

4458

4458

Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HAWAIIAN ISLANDS  
State: \_\_\_\_\_

11-5413

DESCRIPTIVE REPORT.

Hydrographic Sheet No. (2) 4458

LOCALITY:  
Molokai  
Kaunakakai Harbor

1925

CHIEF OF PARTY:  
R.W. Woodworth

DESCRIPTIVE -- REPORT

to accompany

HYDROGRAPHIC SHEET # 2.

of

KAUNAKAKAI HARBOR.

Molokai Island , Terr.of Hawaii

Scale - 1 : 5000

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R.W.Woodworth , Jr.H&G.Eng.

Chief of Party

PROJECT : Surveys of Anchorages.

INSTRUCTION : November 26, 1924.

DESCRIPTIVE REPORT to accompany hydrographic sheet # 2 :

KAUNAKAKAI, Molokai I., T.H.

DESCRIPTION of HARBOR : This harbor is located 25 miles west of Cape Halawa on the south coast of the Island. It is a small, open-mouthed pocket in the coral reefs surrounding, being about 600 meters in length by 200 in width.

The entrance is deep and clear, with a 17' coral reef on the westward side of the entrance plainly marked by a can buoy.

25 feet can be carried to within 150 yards of the wharf end; but at the wharf only 13' is to be had one-half way along the face, with 17' at the outer end.

The bottom is a soft sticky mud that is constantly being deposited by the tidal currents crossing the harbor.

BUOYAGE & LANDMARKS : The harbor is well marked by buoys, and by range lights.

A tall wireless pole stands about 50 yards eastward of the shore end of the wharf, and a prominent church is to be seen 75 yards to the westward of the wharf.


CHANGES : There is very little change in the soundings as shown on Chart 4106 and on this survey.

However, plans are well under way by the Board of Harbor Commission of the Territory to dredge this harbor so as to permit greater draft vessels to lay alongside the wharf, also to construct an entirely new wharf to replace the present inadequate structure owned by the American Sugar Co.

SURVEY METHODS : This survey was made by hand-lead from a whaleboat propelled by oars. The lead was used in a chair built over the bow, and angles were taken within one meter of the leadman when the the lead was up & down.

Control was by sextant fixes on shore signals located by triangulation, and plane-table traverse.

Respectfully submitted,

  
R. W. Woodworth, Jr. H&G.E.  
Chief of Party.

1925

STATISTICS SHEET # 2 .

<u>DATE</u>	<u>DAY</u>	<u>VOL.</u>	<u>POSITIONS</u>	<u>SOUNDINGS</u>	<u>MILES STAT.</u>	<u>BOAT</u>
Feb. 2, 1925	a	1	141	341	5.5	Whaleboat
" .3, "	b	"	16	36	1.0	"
" .7, "	c	"	106	257	5.5	"
" .9, "	d	"	<u>50</u>	<u>95</u>	<u>3.0</u>	"
		TOTALS	= 313	729	15.0	

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Unit for soundings = feet.

Location of tide gauge : made fast to west side  
of Kaunakakai wharf ;  
lat. 21-05 long. 157-02.

Plane of reference (MLLW), reading on gauge = 4.3'  
Lowest tide observed - - - " " " = 4.6'  
Highest " " - - - " " " = 5.3'

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June 27, 1925.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in  
1 volume of sounding records for

HYDROGRAPHIC SHEET 4450

Locality: **Molokai Island, Territory of Hawaii**

Chief of Party: **R. W. Woodworth in 1925**  
Plane of reference is **mean lower low water and is**  
**4.5 ft. on tide staff at Kaunakakai Wharf, Molokai Island, Ter. Hawaii**

For reduction of soundings, 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 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 **Record in excellent shape.**



Chief, Division of Tides and Currents.

Report of Inking and Verifying A. 4458.

The record and notes are good. The drafting is excellent and complete. The area is well developed.

Position 86c is questioned by the field party. As the area here is sufficiently covered the position is omitted.

Position 6c has a sounding of 3 fathoms 6 feet in the record. This has been omitted since it is obviously an error.

F. M. Albert, Cartographer  
Section of Field Records.

Sept. 14, 1925.

4-VEC

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

September 17, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet 4458

Kaunakakai Harbor, Molokai, T. Hawaii

Surveyed in 1925

Instructions dated November 26, 1924

Chief of Party, R. W. Woodworth.

Surveyed by R. W. Woodworth.

Protracted and soundings plotted by G. Risegari.

Verified and inked by F. M. Albert.

1. The records are defective in the following respects:

Boat's courses were not given.

The word "Same" was freely used when there was no change in objects. This is not good practice, and in all cases the names of objects should appear at the top of each page. In this survey as many as five consecutive pages failed to show the names of the objects used.

30 second intervals between soundings were maintained throughout although the depths were often shoal enough to have permitted sounding at 15 or 20 second intervals. As there are numerous coral heads in this locality, more frequent sounding would have given better assurance that none of them would be missed.

2. The character and extent of development satisfy the General Instructions and specific instructions.
3. The sounding line crossings are adequate and the information is sufficient for drawing the usual depth curves.
4. The usual field plotting was done by the field party. The smooth sheet and boat sheet were lost in the office before being inked and it was necessary to replot the work in the office from the original records.

5. Comparison with the previous survey done in 1900 shows that the harbor has shoaled considerably since that date.
6. No further surveying is required within the limits of the sheet.
7. The character and scope of the surveying are excellent, except for the defects noted in paragraph 1.
8. Reviewed by E. P. Ellis, September, 1925.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic 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. (2) 4458

State . . . . Territory of Hawaii . . . . .

General locality . . . . Molokai Island . . . . .

Locality . . . . Kaunakakai Harbor . . . . .

Chief of party . . . . R. W. Woodworth . . . . .

Surveyed by . . . . R. W. Woodworth . . . . .

Date of survey . . . . February, 1935 . . . . .

Scale . . . . 1 : 5000 . . . . .

Soundings in feet . . . . .

Plans of reference . . . . U.S.L.S. . . . .

Protracted by <sup>"Final note"</sup> S. Kiger . . . . Soundings in pencil by <sup>"Final note"</sup> S. Kiger . . . . .

Inked by J. M. Albert . . . . Verified by J. M. Albert . . . . .

Records accompanying sheet (check those forwarded):

\* Des. report,  Tide books,  Marigrams,  Boat sheets,

Sounding books,  Wire-drag books,  Photographs.

Data from other sources affecting sheet . . . . .

Remarks: