

5317

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

Oct. 4 1933

Acc. No.

DECLASSIFIED BY N 1741
PURSUANT TO DOC SYSTEMATIC I
Ed. June, 1923
GUIDELINES AS DESCRIBED IN SECTION
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
3.3(a), EXECUTIVE ORDER 12356.

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.

State/Terr. of Hawaii

DESCRIPTIVE REPORT

Topographic } Sheet No. 32 5317
Hydrographic }

LOCALITY

Northwest Coast of Oahu

Mokuleia to Kawaiapai

1932 & 1933

CHIEF OF PARTY

Lieut. Hubert A. Paton

5317

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
OCT 23 1933
REG. NO. 5317
Ass. Dir.

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. 32

REGISTER NO. 5317

State Hawaiian Islands

General locality North W. Coast of Oahu

Locality Kawaihapai to Mokuleia

Scale 1:5000 Date of survey September 1932 & July 1933

Party Vessel Ishore Hydrographic Survey of Oahu

Chief of Party Hubert A. Paton, Lieut.

Surveyed by H. A. P.

Protracted by H. A. P.

Soundings penciled by H. A. P.

Soundings in ~~fathoms~~ feet

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by

Inked by J. T. Walker and A. L. Williams.

Verified by J. T. W.

Instructions dated July 14th, 1931

Remarks: Surveyed in cooperation with the U. S. Army

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.

DESCRIPTIVE REPORT

To Accompany

Hydrographic Sheet #32

Northwest Coast of Oahu Island
Mokulaia to Kawaiapai

September 1932 - August 1933

INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated July 14, 1931. The field work was done in cooperation with the U.S. Army, the members of the crew being detailed from the Third Engineers, Schofield Barracks.

METHODS:

The purpose of this survey was to locate possible landing sites for troops using power boats drawing four feet. The outer limit of the work was restricted to the depth of 40 feet.

Most of the work was done using Launch #14, a small cabin cruiser. In the shoaler areas, a 20 foot dinghy powered with a 9 H. P. out-board-motor was used.

For further description of methods see. Descriptive Reports for Sheets #12, 31, and 33.

JUNCTIONS:

On the west end of the area, this work joins Sheet #33. ^{H-5316} Several of the lines were run continuous from one sheet to the other; the common sounding and fix being recorded in both records and plotted on both sheets.

On the east end of the area, a satisfactory junction is made with Sheet #4445.

Some of the inshore soundings on Sheet #3291 fall within the area covered by this survey. The depths check surprisingly well, considering the unevenness of the coral bottom.

CONTROL:

All signals used in 1932 were located by a topographic survey. In

1933, however some of these signals could not be recovered and it was necessary to establish six additional control points. These were all located by means of sextant fixes.

DANGERS:

No new dangers were found. The rock awash shown on the charts in Latitude $21^{\circ} 35.'5$, Longitude $158^{\circ} 10.'7$ was verified. Fishing boats plying along the coast in favorable weather sometimes pass on the in-shore side of this rock. In rough weather however heavy breakers will be found in this area.

A deep trench passes close to the west side of this rock and approaches the shore in a general south easterly direction. Although adequate depths for small boats can be carried in close to shore, the entrance can not be used in rough weather, for the heavy breakers on the northeast side of the channel carry across the deeper areas.

LANDINGS:

Local conditions of weather affect the character of the landing sites considerably in this area. In normal weather when the east or north east trades are blowing, it will be found that there will be a few hours after day break when the wind will be almost a calm and conditions quite favorable for landing. On the boat sheet are indicated by means of colored arrows the character of the entrances and shore line: Blue meaning excellent in normal weather; Green, meaning good in normal weather; yellow, meaning practical in favorable weather; Red meaning impractical except in unusually favorable weather.

The good and excellent landing sites were indicated on the Topo Sheet 4752.

Respectfully submitted,

Hubert A. Paton

Hubert A. Paton,
Lieut., U.S.C. & G. S.

STATISTICS

To Accompany

Sheet #32

Total number of soundings	4628
" " " positions	862
Statute miles of sounding line	70.9
Area in square statute miles	2.6

APPROVAL OF RECORDS

To Accompany

Sheets #32

The above sheets and records have been inspected and are approved.

Hubert A. Paton

Hubert A. Paton
Lieut., U.S.C. & G. S.
Chief of Party

RAC

Division of Hydrography and Topography:

~~October~~

November 2, 1933

✓ Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5317

Locality Kawaihapai to Mokuleia, Northwest Coast of Oahu, Hawaii

Chief of Party: H. A. Paton in 1932-3

Plane of reference is mean lower low water reading

2.6 ft. on tide staff at Haleiwa in 1932

10.8 ft. below B. M. 2

2.5 ft. on tide staff at Haleiwa in 1933

10.8 ft. below B.M. 2

Height of mean higher high water above plane of reference is 1.6 feet.

Condition of records satisfactory except as noted below:

In volumes Nos. 1 and 2 the tide reducers have been entered and checked to the nearest whole foot. According to Hydrographic Manual, page 16, where depths are less than 10 fathoms, reducers should be entered to the nearest half foot.

H. A. Manner

Acting Chief, Division of Tides and Currents

Verifiers Report on H. 5317

The tidal sheet at the back of the descriptive report says that the tide reducers in vol. 1 and 2 have been entered to the nearest whole foot instead of half feet. This note was not noticed until the inshore work in vol. 1 and 2 had been inked in. As most of the soundings in vol. 1 and 2 are offshore and not critical it is thought that they may be considered as in open ocean areas and thus entered in integral feet. The tide reducers and lead line corrections were therefore not changed in vol. 1 and 2.

All the positions on this sheet were compared with the boatsheet and the positions which disagreed were checked.

The inshore soundings were inked in and a few offshore soundings were inked in, in their revised position.

A tracing was made of the topographic sheets and of the boatsheet and rocks, reefs, breakers, etc. were transferred to the smooth sheet.

Submitted by - J. T. Walker - November 13, 1933.

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3 (1)(a) EXECUTIVE ORDER 12958

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5317 (e ~~XXXXXXXXXX~~)

Kaunakakai to Mokuleia, Northwest coast of Oahu, Hawaiian Is.

Surveyed Sept. 1932, July-Aug. 1933.

Instructions dated July 14, 1931 (Paton)

Chief of Party - H. A. Paton.

Surveyed by - H. A. Paton.

Protracted and soundings plotted by - H. A. Paton.

Verified and inked by - J. T. Walker and A. L. Williams.

1. The records conform to the requirements of the Hydrographic Manual except as noted on the Tide Approval Form, i. e., Tide reducers were entered to the nearest whole foot instead of to the nearest $\frac{1}{2}$ foot as directed by the regulations.
2. The plan and extent of development conform to the general regulations and satisfy the specific instructions. The latter provided for consultation with U. S. Army authority relative to details desired and assistance to be furnished.
3. Soundings indicate a very broken and irregular bottom. Depths at crossings of lines are generally consistent. The departure from the regulations noted above, is more than offset by the uncertain effects of swell in nearly all kinds of weather.
4. Depth curves can be drawn satisfactorily. The broken line is used in a few unimportant places where the curves are not fully defined.
5. Junctions: On the west the sheet joins contemporary survey sheet H. 5316, which is now being verified and inked in the office.
6. Comparisons. This sheet slightly overlaps H. 4445 (1924) on the east and is in good agreement with that survey. The agreement with H. 3291 (1911) on the north is as good as can be expected considering scale and character of bottom. The offlying rock shown on that sheet and on Chart 4110 was verified by the present survey.
7. Field drafting was satisfactory. Inshore soundings were inked by J. T. Walker, offshore soundings and lettering by A. L. Williams.
8. Recommendations: This sheet (H. 5317 confidential) is the basic survey for inshore details and should supersede all previous information for charting the area represented.

The information relating to landing places shown on the boatsheet in colored pencil should be transferred to the corresponding topographic sheets (T. 4752 and T. 4753) by suitable notes or otherwise for permanent record. The nature of the approach to these landing places is well indicated by the soundings on the sheet.

No further surveys are deemed necessary at this time.

9. Reviewed by - R. J. Christman, Dec. 20, 1933.

L. O. Colbert
L. O. Colbert,
Chief, Field Records Section.

J. Borden
J. Borden,
Chief, Field Work Section.

Examined and approved:

L. O. Colbert
Chief, Division of Charts.
G. H. de
Chief, Division of H. & T.