

4706

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

C. & G. SURVEY
L. & A.
No. 110.

State: Hawaiian Is.

DESCRIPTIVE REPORT

Topographic } Sheet No. 4706
Hydrographic }

LOCALITY

Kauai - N. Coast

Kilauea Bay

1927

CHIEF OF PARTY

F. G. Engle

GOVERNMENT PRINTING OFFICE

9027
4706

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Hawaiian Islands

11-5613

DESCRIPTIVE REPORT.

Hydro. Sheet No. ⁴⁷⁰⁶ 9 4706

LOCALITY:

Kauai Island - N. Coast

Kilauea Bay, North coast of

~~Kauai.~~

19127

CHIEF OF PARTY:

F. G. Engle

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 9

KILAUEA BAY KAUAI, T. H.

Commanding Officer's Instructions dated Nov. 23, 1926

LIMITS: This sheet covers the hydrography of Kilauea Bay and approaches and joins the hydrography on field sheet No. 5 on the east and that of field sheet No. 8 on the west. Sounding lines were carried out to approximately the 10 fathom curve.

SURVEY METHODS & CONTROL: Control for this survey consisted of a series of topographic signals established on Topographic Sheet F, Kilauea Bay scale 1:5000 completed just previous to the hydrography.

The survey was made in accordance with the usual methods of launch hydrography, using a 30 ft., motor sailer and a copper centered hand lead line with 10 lb., lead. The sounding lines were carried as close to the beach as safety would permit. The outer limit of breakers was sketched in from the launch while at the inner ends of the sounding lines.

The bottom in this vicinity is coral and is quite irregular causing discrepancies of a few feet in crossing lines in several places.

Tidal reducers for this sheet were obtained from a portable automatic gauge operated at Hanalei Bay.

GENERAL DESCRIPTION OF THE COAST: This subject is fully covered in the descriptive report accompanying Topographic Sheet F, Kilauea Bay.

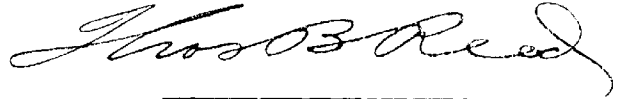
LANDMARKS: The only very prominent landmark on this sheet is Mokolea Point, which is about 140 feet high and has two prominent black buildings on its outer end. Signal, STACK is a small black stack from the roof of the outermost building. This stack is not very prominent however. There is a derrick, slightly higher than the building at the outermost building.

INSHORE DANGERS: Between signals LIM and SUM a coral reef which bares in spots at low water extends from 100 to 150 meters off shore. This reef extends along shore from LIM to the mouth of the river but is mostly submerged. This reef is plainly outlined by a row of breakers. The reef at the mouth of the river is composed of sand. Between signals WHITE and OUT there extends a submerged rocky ledge which is awash with a four or five foot swell.

ANCHORAGES: Anchorage in this bay affords shelter only from south, south west or westerly weather and is fully exposed to the North East Trades which is the predominating wind in this vicinity. At most times a heavy swell sets into this bay.

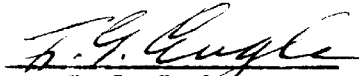
BUOYS ETC: All mooring buoys in the bay are maintained by the Inter-
Island Navigation Co. Ships moor to these buoys and cargoes
are loaded and unloaded by means of a cable extending between the ship
and the ware houses on Mokolea Point.

Respectfully submitted,



Thos. B. Reed.

Approved and forwarded:



F. G. Engle,
Commdg., Str. DISCOVERER.

STATISTICS SHEET NO. 9

NORTH COAST KAUAI, SCALE, 1:5,000 - - - - - KILAUEA BAY, KAUAI.

<u>DATE. 1927</u>	<u>:</u>	<u>Letter</u>	<u>:</u>	<u>Volume</u>	<u>:</u>	<u>Positions</u>	<u>:</u>	<u>Soundings</u>	<u>:</u>	<u>Miles Stat</u>	<u>:</u>	<u>Vessels</u>
June 22	:	a	:	1	:	219	:	646	:	19.5	:	Stbd.Motorsailer
Aug. 4	:	b	:	1& 2	:	121	:	490	:	10.1	:	" "
Sept. 2	:	c	:	2	:	69	:	214	:	5.2	:	" "
				Totals ----		409		1350		34.8		

J.H.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4706

Locality: KAUAI ISLAND, T.H.

Chief of Party: F. G. Engle, 1927.
Plane of reference is M L L W
2.2 ft. on tide staff at Hanalei Bay

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Glade

Chief, Division of Tides and Currents.

Section of Field Records

Report on Sheet No. 4706

Chief of Party F. G. Engle

Protracted by G. A. Nelson

Verified and Inked by J. T. Walker

Surveyed in 1927

Surveyed by T. B. Reed

Soundings plotted by G. A. N.

The sounding records were legible, neat and adequate in most cases. An exception might be that no notes were taken in respect to distance of shore from ends and turns of sounding lines. Also where soundings were taken between sounding lines no notes were taken to show the path of the boat and it was necessary to accept the boat sheet course as correct.

One hundred eighty positions or 26% were checked and of these, three were found incorrectly plotted. The soundings were well plotted. They were generally plotted according to time interval. There were a number of bad crossings. Two particularly bad crossings occurred at 134-135a, 23-24c and 126-127a, 16-17c.

The sheet was clean and legible when received and the drafting conformed to General Instructions for field work.

North east of signal White, on the boat sheet, is shown a symbol \square to which no reference was found elsewhere. It is not shown on smooth sheet or topo sheet.

Reviewed by

Date

as this is needed the
ref it is believed to be nothing of
importance C.R.M.

Respectfully submitted
J. T. Walker

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON March 1, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4706

Kilauea Bay, North Coast of Kauai Island, H. I.

Chief of Party, F. G. Engle.

Surveyed by T. B. Reed.

Protracted and soundings in pencil by G. A. Nelson.

Verified and inked by J. T. Walker.

1. Specific instructions for the work were carried out except for the location of the reef. This was sketched by the hydrographic party and traced from the boat sheet.
2. The development is adequate. No additional development is deemed necessary.
3. All depth curves could be drawn.
4. Junction with sheet No. 4708 to the westward will be taken up with the report of that sheet. Sheets to the eastward have not yet been completed.
5. Few changes were made and these were minor. A 13 fathom sounding inside the one fathom curve was examined and found to be correct.
6. Inking - very good.
7. Reviewed by E. R. McCarthy, February 28, 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.
4706

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 9

REGISTER NO. 4706

State Hawaiian Islands

General locality Kauai Island - N. Coast

Locality Kilauea Bay, ~~North coast Kauai~~

Scale 1:5,000 Date of survey June 22, Aug. 4, Sept. 2
~~June to Sept.~~ 1927

Vessel DISCOVERER

Chief of Party F. G. Engle

Surveyed by Thos. B. Reed

Protracted by G. A. Nelson

Soundings penciled by G. A. Nelson

Soundings in ~~fathoms~~ feet

Plane of reference M.L.L.W. reading 2.2 on tide staff at Hanalei

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated Nov. 23, 1926

Remarks:

Applied to chart 4100 thru 4118 Wittmann 11/15/58