

4355

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
....., Director	
G. & G. SURVEY L & A JUL 11 1928 Acc. No.	
State: Hawaiian Is.	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 4355
LOCALITY	
West Coast of Hawaii	
Kailua Bay	
1928	
CHIEF OF PARTY	
T. J. Maher	

GOVERNMENT PRINTING OFFICE

4355

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

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. Lester Jones Director

State: T. Hawaii

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No.

"D"

4355

LOCALITY

West Coast of Island of Hawaii

Kailua Bay

1928

CHIEF OF PARTY

Thos. J. Maher, H. & G. E.

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

To Accompany Topographic Sheet No. "D" -----Scale 1/5000

West Coast of Island of Hawaii, T. H.

Kailua Bay

Date of Instructions:- November 3, 1927.

Date of Survey:- April 7-21, 1928.

Chief of Party:- Thos. J. Maher, H. & G. E.

Topographer:- F. B. Quinn, Jr. H. & G. E.

Introduction:- The work on this sheet includes the shore line in the vicinity of Kailua Bay and the detail adjacent to it. The detail back of the shore line is to be completed when this ship resumes operations at Hawaii during the winter of 1928-29. The topographic party operated from the steamer Guide.

Limits:- This sheet extends from a point near Kaiwi Point about $1\frac{1}{2}$ miles NW'ly from Kailua Bay, southeasterly to Kailua Bay, and thence SSE'ly about $1\frac{3}{4}$ miles to and including Puapua Point.

Control:- Seven main scheme triangulation stations in the vicinity and an azimuth line to station Puu Ohau (eight miles distant), from a point near Kailua Light furnished the control for the work. The location of Kailua Church was found to be slightly in error and was plotted on the sheet in accord^{ance} with the 1928 triangulation of this ship.

Method:- The method of plane table stadia was used almost entirely, except where reefs and breakers were sketched from cuts to their limits and tangents.

The survey was started at a point near Kailua Light and carried by stadia traverse southerly to station "Kahelo", a distance of 1.6 miles, with a closure of 11 meters. The northerly end of the work was then carried from the point near Kailua Light to station "Keahuolu" and closed to 6 meters in a distance of 1.6 miles. These closing errors were distributed proportionally.

Nearly all hydrographic signals located by this party were natural objects, whitewashed where necessary for recognition. A few signals were small flags or cross banners.

From station Kahelo to the southerly limit of the sheet no triangulation stations were visible, so the traverse was carried along the shoreline and closed back along the road to 2 meters.

General Description of the Locality:- Practically the entire shore line is of a rock formation and not suitable for landing, except in Kailua Bay where a dock has been built in the sheltered northerly cove. Landings may be easily made here with small boats, except with a south-westerly wind when they are made difficult or impossible. A sand beach extends for about 50 meters to the east from the dock. A stone and concrete sea wall about 225 meters long protects the road from the dock eastward.

To the northwest of Kailua Light there is very little vegetation over an area extending nearly a mile back from the shore line. The lava rock over this area is sparsely covered with grass and weeds. Nine tenths of a mile northwest of Kailua Lighthouse there is a prominent grove of cocoa-nut trees, about 275 meters in length and just back of the high water line. There is a small house back of the center of this grove.

Kaiwi Point when viewed from the south appears as a low rocky point stepping up in a series of flat shelves from the water line. In this vicinity the slope up to the mountainous part of the island starts about a mile back from the shore line, while further south it starts about a half mile back from the shore.

The village of Kailua extends around the north and east side of of the bay. Kailua Church is the most prominent mark in the village and shows up as a rectangular building, painted dark red. It has spire at its northerly end. The village proper consists of about twenty five houses, a Post Office, a Court House, two churches, a Standard Oil Company supply station, a store of the American Factors Company, Ltd., three small retail stores, and a coffee-sorting mill. A paved highway leads from the village to Hualaloa and the main road around the island. Three dirt roads lead to other points as shown.

From Kailua to the southward, the trees extend practically to the shore line and obscure the roads and many of the houses from view to the seaward.

Statistics:-

Statute miles of high water line	5.3
Statute miles of roads and trails	4.7
Square statute miles of area	1.0
Working days	11
Number of men in party	3

PLANE TABLE POSITIONS

SIGNAL	LATITUDE LONGITUDE	D. M. D. P.	REMARKS
Crack	19-39 156-01	164.7 567.6	Cross banner. Marked with standard hydro. disc cemented in the bed rock.
Net	19-39 156-01	44.5 383.0	Large whitewash on rocks
Bak	19-39 156-01	145.5 235.4	Small house or shack
● Cen	19-38 156-01	(109.0) 17.7	Center of house back of prominent coconut grove
Flag	19-38 156-00	1498.4 (346.5) 1454.1 (294.0)	Small flag near high water line
Fence	19-38 156-00	1415.9 (429.0) 1258.6 (489.5)	White wash on corner of rock cairn
Cut	19-38 156-00	1224.8 (620.1) 1103.9 (644.2)	White wash on rocks
Boy	19-38 156-00	1153.8 (691.1) 922.6 (825.5)	Bush with whitewashed branches
Abe	19-38 156-00	1059.0 (785.9) 817.8 (930.3)	White wash on rock pile
Mort	19-38 156-00	947.4 (897.4) 736.2 (1011.8)	Cross banner. Marked with standard hydro. disc cemented into bed rock.
Tom	19-38 156-00	912.0 (932.9) 495.1 (1253.0)	Grave farthest from high water line
Gob	19-38 156-00	881.3 (963.6) 235.2 (1512.9)	Whitewashed algeroba tree trunk
Run	19-38 156-00	867.8 (977.1) 152.2 (1595.9)	Algeroba tree with white washed rocks underneath
● Stu	19-38 156-00	892.9 (952.0) 161.8 (1646.3)	Prominent tree stump about four feet high
Al	19-38 156-00	913.3 (931.6) 71.0 (1677.1)	Algeroba tree
Wit	19-38 156-00	912.2 (932.7) 50.2 (1697.9)	Large white wash on end of wall
Oil	19-38 156-00	982.8 (862.1) 64.5 (1683.6)	Larger of two oil tanks

#2 Continued

Signal	Latitude Longitude	D. M. D. P.	Remarks
Fox	19-38 155-59	1081.5 (763.4) 1729.9 (18.2)	Front gable of American Factors' store
Doc	19-38 155-59	1034.9 (810.0) 1693.9 (54.2)	Seaward gable of shed over dock
Oat	19-38 155-59	1093.9 (751.0) 1619.7 (128.4)	White wash on rock jutting out from sea wall
Dog	19-38 155-59	1124.2 (720.7) 1550.8 (197.3)	Center of small square house with green shutters
Pole	19-38 155-59	1230.9 (614.0) 1139.4 (608.7)	Flag pole
Wal	19-38 155-59	882.6 (962.3) 1390.1 (358.0)	White wash on corner of wall
Pat	19-38 155-59	749.3 (1095.6) 1312.2 (435.9)	Palm tree with white wash on trunk
Cort	19-38 155-59	733.9 (1111.0) 1239.0 (509.1)	Seaward gable of court-house
Staff	19-38 155-59	757.5 (1087.4) 1215.0 (533.1)	Flag pole in court house yard
Fin	19-38 155-59	668.0 (1176.9) 1225.7 (522.4)	White wash on southwest corner of wall around courthouse grounds.
Palm	19-38 155-59	664.1 (1180.8) 1132.4 (615.7)	Palm tree with white wash on trunk
Sil	19-38 155-59	603.8 (1241.1) 1002.0 (746.1)	White house with pale red roof
Tel	19-38 155-59	560.9 (1284.0) 1007.3 (740.8)	Telephone pole with white wash band
Bit	19-38 155-59	452.7 (1392.2) 929.0 (819.1)	Windmill
Ek	19-38 155-59	404.6 (1440.3) 928.4 (819.7)	Lone palm tree
Tib	19-38 155-59	297.8 (1547.1) 969.2 (779.0)	Center of white house
Ray	19-38 155-59	261.4 (1583.5) 1045.2 (703.0)	Large white wash on rock ledge

#3 Continued

Signal	Latitude Longitude	D.M. D.P.	Remarks
Green	19-38 155-59	149.6 (1695.3) 1025.2 (723.0)	Small brown house on point
Pil	19-38 155-59	24.7 (1820.2) 961.3 (786.9)	White wash boxes on rock
Cab	19-37 155-59	1781.0 (63.9) 905.4 (842.8)	White wash on rock cairn
Clump	19-37 155-59	1681.1 (163.8) 815.1 (933.1)	Prominent clump of palm trees
Bat	19-37 155-59	1513.7 (331.2) 772.2 (976.0)	White wash on rock cairn
Out	19-37 155-59	1379.0 (465.9) 739.0 (1009.3)	Small shack at corner of wall
Ruin	19-37 155-59	1328.5 (516.6) 701.0 (1047.2)	Ruins of stone house
Tut	19-37 155-59	1232.1 (612.8) 618.4 (1129.9)	White wash on rock pile
Gat	19-37 155-59	1190.7 (654.2) 533.5 (1214.8)	Gate
Ent	19-37 155-59	1185.6 (659.3) 525.6 (1222.7)	Leaning palm near gate
Bub	19-37 155-59	1103.2 (741.7) 538.6 (1209.7)	Prominent bush at corner of yard
To	19-37 155-59	992.3 (852.6) 577.4 (1170.9)	White rock
Bush	19-37 155-59	900.00 (944.9) 593.9 (1154.4)	Prominent lone cactus bush
Wow	19-37 155-59	822.9 (1022.0) 624.8 (1123.5)	White wash on tree trunk
Tre	19-37 155-59	745.4 (1099.5) 622.0 (1126.3)	Outside tree on point
Jef	19-37 155-59	671.0 (1173.9) 586.2 (1162.1)	White wash on tree trunk
Po	19-37 155-59	533.4 (1311.5) 601.5 (1146.8)	White wash on rock pile

Thos. J. Maher, H. & G. E.,
Chief of Party.

#4 Continued

Signal	Latitude Longitude	D.M. D.P.	Remarks
Ec	19-37 155-59	477.7 (1367.2) 598.5 (1149.8)	White wash on rock pile
Prom	19-37 155-59	1.6 (1843.3) 159.7 ()	Prominent tree
Last	19-36 155-59	(86.3) (186.0)	White rock
Wind	19-38 155-59	138.5 (1706.4) 978.5 (769.7)	Windmill near Signal "Green"
Rol	19-37 155-59	364.4 (1480.5) 550.4 (1197.9)	White wash on rock cairn
Wash	19-37 155-59	295.5 (1549.4) 438.3 (1310.0)	Palm tree with white wash on trunk
Roc	19-37 155-59	178.0 (1666.9) 365.4 ()	White wash on rocks
Dead	19-37 155-59	133.6 (1711.3) 285.4 ()	Dead palm tree

Respectfully submitted,

Francis B. Quinn

Francis B. Quinn, Jr. H. & G. E.

Approved,


 Thos. J. Maher, H. & G. E.,
 Chief of Party.

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

AND REFER TO NO. 11-DEP

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

July 31, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4355

Kailua Bay, Hawaii

Surveyed in 1928

Instructions dated November 3, 1927

Chief of Party, T. J. Maher.

Surveyed and inked by P. B. Quinn.

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 specific instructions.
3. The triangulation datum appears to be from 10 to 25 meters different from that on T. 3425, surveyed in 1913.
4. The junction with T. 3425 is adequate.
5. The Chief of Party states that the topography back of the shoreline will be completed when the ship resumes work in the locality next season.
6. The character and scope of the surveying and field drafting are excellent.
7. Reviewed by E. P. Ellis, July, 1928.

Approved:

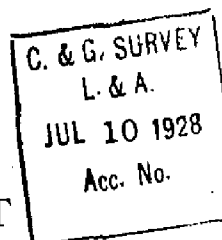


Chief, Section of Field Records (Charts)



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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO.

4355

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. D

REGISTER NO. **4355**

State Territory of Hawaiian Is.

General locality West Coast of Island of Hawaii

Locality Kailua Bay

Scale 1/5000 Date of survey April 7-21, 192 8

Vessel Steamer Guide

Chief of Party Thos. J. Maher, H. & G. E.

Surveyed by F. B. Quinn, Jr. H. & G. E.

Inked by F. B. Quinn

Heights in feet above MHW to ground ~~to tops of trees~~

~~Contours: Approximate contours: Form line interval: XXXXX feet~~

Instructions dated November 3, 192 8

Remarks: Topography back of shore line to be completed when ship resumes work at Hawaii Island during the winter of 1928-29.