

4301

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

E. Lester Jones Director

C. & G. SURVEY

L. & A.

DEC 30 1927

Acc. No.

State: Hawaiian Is.

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No.

4301

LOCALITY

Hawaiian Islands

Kauai Island

Kalihiwai Bay

Kilauea Pt to Honono Pt.

1927

CHIEF OF PARTY

F.G. Engle

GOVERNMENT PRINTING OFFICE

4301

DESCRIPTIVE REPORT
to accompany
Topographic Sheet # G., Kalihiwai Bay, Kauai Island T.H.

F.G.Engle, Chief of Party

Director's instructions dated Nov.23,1926.

EXTENT:

This sheet includes the shore-line of the north coast of Kauai Island from Kilauea Pt. to about one mile west of Kalihiwai Bay and connects on the east with Topographic Sheet # F, and on the west with Topographic Sheet # D. This sheet also includes form lines and topographic features in the vicinity of Kalihiwai Bay.

GENERAL DESCRIPTION:

Kilauea Pt., the most northerly part of Kauai Island, is a black rocky point marked by a lighthouse. The shore-line of this point is very steep, dropping off almost vertically to the water's edge. From Kilauea Pt. to Kalihiwai Bay the shore-line is almost a continuous sand beach except for the rocky stretch of coast near Pukamoe Pt. From 100 to 200 meters back from this shore-line the land rises abruptly to a height of 100 to 200 feet forming a table-land which is devoted to the cultivation of sugar cane.

Kalihiwai Bay is a triangular shaped bight one-half mile wide and indents the coast about three-eighths of a mile. It's east side is marked by Pukamoe Pt., a precipitous red bluff about 150 feet high. The head of the bay is a sand beach. The Kalihiwai River empties into bay and is navigable by small boats for about one mile above the entrance. The village of Kalihiwai is scattered along the beach, back of which are high wooded bluffs.

Just west of the mouth of the river is a short stretch of steep rocky shore-line. From this point to the western limit of the sheet the shore-line is a continuous sand beach. The land back of here is rolling and cut up by valleys. It is used chiefly for grazing.

REEFS and ROCKS:

A rock awash at high water is located off Pukamoe Pt. about 190 meters north of topographic station TON. A coral reef fringes the shore on the west side of Kalihiwai Bay and extends to the western limit of the sheet. The rock awash was located by plane table cuts taken at time of low water. The limits of the coral reef were sketched in by the hydrographic party.

SURVEY METHODS:

The three triangulation stations shown furnished control for this work and the survey was accomplished by the usual plane-table methods. A traverse was run from triangulation station KIL to Triangulation station CREST with a closing error of 4 meters which was adjusted. A traverse was also run from triangulation station CREST to triangulation station HONONO with a closing error of 2 meters which was adjusted. A spur traverse was run up the Kalihiwai River. Elevations were obtained by vertical angles and rod readings.

LANDMARKS and AIDS TO NAVIGATION:

The most important aid to navigation on this sheet is Kilauea Pt. Lighthouse. It's position was determined by triangulation.

The only other landmark on this sheet is a small white church on the beach about mid-way between triangulation stations CREST and HONONO. This church spire is shown on the sheet and is named SPIRE. It is visible to about 2 miles off shore.

List of plane-table positions and statistics accompany this report.

Respectfully submitted,

Approved and forwarded,

F. G. Engle
Chief of Party

J. C. Partington
Topographer

LIST of PLANE-TABLE POSITIONS
to accompany
Topographic Sheet # G., Kalihiwai Bay, Kauai Island, T.H.

Object	Latitude	D.M. meters	Longitude	D.P. meters	Remarks
Flag	22° 13'	(1449) 395	159° 25'	(614) 1104	1 inch iron pipe set by local surveyors.
Let	22 13	(1664) 181	159 26	(1572) 146	Center of small house on beach west side Kalihiwai Bay.
Rock	22 13	(1157) 688	159 26	(682) 1036	Center of rock crusher.
Spire	22 13	(1073) 772	159 26	(277) 1441	Lone church spire on sand beach.

Statute miles of shore-line	5.0
Statute miles of roads	4.0
Statute miles of rivers	0.8

DEPARTMENT OF COMMERCE
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TOPOGRAPHIC TITLE SHEET

4301

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4301

State . . . Hawaiian Is.

General locality . Kauai Island - N. Coast

Locality . . . Kalihiwai Bay, ^{Kilauea Pt. to Hanalei Pt.} ~~North coast Kauai Island~~

Chief of party . . F.G. Engle

Surveyed by . . . J.C. Partington

Date of survey . . June 1927

Scale 1 : 5,000

Heights in feet above Mean high water

~~Form line~~
~~Contour~~ interval 20 . . feet.

Inked by J.C. Partington. Lettered by J.C. Partington

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, ☒ Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks: