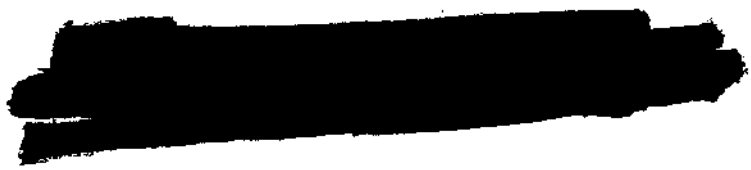


4382



4382

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Terr. of Hawaii

11-5013

DESCRIPTIVE REPORT.

Hydrog. Sheet No. 4382

LOCALITY:

Oahu

W. Coast — Barbers Pt. to Kahe Pt.

1924

CHIEF OF PARTY:

E. B. Hand

[REDACTED]

DESCRIPTIVE REPORT

to accompany hydrographic sheet No. 1, Barber's Point to sta. KAHE, S.W. Oahu, T.H.
Eoline R. Hand, Chief of Party.

This sheet, in conjunction with the complementary topographic sheet "A", records the results of the survey (within the above limits) undertaken for the War Department and the character of the operations follows the considerations as expressed in Department letter of January 28, 1924 (Engr. 600.93)

Landings on this set of sheets, and subsequent sets, will be characterized as "possible", "fair", "good", "very good", and "excellent". It is of course obvious that some criterion must be expressed to indicate just what is meant by these varied kinds of landings, and especially under what physical conditions they apply: for there are times, most infrequent it is true, when the millpond condition of the sea would permit anything to get ashore any place along this stretch; and on the other hand, when a long, heavy swell from the west, in combination with a local "kona", would foredoom to disaster a landing attempt with best equipment at even the positions labelled "excellent". And so the following statement is made, which will be understood to preface all subsequent reports: the landing condition is ~~###~~ that ordinarily obtaining at the locality concerned - the average state of wind and surf - smallboats are assumed to be of the whaleboat type, not overloaded, and manned by thorough seamen who are skilled in backing in and in meeting each breaking sea by "giving way" till it passes under (when such maneuvers are necessary) and the boats are expected either to win back to the open sea after discharging passengers without casualties, or else to beach safely. With conditions equal, my notes attempt a careful comparison of the advantages and disadvantages of the several landing spots indicated.

I call attention to the cove at signal "Zip" - the best landing on this sheet. With shoal water off this locality - but not so shoal as to break dangerously - the oncoming swell is appreciably lessened by the time it strikes the shore: then natural advantages on either side of the entrance give further protection. The sounding party found it safe and expedient to beach the boat here each night, going in on an established range. I draw attention to note of this place, shown on topographic sheet "A", also the other landing notes thereon.

The bottom was found to be regular, and consisted of sand and coral. There are no outstanding hydrographic features for this area - nothing worthy of note. I endeavored to ascertain something about the currents, what they did with rising and with falling tide, but my experiments were not conclusive; meteorological conditions appear to preclude any fixed rule: but it is known the current is ~~##~~ slight, in any case.

The tide gauge at Waianae governs the reductions. I started simultaneous observations as directed, at Brown's Camp, but the results being open to doubt, as I stated in my Annual Report for 1924, I concluded it advisable to throw them out.

Eoline R. Hand

STATISTICS SHEET No. 1

DATE	LETTER	VOLUME	POSITIONS	SOUNDINGS	MI. STAT.	VESSELS
APRIL 1, 1924	a	1	63	213	6.00	WHALEBOAT
" 2	b	1	71	306	7.00	"
" 3	c	1	65	226	6.00	"
" 4	d	1	67	246	6.50	"
" 5	e	1	80	297	5.75	"
" 15	f	1	6	33	.75	"
" 16	g	1	52	346	4.25	"
" 17	h	1	31	202	3.00	"
" 17	h	2	29	165	3.00	"
" 18	i	2	68	455	5.75	"
" 19	k	2	61	380	5.50	"
TOTALS			593	2869	53.50	

REPORT ON VERIFICATION OF HYDRO SHEET No. 4382

The sounding records were not complete in so much as there were a good many soundings taken for which no time was recorded. From the spacing of positions it is evident that the boat changed its speed a good many times but no record was made of the fact.

The sheet was clean and well protracted, but the spacing of soundings was poorly done as the time intervals were not carefully adhered to.

From 3 to 5, P day, the soundings were equally spaced as no time was recorded for these soundings.

The note, Sand and Coral, is given at the top of a good many pages in the records and it is evident that this applies to the whole area covered by this sheet.

H. Edmonstone

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 16, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4382

Barbers Pt. to Kahe Pt., Oahu

Surveyed in 1924.

Instructions furnished by U. S. Army.

Chief of Party, E. R. Hand.

Surveyed by E. R. Hand.

Protracted and soundings plotted by C. VanHapert.

Verified and inked by H. R. Edmonston.

1. The records conform to the requirements of the General Instructions except that changes in boats' courses were frequently omitted.
2. The plan and character of development conform to the requirements of the General Instructions, except that the time interval between soundings is less frequent than is called for in paragraph 225. As there are numerous instances of 50% differences between consecutive soundings it is probable that the least water was not always obtained.
3. The plan and extent of development satisfy the specific instructions, except that there are not as many bottom characteristics as were contemplated in the instructions.
4. The sounding line crossings (including comparison of closely parallel lines) are not up to the usual standard. This may be accounted for in many cases by the very irregular bottom. Some of the sounding lines appear to be erroneously located. Two causes probably contributed to this: 1st, In the northern portion of the sheet the signals average 75 meters apart and their close proximity no doubt caused errors in identity in angling. 2nd, There are several combinations of names having similar sound which would cause errors in recording the objects.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party. The protracting is excellent, but the time intervals were not adhered to in plotting soundings.

7. The junction with the adjoining sheet is satisfactory.
8. In some instances the regular system of sounding lines was carried only one-third mile offshore, leaving gaps. These openings, however, are not serious and no further leadline surveying appears to be needed. The area should be wire-dragged to locate all coral heads, which are numerous.
9. The character and scope of the surveying and field drafting are good.
10. Reviewed by E. P. Ellis, February, 1925.

Field Records

Eak

Division of Hydrography and Topography:

December 30, 1924.

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4582

Locality: West Coast of Oahu Island, Terr. of Hawaii

Chief of Party: E.R. Hand in 1924.

Plane of reference is mean lower low water, reading
ft. on tide staff at Waikae, Pohni Bay.

2.1

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

E. R. Hand
Chief, Division of Tides and Currents.

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.

sheet No. 1
Register No. 4382

Terr. of Hawaii
State ~~Oahu P.H.~~

General locality ~~E.W. coast~~ Island of Oahu

W. Coast—
Locality ~~Barbers Pt~~ Point to sta, KAHE Pt,

Chief of party Eoline R. Hand,

Surveyed by " " "

Date of survey April, 1924

Scale 1:5000

Soundings in feet

Plane of reference MLLW

Protracted by *CVH. . . Soundings in pencil by *CVH. . .

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:

* Constant Van Hapert, Master Sergt. 3rd. Engrs. U.S. Army.