4354

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

C. & G. SURVEY
L. & A.
JUN 18 1928
Acc. No.

*State:* Hawaiian Is.

# DESCRIPTIVE REPORT

*Topographic* / ~~*Hydrographic*~~ *Sheet No.* C 4354

LOCALITY

West Coast of Hawaii

Keauhou Bay and Vicinity

*1928*

CHIEF OF PARTY

T.J. Maher

GOVERNMENT PRINTING OFFICE

4354

Applied to compilation 4140 D.M.A. June 1941.

C. & G. SURVEY
L. & A.
JUN 12 1928
Acc. No.

DESCRIPTIVE REPORT
to accompany

TOPOGRAPHIC SHEET "C"
4354

Coast of Hawaii,

KEAUHOU BAY

U.S.C. & G.S.S. GUIDE
1928

Thos. J. Maher
Chief of Party

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET"C"

AUTHORITY: Orders from the Director, Coast & Geodetic Survey, to Thos. J. Maher, H & G Engineer, dated Nov. 3, 1927.

LIMITS: Keauhou Bay and vicinity.

CONTROL: Control for this survey is based on three triangulation stations in the immediate vicinity of Keauhou Bay,

METHODS: The usual plane table method was used in making this survey.

A plane table traverse was run along the coast from △ Signal to the church at Kahaluu. Another traverse was then run along the road from Keauhou to this church. These two positions thus determined differed by eight meters and an adjustment was made, taking an average of these two positions. The shore line was next adjusted for this difference.

A traverse was also run from △ Target to the southern limit of the sheet but no check position was obtainable.

Traverses between the other stations were also run. These were short and closed well so that no further adjustment was necessary.

GENERAL DESCRIPTION:

With the exception of the beach at the inner end of Keauhou Bay and the small bight immediately to the north of it, the shore line from the southern limit of this sheet to a point opposite ⊙ Ho is steep to with a well defined high water line. In the most part it is very rough and ragged and formed by two old lava flows. It is from 15 to 30 feet above the high water line.

From ⊙ Ho to the northern limit of the sheet it is low and flat. Between ⊙ Ho and ⊙ Bud is a long flat gravel beach and from there to the sand beach at Kahaluu there are grassy stretches with scattered patches of coconut palms.

That section of the shore line included between the lines of the lava flow is exceptionally rough and although a small trail was found by the party, travel along the shore in this locality is rather difficult.

From offshore the lava flow north of Keauhou Bay is fan shaped in appearance. As noted on the sheet, it is practically barren with only an occasional scrub bush or tree thereon.

This flow is very old as the authorities in charge of the observatory at Kilüea state that they have no information concerning the date of it's occurence.

ROADS AND TRAILS:

There are two roads running out of the village of Keauhou, one across the lava bed thru the village of Kahaluu and the other in a northerly direction across the lava flow to connect with the main island highway or what is called the Government Road. Both of these roads are of hard dirt and lava and are in fair condition.

A trail from the village of Keauhou leads up over the hill to connect with the Government Road, beyond the limits of this sheet.

Small foot trails lead out from the village of Keauhou in both directions along the shore but they are very poor and hard to follow at times.

CHANGES: No marked changes in the shore line were noticed since the previous survey.

TOWNS: Keauhou and Kahaluu are both small settlements located on the shore line. There is a post office at Keauhou and inter-island boats stop there with supplies and mail for Kahaluu and the settlements along the Government Road.

The reef off of Kahaluu is impassable even to small boats.

POSITIONS: A list of plane table positions are attached herewith.

Respectfully submitted,

Francis L. Gallen

Francis L. Gallen, H & G E,
U.S. Coast & Geodetic Survey.

Approved.
T. Mahon
Ch. of Party.

LIST OF PLANE TABLE POSITIONS SCALED FROM TOPOGRAPHIC SHEET "C"

| SIGNAL | LATITUDE ° ' | D.P. meters | | LONGITUDE ° ' | D.M. meters | | DESCRIPTION |
|---|---|---|---|---|---|---|---|
| PA | 19 33 | 537.4 | (1307.5) | 155 57 | 1712.8 | ( 36.2) | Prominent lone coconut tree |
| Get | 19 33 | 550.0 | (1294.9) | 155 58 | 211.5 | (1537.5) | Whitewash on prominent cliff |
| WAY | 19 33 | 998.69 | ( 846.2) | 155 58 | 251.0 | (1499.9) | whitewash on cliff |
| LON | 19 33 | 1450.69 | ( 394.2) | 155 58 | 81.2 | (1667.7) | Prom.lone coconut tree S shore of Keauhou Bay |
| BAD | 19 33 | 1531.69 | ( 313.2) | 155 57 | 1683.1 | ( 65.8) | Whitewash on rocks |
| TREE | 1933 | 1579.39 | ( 265.5) | 155 57 | 1619.7 | ( 129.2) | Large prominent tree |
| NEP | 19 33 | 1637.09 | ( 207.8) | 155 57 | 1545.4 | ( 203.5) | W gable of prom. house on shore. |
| DOCK | 19 33 | 1680.39 | (164.5 ) | 155 57 | 1559.7 | ( 189.2) | W gable on dock housing |
| SMA | 19 33 | 1730.39 | ( 114.5) | 155 57 | 1614.4 | ( 134.5) | Small tree near stone wall |
| MY | 19 33 | 1681.39 | ( 163.5) | 155 57 | 1732.1 | ( 16.8) | Whitewash in highest point |
| ALL | 19 33 | 1749.39 | ( 95.5) | 155 58 | 74.8 | (1674.1) | Prominent algaroba tree |
| AS | 19 33 | 1754.69 | ( 90.2) | 155 58 | 129.5 | (1619.4) | Whitewash on highest point |
| TED | 19 34 | 96.39 | (1748.5) | 155 58 | 282.5 | (1466.4) | Whitewash on rocky lava pinnacle |
| TOD | 19 34 | 524.0 | (1320.89) | 155 58 | 428.5 | (1320.4) | Cairn of rocks, whitewashed |
| WAT | 19 34 | 258.3 | (1586.56) | 155 58 | 361.5 | (1387.4) | Whitewash on small,rocky lava cliff |
| BUZ | 19 34 | 641.69 | (1203.2) | 155 58 | 403.2 | (1345.5) | Southernmost of two prom. bushy green trees |
| SAM | 19 34 | 845.09 | ( 999.8) | 155 58 | 375.0 | (1373.9) | Whitewash on small cliff |
| HO | 19 34 | 1111.6 | ( 733.3) | 155 58 | 352.5 | (1396.3) | Gable of small shack S of gravel beach |
| BUD | 19 34 | 1411.9 | ( 433.0) | 155 58 | 504.0 ~~XXXXXX~~ | (1244.7) | Cairn of rocks,whitewashed |
| HEN | 19 34 | 1793.9 | ( 51.0) | 155 58 | 215.0 | (1533.7) | Helani stone church,red trimmed steeple, iron roof. |
| LAST | 19 35 | 124.0 | (1720.9) | 155 58 | 315.0 | (1433.7) | Small white house on beach with red roof |

Δ Signal 1928. } plotted incorrectly on 7·4354
Δ Point 1928 } as to latitude, and in error
in opposite directions

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON July 31, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4354

Keauhou Bay and vicinity, Hawaii

Surveyed in 1928

Instructions dated November 3, 1927

Chief of Party, T. J. Maher.

Surveyed and inked by F. L. Gallen.

1.- The records as well as the plan and character of the survey conform to the requirements of the General Instructions.

2. The plan and extent of the survey satisfy the requirements of the specific instructions.

3. The shoreline between signals Get and Pa differs somewhat from that on T. 3424 surveyed in 1913. Elsewhere on the sheet the agreement between the two surveys is adequate, but a detailed comparison between the two sheets shows that there is a difference in the latitudes varying from 16 to 24 meters, the longitudes being identical. The Division of Geodesy states that the triangulation on the old sheet is unadjusted which probably accounts for the differences.

4. No additional surveying is required.

5. The character and scope of the surveying and field drafting are excellent.

6. Reviewed by E. P. Ellis, July, 1928.

Approved:

L. O. Colbert

Chief, Section of Field Records (Charts)

J. B. Borden

Chief, Section of Field Work (H. & T.)

Form 537a
11—5813

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4354

# 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.

C. & G. SURVEY
L. & A.
JUN 11 1928
Acc. No.

Field No. C

REGISTER NO. 4354

State ~~Island of~~ Hawaiian Is.

General locality West Coast of Hawaii

Locality Keauhou Bay and Vicinity

Scale 1:2,500 Date of survey March, 1928

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party Thos. J. Maher

Surveyed by Francis L. Gallen

Inked by Francis L. Gallen

Heights in feet above H W to ground ~~xxxxxxxxxxxxxxxx~~

~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~, Form line interval 50 feet

Instructions dated November 3, 1927

Remarks:

GPO