *H.A. Paton* Inked by *H.A. P.*

Ship *Shore 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.)
None
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) *None*
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. 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. pps* ✓
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, 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.G. Christman, Feb. 14, 1934*

Examined and approved:

L.O. Polub
Chief, Section of Field Records

L.O. Polub
Chief, Division of Charts

J.S. Borden
Chief, Section of Field Work

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES
OCT 17 1933
NO. 4758
Acc. No.

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. M₁

REGISTER NO. **4758**

State Hawaiian Is.

General locality S.E. Coast of Oahu

Locality Hanauma Bay and Vicinity

Scale 1:5000 Date of survey December, 1931

Vessel Inshore Hydrographic Survey of Oahu

Chief of Party Hubert A. Paton, Lieut.

Surveyed by H.A. Paton and L.A. Wirtz, Sgt. U. S. A.

Inked by Hubert A. Paton

Heights in feet above high water to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval.....feet

Instructions dated.....July 14, 1931

Remarks: Surveyed in cooperation with the U. S. Army, to re-locate signals for Hydrographic Survey. See Sheet # 4377