

4753

U. S. COAST & GEODETIC SURVEY  
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Oct. 4 1933

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Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. Patton, Director

State: Hawaiian Is.

DESCRIPTIVE REPORT

Topographic  
~~Hydrographic~~

Sheet No. DD

4753

LOCALITY

Northwest Coast of Oahu

Mokuleia to Kalaupapa

1932

CHIEF OF PARTY

Hubert A. Paton

U. S. GOVERNMENT PRINTING OFFICE: 1928

DECLASSIFIED BY NOAA  
PURSUANT TO DOC SYSTEMATIC REVIEW  
GUIDELINES AS DESCRIBED IN SECTION  
3.3(a), EXECUTIVE ORDER 12358

DESCRIPTIVE REPORT

to accompany

SHEET DD

NORTHWEST COAST OF OAHU

MOKULEIA TO KAWAIAPAI

INSTRUCTIONS:

The survey of this sheet was made in cooperation with the U. S. Army, in accordance with instructions of the Director, U. S. Coast & Geodetic Survey, dated July 14, 1931. Additional verbal instructions were received from the Chief of Engineers, U. S. A., and his representatives. See Descriptive Reports for Sheets "L", "BB" and "CC."

T-4687 T-4754 T-4740

METHODS:

Standard methods were employed as recommended by the U. S. Coast & Geodetic Survey in Special Publication No. 144.

CONTROL:

Basic control for the plane table survey was furnished by ten triangulation stations.

CLOSING ERRORS:

The traverse from Triangulation Station Dillingham to Triangulation Station Land had a closing error in distance of seven meters. This was adjusted proportionally throughout the traverse. For the remainder of the sheet, the control was sufficient to make long traverses unnecessary.

JUNCTIONS:

At the east end of the sheet a good junction was made with previous work as shown on Sheet #4445. On the west end of the sheet the traverse was plotted on Sheet "EE" and extended to Triangulation Station Y.M.C.A. which had zero closure. T-4752

LAND MARKS:

Dense groves of iron wood trees form the most prominent land marks in this area. Outlines of these groves are indicated from Signal Cor eastward, south of Signals Red, Hid and Tri to the railroad, south of Signals In and Mac to the railroad. A single row of these trees lies between the highway and sugar cane fields in this vicinity. Another row of trees, which was trimmed

down considerably in 1932, line the north side of the railroad from near Signal Pot to Signal Hut. The railroad trestles are not as prominent offshore as on the next sheet (EE").

**BREAKERS:**

The outer limits and general shape of shoal areas were indicated by a dash line. These are the areas where breakers may be expected in normal weather. In heavy northeasterly or northerly winds the breakers are continuous along this shore and extend much farther offshore.

**LOCAL ATTRACTION:**

Authorities here claim this area is subject to considerable local deflection of the compass needle. This was investigated to a certain extent by drawing in the direction of the declinoire at four places on the sheet. At Triangulation Station Mokuleia U.S.E. there is apparently some local attraction.

Respectfully submitted,

*Hubert A. Paton*

Hubert A. Paton,  
Lieutenant,  
Chief of Party.

# PLANE TABLE POSITIONS

SHEET D.D.

| Object & Description                      | Lat.   | D.M. | Long.   | D.P. | Height |
|---|--------|------|---------|------|--------|
| APE., N.E. cor. dark grey house           | 21°34' | 1789 | 158°09' | 1212 | 15'    |
| Fen, west end board fence                 | 21°34' | 1807 | 158°09' | 1316 | 6'     |
| Gab, N.E. gable Kaiahulu Club House       | 21°34' | 1837 | 158°09' | 1434 | 15'    |
| Cor, N.W. cor. small house                | 21°34' | 1723 | 158°10' | 306  | 12'    |
| Tat, center, Mokuleia R.R. Sta.           | 21°34' | 1717 | 158°10' | 1084 | 10'    |
| Hid, " dark green roof                    | 21°35' | 110  | 158°10' | 1146 | 15'    |
| Pra, " Buddhist Shrine                    | 21°35' | 1    | 158°10' | 1663 | 10'    |
| ✓Army, Army Survey Mark (conc. mon.)      | 21°35' | 249  | 158°11' | 1079 |        |
| Soc, wind sock, emergency landing field   | 21°35' | 77   | 158°11' | 1157 | 25'    |
| Dol, water tank, Dollar Radio Sta. (Rec.) | 21°34' | 1521 | 158°11' | 1255 | 35'    |
| Hut, center, small shack                  | 21°35' | 167  | 158°11' | 1673 | 10'    |
| Wat, green water tank                     | 21°34' | 1651 | 158°12' | 585  | 10'    |
| Ike, R.R. crossing sign                   | 21°35' | 102  | 158°12' | 569  | 10'    |
| Mas, N.E. cor, motor room, Q.M. sand pit  | 21°35' | 140  | 158°12' | 971  | 20'    |
| Ter, white water tank                     | 21°34' | 1686 | 158°12' | 1052 | 15'    |
| ✓Jac, boundary mon. Mil. Reservation      | 21°35' | 152  | 158°12' | 579  |        |
| Had, end of prominent shoulder of cliff   | 21°34' | 1378 | 158°12' | 1502 | 500'   |

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Honolulu, Fort Shafter, T. H.

February 19th, 1933

DIRECTOR, 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.

| Hubert A. Paton   |               |               |                 |                |               |               | Chief of Party.         |                 |
|---|---------------|---------------|-----------------|----------------|---------------|---------------|-------------------------|-----------------|
| DESCRIPTION   | POSITION      |               |                 |                |               |               | METHOD OF DETERMINATION | CHARTS AFFECTED |
|   | LATITUDE      |               |                 | LONGITUDE      |               | DATUM         |                         |                 |
|   | °             | '             | D. M. METERS    | °              | '             |               |                         |                 |
| Kaiahulu Club House   | 21            | 34            | 1837            | 158            | 09            | 1434          | 1930 Stand.             | Topo 4110       |
| Station Water tank, Dollar Radio/   | 21            | 34            | 1521            | 158            | 11            | 1255          | "                       | "               |
| Green water tank  | 21            | 34            | 1651            | 158            | 12            | 585           | "                       | "               |
| White water tank  | 21            | 34            | 1686            | 158            | 12            | 1052          | "                       | "               |
| Sand pit loading tower  | 21            | 35            | 140             | 158            | 12            | 971           | "                       | "               |
| Shoulder of cliff   | 21            | 34            | 1370            | 158            | 12            | 1502          | "                       | "               |
|   |               |               |                 |                |               |               |                         |                 |
| <del>The following Landmark should be removed from Chart #4110, as it has been destroyed.</del> |               |               |                 |                |               |               |                         |                 |
| <del>Steel</del>  | <del>21</del> | <del>34</del> | <del>1100</del> | <del>158</del> | <del>11</del> | <del>20</del> | <i>Removed</i>          |                 |
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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.

## REVIEW OF TOPOGRAPHIC SURVEY No. 4753

Title (Par. 56) *Kawaihapae to Mokuiaia, N.W. coast of Oahu, Hawaiian Islands*

Chief of Party *H. A. Paton* Surveyed by *H. A. Paton* Inked by *H. A. Paton*

~~Ship~~ Instructions dated *July 14, 1931* Surveyed in *Sept. 1932*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)  
*None shown*
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) *None shown*
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *and cards were checked. see* Planetable stations are listed in Desc. Report.
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown and declination was checked. ✓ (Par. 17, 52.) *Effect of local attraction is noted in Desc. Rep.*
18. The geographic datum of the sheet is *Old Hawaiian* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate.
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by
24. Remarks:

Reviewed in office by *R. J. Christman*, Dec. 20, 1933.

Examined and approved:

*L. O. Lobert.*  
Chief, Section of Field Records  
*L. O. Lobert.*  
Chief, Division of Charts

*B. Borden*  
Chief, Section of Field Work  
*G. H. de*  
Chief, Division of Hyd. and Top.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURV.  
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OCT 17 1933

REG. NO. 4753

TOPOGRAPHIC TITLE SHEET

Acc. No. \_\_\_\_\_

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. DD \_\_\_\_\_

REGISTER NO. 4753

State Hawaiian Islands

General locality Northwest Coast of Oahu

Locality Kawaihapai to Mokuleia Island

Scale 1:5000 Date of survey September, 1932

Vessel Inshore Hydrographic Survey of Oahu

Chief of Party Hubert A. Paton, Lieut.

Surveyed by do

Inked by do

Heights in feet above H. W. to ground ~~to tops of trees~~ XXXX

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated July 14th, 1931

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