

4296

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.

4296

LOCALITY

Hawaiian Islands

Kauai Island

Makahuena Pt. to Kapaa

1927

CHIEF OF PARTY

Clem L. Garner

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT
to accompany
Topographic Sheet # A., East coast Kauai Island, T.H.

Glen L. Garner, Chief of Party

Director's instructions dated Nov. 23, 1928

EXTENT:

This sheet includes the shore-line and signals on the east coast of Kauai Island from Makahuena Pt. to the village of Kapaa. The surveys of Nawiliwili and Hanamaulu Bays were accomplished on large scale sheets.

GENERAL DESCRIPTION:

Makahuena Pt., the southeast point of Kauai Island, is a low rocky point marked by a lighthouse. From Makahuena Pt. to Kawelikoa Pt. the shore-line is low and rocky with occasional stretches of sand beach. Kawelikoa Pt. is a high black rocky point about 680 feet high which drops off rapidly to the water's edge. Back of this stretch of coastline the land is used chiefly for the cultivation of sugar cane. From Kawelikoa Pt. to Nawiliwili Bay the shore-line is mostly steep and rocky. The area back of this is high and rugged and much cut up by valleys. From Nawiliwili Bay to the northern limit of the sheet the shore-line is mostly sandy and the country is low and rolling. Sugar cane is grown here in large quantities.

Breakers extend off-shore almost continuously from Makahuena Pt. to Nawiliwili Bay but landings can be made in smooth weather back of the point near topographic signal BUT and in the small bight near signal BLIND. Breakers are almost continuous from Nawiliwili Bay to Hanamaulu Bay and from Hanamaulu Bay to Lehuawehe Bay. The limits of breakers are shown on the hydrographic sheet of this area.

Nawiliwili Bay and Hanamaulu Bay are the principal ports on the island. The surveys of these bays were accomplished on large scale sheets. Hanamaulu Bay, the port of which is known as Ahukini, is the only port on the island where ships may go alongside the dock at present.

SURVEY METHODS:

The survey was accomplished by the usual plane-table methods except for a small part which was located by sextant cuts.

From triangulation station MAKAHUENA to KAWELIKOA a combination of traverse and three point fix was used, closing on KAWELIKOA with an error of 4 meters which was adjusted. A traverse was run from KAWELIKOA to topographic station WEN and the shore-line rodged in to within 100 meters of topographic station WHIR. The position of topographic station WHITE was determined by plane-table cuts from Ninini Light and Kukii Light and the location was checked by running a traverse from Kukii Light to WHITE. From WHIR to WHITE the shore-line could not be traversed by plane-table but was located by sextant cuts taken from the ship.

SURVEY METHODS: (continued)

From Ninini Light to Derrick a traverse was run closing with an error of 5 meters and a traverse was run from DERRICK to AHUKINI LIGHTHOUSE with an error of 4 meters. Both traverses were adjusted. From AHUKINI LIGHTHOUSE to POLO a combination of traverse and three point fix was used checking the traverse positions by three point fix. From POLO a traverse was run to EAST STACK KAPAA closing with an error of 6 meters which was adjusted.

No attempt was made to locate contours and topographic features inland because the area seemed adequately covered by the U.S. Geological Survey map of this island.

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

Respectfully submitted,

Approved and forwarded,

D. G. Hughes
Chief of Party

J. C. Partington
Topographer

Inspected January, 1928.

Six Δ^m points on this sheet differed from the field computations, with a maximum difference of 25 meters. They have been correctly plotted in the office.

The only topography that appeared to be affected by the erroneously located points was that between Kukui Lt. and \odot White. As the topography in this location is also shown on T. 4292 it has been erased from T. 4296 north of \odot White.

\odot White and adjacent topography have been changed to agree with T. 4292. E. P. Ellis.

LIST of PLANE TABLE POSITIONS
to accompany
Topographic Sheet # A, East coast Kauai Island, T.H.

Object	Latitude	D.M. meters	Longitude	D.P. meters	Remarks
Mak	21° 52'	(1555) 290	159° 26	(335) 1388	Center of Makahuena Pt. lighthouse.
Loa	21 53	(19) 1826	159 26	(210) 1513	Koloa Mill Chimney.
By	21 53	(775) 1070	159 24	(820) 902	Center of conspicuous de- tached islet.
Blind	21 55	(1469) 376	159 23	(1389) 333	Flag staff on north gable of green house.
Vane	22 00	(1193) 660	159 20	(1143) 578	Weather vane on north end of barn.
Fen	22 00	(528) 1317	159 20	(1111) 610	End fence post on sand beach.
Ree	22 02	(1495) 350	159 20	(1204) 517	Lone green tree.
Gin	22 02	(377) 1468	159 20	(1193) 528	White railroad crossing sign,north of bridge.
Sign	22 02	ø 335) 1510	159 20	(1210) 511	White square sign,north of Gin.
Square	22 03	(1787) 58	159 20	(1367) 354	White square sign on beach south of Japanese temple.
Wy	22 03	(1618) 227	159 20	(1594) 127	Flag pole back of Japanese temple.

Statute miles of shore-line - - - - - 20.1
Statute miles of roads and railroads - - 13.3

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TOPOGRAPHIC TITLE SHEET

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.

4296

U. S. Coast and Geodetic Survey.

Register No. ^A4296

State . Hawaiian Is.

General locality . East coast. ~~Kauai Island~~

Locality . Makahuena Point to ~~Kapaa~~

Chief of party . Clem L. Garner

Surveyed by . J.C. Partington

Date of survey . February 1927

Scale . 1 : 20,000

Heights in feet above ~~Mean high water~~

Contour interval feet.

Inked by . J.C.P. Lettered by . . J.C.P.

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks: