

4649

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GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.

4649



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

State: Hawaiian Is.

DESCRIPTIVE REPORT
~~Topographic~~ } Sheet No. ¹⁵ 4649
 Hydrographic }

LOCALITY
 W. Shore of Oahu
 Kepuhi Pt. to Makua

1926

CHIEF OF PARTY
 E. R. Hand

GOVERNMENT PRINTING OFFICE

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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.

4649

U. S. Coast and Geodetic Survey.

Register No. 15 **4649**

State ~~Terr.~~ of Hawaiian Islands

General locality West shore of Oahu

Locality . Kepuhi Point to ~~Trig. station Hill~~ Makua

Chief of party Eoline R. Hand,

Surveyed by " " "

Date of survey May¹² - June²³, 1926.

Scale 1:5000

Soundings in feet

Plane of reference MLLW

Protracted by C.S. Merek #. Soundings in pencil by C.S. Merek.#
#chief draftsman, Dent. Engr. Office. Honolulu

Inked by Verified by

Records accompanying sheet (check those forwarded):

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

2 Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks:
Tide gauge at ^kokai Bay, (Waianae) Book accompanied sheet No. 14.

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Duplicate

DESCRIPTIVE REPORT

To accompany hydrographic sheet No. 15, Kepuhi Pt. to sta. "MILL", W. Coast Oahu, T.H.
7/17/26 Eoline R. Hand, Chief of Party.

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Sheet No. 15 is notable for its magnificent stretches of sand beach: and even much of the low, flat rock shore bears a heavy line of sand, thrown back upon it by storm high water, so that from well offshore this coast coming up over the horizon must appear like an almost continuous sandy stretch. With one exception the hydrography offers no outstanding peculiarities, the bottom being fairly regular, composed of sand and coral: but that one is the remarkable submarine ledge just off Kepuhi Pt. Here the bottom drops away from seven fathoms abruptly, cliff-like.

The best landing is off Makua, as indicated on sheet. It owes its advantages to a steep sand beach with deep water close-to, and to being at the head of the great bight formed between Kaana and Kepuhi Pts. It is not, however, as good as the best on sheet No. 14. As to landings, I call attention to par. 1 of report on sheet No. 1, and to par. 2, report on sheet No. 2, and also refer to my statement in a previous report to the effect that while successful landings might be made on open stretches of beach the party might ordinarily not be so successful in hauling their boat out. For such a deep indentation is to be preferred; with plenty of water at the entrance, and parallel (or better, flaring) sides toward a sand beach. There is none such on this sheet: on sheet No. 14 is one (off sig. "Lan") that only partially fulfilled the requirements: but in lieu of nothing better it was used frequently by the sounding party.

There are other landings, and lesser in importance or value, described in detail upon the sheet. They are labeled from "possible" to "fair". The one marked "good" (at "Tan") is so designated because the slightly deeper water, and the projecting L.W. line at each end, seems to me to give it an "edge" over these apparently of equal importance, marked "fair". These notes, it is understood, apply for ordinary conditions: but (AFTER the Makua landing) and with considerable swell running directly in from the west, making a dubious surf off all the "fair" landing beaches, careful consideration as a probably practical landing place must be given that extensive, smooth, sea-growth covered, awash ledge at sig. "Tri". Here is deep water close to a vertical edge. With boiling surf at nearly all the other landings, here a small boat under skillful oars could be backed in and held close to this ledge while designated men watched their chance and made a jump for it, gaining the higher rock across the flat between the washes from the recurring swells.

The Oahu Railway parallels this coast. There is an indifferent wagon road from the south to Makua: autocars should not attempt it. The road continues as a trail north from Makua.

Soundings are reduced to MLLW. An automatic gauge was maintained at Pokai to the south of this sheet.

No inside topography is shown: an analysis of the shoreline only was called for in the original instructions for the survey from the Hawaiian Department. It was the intention of the Department to have the inside work done by later parties: as a tie for such sheets I have frequently noted and described various objects most of which can doubtless be recovered. The Army instructions for the work are dated January 28, 1924 (Engr. 600.93)

Nothing conclusive was learned about currents along this shore: they are slight.

Original to Dept. Commander (G2)
Hawaiian Department,
Honolulu, T.H.

Eoline R. Hand

Eoline R. Hand,
Lt. USC&GS.

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LIST OF STATISTICS
 To accompany hydrographic sheet No. 15, Kanyhi Pt. to Triangle Sta. Will.
 Eoline R. Hand, Chief of Party.

| Date, 1926 | Letter | Vol. | Posi- tions | Sound- ings. | Miles, statute | Veasels. |
|--------------|--------|------|----------------|-----------------|-------------------|-----------|
| May 12..... | a | 1 | 50 | 200 | 2.7 | Whaleboat |
| " 19..... | b | 1 | 79 | 253 | 5.3 | " |
| " 20..... | c | 1 | 61 | 266 | 4.5 | " |
| " 21..... | d | 1 | 76 | 376 | 5.5 | " |
| " 22..... | e | 1 | 66 | 303 | 3.9 | " |
| " 27..... | f | 1 | 64 | 321 | 6.0 | " |
| " 27..... | f | 2 | 18 | 106 | 1.6 | " |
| " 28..... | g | 2 | 102 | 438 | 8.2 | " |
| June 10..... | h | 2 | 85 | 346 | 4.3 | " |
| " 23..... | j | 2 | 93 | 412 | 4.8 | " |
| Total..... | | | 694 | 3021 | 46.8 | |

LIST OF STATISTICS
 To accompany hydrographic sheet No. 15, Kapani Pt. to Triangle Sta. Mill.
 Eoline R. Hand, Chief of party.

| Date, 1926 | Letter | Vol. | Post-ions | Sound-ings | Miles, statute | Vessels |
|--------------|--------|------|-----------|------------|----------------|-----------|
| May 12..... | a | 1 | 50 | 200 | 2.7 | Whaleboat |
| " 19..... | b | 1 | 79 | 253 | 5.3 | " |
| " 20..... | c | 1 | 61 | 266 | 4.5 | " |
| " 21..... | d | 1 | 76 | 376 | 5.5 | " |
| " 22..... | e | 1 | 66 | 303 | 3.9 | " |
| " 27..... | f | 1 | 64 | 321 | 6.0 | " |
| " 27..... | f | 2 | 18 | 106 | 1.6 | " |
| " 28..... | g | 2 | 102 | 438 | 8.2 | " |
| June 10..... | h | 2 | 85 | 346 | 4.3 | " |
| " 23..... | j | 2 | 93 | 412 | 4.8 | " |
| Total..... | | | 694 | 3021 | 46.8 | |

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

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 20, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4649

Off west coast of Oahu - Hawaiian Is.

Surveyed in 1926

Instructions dated January 28, 1924 (Army Instructions)

Chief of Party, E. R. Hand.

Surveyed by E. R. Hand.

Protracted and soundings plotted by C. S. Merek.

Verified and inked by F. B. Kelly.

1. The records conform to the General Instructions.
2. The plan and character of development conform to the General Instructions.
3. Since no copy of the specific instructions is available it is assumed that the work conforms.
4. There are no cross lines.
5. The usual depth curves, with the exception of parts of the zero and 6 ft., can be completely drawn.
6. The usual field plotting was done by the field party but the dotted line shown along the shore to indicate the sand edge at low water is not verified by soundings. In some cases, especially off O Wig, there is a sounding of 12 feet inside of this shore line.
7. Only 6 fixes had to be replotted, of a total number of 794.

All the soundings between 13 G and 57 G had to be increased by 1ft. due to office changes in the tide reductions.
8. The junction with H. 4583 on the south is good.

9. No further surveying is needed.
10. Character and scope of surveying, good.
Field drafting, excellent.
11. Number of positions, 794
Number checked, 257
12. Reviewed by F. B. Kelly, August, 1927.

Approved:

Chief, Section of Field Records (Charts)

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

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

AND REFER TO No. 11-DFM

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

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3.3(a), EXECUTIVE ORDER 12356.

October 14, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4649 [REDACTED]

West Coast of Oahu, Hawaiian Islands

Surveyed in 1926

Instructions issued by U. S. Army

Chief of Party, E. R. Hand.

Surveyed by E. R. H.

Protracted and soundings plotted by C. S. Merek.

Verified and inked by F. B. Kelly.

1. The records conform to the requirements of the General Instructions except that no leadline comparisons appear anywhere in the record, the only reference thereto being a note at the beginning of each day's work, "Leadline - correct."
2. The plan and character of development fulfill the requirements of the General Instructions except that split lines should have been run over some of the shoals found. These will be mentioned below.
3. The specific instructions not being available, it is assumed that the work conforms.
4. No cross lines were run, but a comparison of closely spaced adjacent lines, where the bottom is not too irregular, shows a good agreement.
5. The usual depth curves could be completely drawn with the exception of parts of the 6 foot curve which lies very close to the beach.
6. The usual field plotting was done by the field party and was very satisfactory, with the exception that the low water line was transferred from the topographic sheet without making an adjustment for the hydrography.
7. The junction with H. 4583 on the south is adequate.

A rough comparison with H. 3292 (surveyed in 1911) shows a generally good agreement.

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8. The survey discloses numerous holes and shoal spots. In an area of this character, it is difficult even with a close system of lines to obtain the least depth on all the coral heads. It is therefore suggested that if practicable wire drag work be done over the more important shoals. Otherwise additional sounding lines should be run. Those considered as requiring additional work are the following:
 - a. The 13 foot spot in lat. $21^{\circ}31'$ 505 m., long. $158^{\circ}14'$ 206 m.
 - b. The 17 foot shoal in lat. $21^{\circ}31'$ 125 m., long. $158^{\circ}14'$ 455 m.
 - c. The 13 foot spot in lat. $21^{\circ}30'$ 1550 m., long. $158^{\circ}14'$ 230 m.
 - d. The 11 foot shoal in lat. $21^{\circ}30'$ 620 m., long. $158^{\circ}14'$ 295 m.
9. Character and scope of surveying - very good.
Field drafting - excellent.
10. Reviewed by A. L. Shalowitz, October, 1927.

Approved:

Chief, Section of Field Records (Charts)

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

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

AND REFER TO No. 11-DRM

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

October 14, 1927.

Memorandum from Verifier's Report

| | | |
|------------------------------|-------|-----|
| Number of positions on sheet | ----- | 794 |
| " " " checked | ----- | 257 |
| " " " in error | ----- | 6 |

F. B. Kelly

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4649

Locality: OAHU, TERRITORY HAWAII.

Chief of Party: H. R. Bond, 1926.
Plane of reference is M L L W
E.E. ft. on tide staff at Waialae.

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.

G. W. Rude

Chief, Division of Tides and Currents.

