

4936

Ding Chart No. 4115

C. S. SURVEY
DEC 23 1929
Acc. No.

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Hawaiian Is.
State: Territory of Hawaii

11-5413

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 12. 4936

LOCALITY:

Honuapo Bay

SE Coast of Hawaii ~~Island~~

1929

CHIEF OF PARTY:

K. T. Adams, H. & G. E.

4936

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET NO. 12
Honuapo Bay, Hawaii, T. H.
Scale 1/2,500.

DATE OF INSTRUCTIONS: June 17, 1929.

NOTE ON SCALE USED: The instructions for this survey called for a 1/5,000 scale. This fact was inadvertently overlooked and the survey made on a scale of 1/2,500, the scale that had been used on a number of other small harbor surveys about this island.

LIMITS: From approximately one mile south of the Honuapo dock to approximately 0.8 miles northeast of the dock. It extends from the shore-line out to the inner limits of sheet #13.

CONTROL: The usual types of small signals were used. They were located by the topographic party of Ens. V. M. Gibbens, on sheet "K".

SURVEY METHODS: For the inshore portion of the sheet, a whaleboat was used with hand-lead. The party consisted of: one officer in charge, taking right angle and plotting; one officer taking left angle and steering; one recorder; and four men alternating between rowing and sounding. Ranges were used almost entirely. In the vicinity of the dock, lines were run normal to the shoreline, that is NW and SE. With an E and NE wind it became difficult to remain on line, so the system was shifted to run with and into the wind. North of the bay it was found more economical to run lines parallel to the shore-line.

The outer limits of the sheet were sounded from a standard Navy motor-sailer using hand-lead to about 20 fathoms, and hand-machine for greater depths. This party consisted of: one officer in charge, taking right angle, and plotting; one officer taking left angle and steering; one recorder; one launch engineer; and three leadsmen.

One line of soundings was taken around the dock, from the dock. At the same time the limits of the reef immediately north of the dock were established by ranges with signals.

On two days when conditions were at their best, lines were run parallel to the shoreline and as close to the shoreline and reef lines as was possible.

DISCREPANCIES: At approximately 0.4 miles SSW from the dock, two white-wash signals were built near the top of the cliff. They are "Boy" and "Pat" with elevations of 158 feet and 150 feet respectively. For a few fixes on lines close to the foot of the cliff, these signals were used with a slight amount of error in the resulting positions. The greatest error, position 74d, whaleboat, was estimated to be about 6 meters offshore; and the other errors were considerably less.

No adjustment was made since it could only be approximate and would move the soundings but slightly on this scale. The soundings affected are in an area of large swells under most conditions. It is impossible and impracticable to make a landing at this location. ✓

DANGERS: No rocks or dangers were found within the limits of this sheet. The foul area of shoal water and reef awash flanking the northern side of the bay is definitely outlined by breakers and swells that make up just inside the 10-fathom curve around the point.

ANCHORAGES: There is an extensive area of shoal water in a SSE'ly direction from the dock. The Inter-Island steamers usually anchor approximately on the 15-fathom curve SSE of the dock. Two buoys just off the dock are used to tie up the ships that handle cargoes. They are in line with the dock, approximately SE, and are respectively 15 and 85 meters off the end of the dock.

During the period of the survey the ship, which was anchored in about 20 fathoms, tailed about true west.

LANDMARKS: The most prominent landmark for Honuapo is a cliff 236 feet high and a quarter mile long. It is a half mile southwest of the dock. It shows up black against the light-brown background of sloping hills. It is the first definite object visible from either an easterly or westerly approach.

Second in prominence is the stack and group of white buildings surrounding it at the Hutchinson Sugar Plantation Mill, 0.4 miles N by E from the dock.

Next is the group of five oil tanks of the Standard Oil Company, 0.1 mile north of the dock. They are painted gray.

Triangulation Station HONUAPU, $\frac{1}{4}$ mile E by N from the dock, has a white-washed cairn about 8 feet in diameter and 10 feet high. It shows up well for a short distance outside the bay, particularly in a SE'ly direction.

STATISTICS: The statistics for the sheet appear on another page attached to this report.

Respectfully submitted,

Francis B. Quinn

Francis B. Quinn, Jr. H. & G. E.

Forwarded, Approved

K. T. Adams

K. T. Adams, H. & G. E.,
Chief of Party.

STATISTICS FOR HYDROGRAPHIC SHEET 12, HONUAPU BAY, HAWAII, T. H.

| <u>Date</u> | <u>Day</u> | <u>Volume</u> | <u>Positions</u> | <u>Soundings</u> | <u>Statute Mi.</u> |
|--------------------------|------------|---------------|------------------|------------------|--------------------|
| 1929 | | | | | |
| (Whaleboat) | | | | | |
| Oct. 13 | a | 1 | 125 | 382 | 5.0 |
| 14 | b | 1 | 122 | 389 | 4.2 |
| 15 | c | 1 | 140 | 468 | 5.7 |
| 16 | d | 2 | 136 | 494 | 5.0 |
| 17 | e | 2 | 20 | 59 | 0.6 |
| 18 | f | 2 | 21 | 78 | 0.8 |
| <hr/> | | | | | |
| TOTALS | 6 | 2 | 564 | 1870 | 21.3 |
| (Motor-sailer) | | | | | |
| Oct. 17 | a | 1 | 111 | 269 | 5.9 |
| 18 | b | 1 | 123 | 145 H.L. | 1.8 H.L. |
| | | | | 81 Wire | 5.6 Wire |
| <hr/> | | | | | |
| TOTALS | 2 | 1 | 234 | 495 | 13.3 |
| <hr/> | | | | | |
| (Summary for both boats) | | | | | |
| | 8 | 3 | 798 | 2365 | 34.6 |
| <hr/> | | | | | |

TIDAL NOTE FOR HONUAPO, HAWAII, T. H.

A portable-automatic tide gauge, No. 200, was established on the dock at Honuapo by Lieut. Peters on July 22, 1929. Three months of observations were obtained and a computation of MLLW was made. The gauge was removed on October 23, 1929 upon the completion of sounding in that vicinity.

Respectively submitted,

F. B. Quinn

F. B. Quinn

Jr. H. & G. E.

Forwarded, Approved,

K. T. Adams

K. T. Adams,

H. & G. E.

Chief of Party.

VERIFICATION REPORT
Sheet #12
Honuapo, Hawaii, T.H., 1929.

I hereby certify that I examined the completed records and smooth sheet.

More than the usual supervision over the field work was had. The parties were working from the ship and the sheet was examined each evening and the work discussed with the officer in charge.

This sheet was inadvertently laid out on a 1:2500 scale instead of a 1:5,000 as called for in the instructions. It was an error made by me, on account of the paragraph in the instructions which called for this survey to be similar to those made by this party last season.

K. T. Adams
K. T. Adams, H. & G. E.
Chief of Party.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Honolulu, T. H.

October 30, 1929

Director

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

K. T. Adams

K. T. Adams Chief of Party.

| DESCRIPTION. | POSITION. | | | | | Method of determination. | Charts affected. |
|---|-----------|---------------|------------|---------------|-------------------|--------------------------|------------------|
| | Latitude. | | Longitude. | | Datum. | | |
| | ° / | D. M. meters. | ° / | D. P. meters. | | | |
| AT HONUAPO, S. E. COAST OF HAWAII, T. H. | | | | | | | |
| Black Cliff 236' high | 19-04 | 1724 | 155-33 | 907 | Old Hawaiian Topo | Honapo | |
| Stack, Hutchinson Sugar | 19-04 | 269.4 | 155-33 | 176.6 | " Triang | " | |
| 5 Oil Tanks | | | | | Map * | | |
| Signal Honuapo, 1914 | | | | | " | " | |
| W. W. Cairn | 19-04 | 554.7 | 155-32 | 1741.6 | " Triang | " | |
| S. E. cor. | | | | | " | " | |
| Small Yellow Church | 19-05 | 5355 | 155-33 | 461.0 | Topo | | |
| * These tanks appear on a map "showing Honuapo Landing and Surroundings" by T. Koike, Oct. 1, 1929. | | | | | | | |

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 12

REGISTER NO.

State TERRITORY OF HAWAII

General locality ISLAND OF HAWAII

Locality HONUAPO (SOUTHEAST COAST)

Scale 1-2,500 Date of survey October 13-18, 1929

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party K. T. ADAMS, H & G E

Surveyed by F. B. QUINN, Jr. H & G E

Protracted by E. B. LEWEY, Aid

Soundings penciled by E. B. LEWEY

Soundings in fathoms feet

Plane of reference M L L W

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 17, 1929

Remarks:

Section of field records ^{ECM}
Feb. 6, 1930.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 4936

Locality: Honuapo Bay, Hawaii, I., T. H.

Chief of Party: K. T. Adams, in 1929
Plane of reference is mean lower low water, reading
1.2 ft. on tide staff at Honuapo
ft. below B. M.

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 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.

Chief, Division of Tides and Currents.

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

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4936

Honuapo, Southeast Coast, Island of Hawaii

Surveyed in 1929

Instructions dated June 17, 1929 (GUIDE)

Chief of Party, K. T. Adams

Surveyed by F. B. Quinn

Protracted and soundings plotted by E. B. Lewey

Verified and inked by J. G. Ladd

1. The records conform to the requirements of the Hydrographic Manual.
2. The extent of the survey conforms to the specific instructions. As stated by the Chief of Party, the scale of 1:2500 was inadvertently used instead of 1:5000 as called for. The spacing of the sounding lines is closer than called for, but this is not objectionable considering the fact that a large scale chart of this harbor is contemplated.
3. A comparison of adjacent sounding lines shows a good agreement.
4. The indications of reefs off some of the points were accepted as indicated by the field party although no authority could be found in the records for the information.
- *5. The sunken rock symbol is used on this sheet to designate a sunken reef, but it is recommended that a new symbol be adopted for coral reefs that are not exposed at any stage of the tide.
6. The junctions with the contemporary surveys will be taken up when those sheets are reviewed.
7. There are no cartographic problems raised by this survey.

**There has been much consideration given to this matter, but no results. The interpretation of the coral reef symbol differs among field officers.*

8. No additional work is necessary within the limits of this survey.
9. Reviewed by A. L. Shalowitz, February, 1930.

Approved:

A. M. Sobieralski
Chief, Section of Field Records (Charts)

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

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. 18

REGISTER NO. 4936

State TERRITORY OF HAWAIIAN IS.

General locality ISLAND OF HAWAII

Locality HONUAPO (SOUTHEAST COAST)

Scale 1-2,500 Date of survey October, 1929

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party K. T. ADAMS, H & O E

Surveyed by F. B. QUINN, Jr. H & O E

Protracted by E. B. LEWY, AIA

Soundings penciled by E. B. LEWY

Soundings in fathoms feet

Plane of reference M L L W

Subdivision of wire dragged areas by

Inked by John G. Ladd

Verified by J. G. L.

Instructions dated June 17, 1929

Remarks:

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

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4936

Honuapo, Southeast Coast, Island of Hawaii

Surveyed in 1929

Instructions dated June 17, 1929 (GUIDE)

Chief of Party, K. T. Adams

Surveyed by F. B. Quinn

Protracted and soundings plotted by K. B. Lewey

Verified and inked by J. G. Ladd

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7. There are no cartographic problems raised by this survey.

8. No additional work is necessary within the limits of this survey.
9. Reviewed by A. L. Shalowitz, February, 1930.

Approved:

Chief, Section of Field Records (Charts)

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

Field Records Section (Charts)

47
48
50
53
54

HYDROGRAPHIC SHEET No. 493.6.

The following statistics will be submitted with the cartographer's report on the sheet:

| | |
|--|--------|
| Number of positions on sheet | ..798. |
| Number of positions checked | ..164. |
| Number of positions revised |8 |
| Number of soundings recorded | 2365 |
| Number of soundings revised | ..none |
| Number of signals erroneously plotted or transferred | ..none |

Date:.....Feb...15...1930.....

Cartographer:.....John G. Ladd.....