

# 5982

Diag. Cht. No. 8863-2

Form 504

## U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

### DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. \_\_\_\_\_ Office No. T-5982

#### LOCALITY

State Aleutian Islands, Alaska

General locality Delarof Islands

Locality Kavalga Island (western extremity)

194 4-'48

#### CHIEF OF PARTY

C.D. Meaney, Chief of Field Party  
Div. of Photogrammetry, Wash., D.C.

#### LIBRARY & ARCHIVES

DATE

April 18 - 1954

B-1870-1 (1)

# DATA RECORD

T-5982

Project No. (II):  
Ph-34(48)

Quadrangle Name (IV): Kavalga Island

Field Office (II): Ships SURVEYOR, DERICKSON,  
E. LESTER JONES, and PATTON

Chief of Party: C. D. Meaney

Photogrammetric Office (III): Washington

Officer-in-Charge: Louis J. Reed, Chief,  
Stereoscopic Mapping Section

Instructions dated (II) (III): 16 April 1943  
19 June 1945  
8 April 1948

Copy filed in Division of  
Photogrammetry (IV)

Office Files

Method of Compilation (III): Stereoplanigraph

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): Photo: Instrument

Scale: Plot:: 27,500: 20,000: 20,000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

6/30/49

Applied to Chart No.

Date:

Date registered (IV): 3-29-50

Publication Scale (IV): 1:25,000

Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III):

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

T-5982 - OFF, 1944

Reference Station (III): GP Vol. 5 p. 203

Lat.:

Long.:

Adjusted  
Unadjusted

Plane Coordinates (IV):

State:

Zone:

Y=

X=

Military Grid: Universal Transverse Mercator, Zone No. 1

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

RECEIVED

LAST NAME

FIRST

MIDDLE INITIAL

LOCATION

EXTENSION

| TOPOGRAPHIC<br>SHEET NUMBER | REPORT<br>(✓) |
|-----------------------------|---------------|
| T-5982                      | ✓             |
| T-5983                      | ✓             |
| T-5984                      | ✓             |
|                             |               |

| HYDROGRAPHIC<br>SHEET NUMBER | REPORT<br>(✓) |
|------------------------------|---------------|
|                              |               |
|                              |               |
|                              |               |
|                              |               |

| OTHER MATERIAL |
|----------------|
|                |
|                |
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|                |

☐ **Classified Material - Authorization:** This is to certify that the above named employee is authorized to use the classified material listed hereon.

SIGNATURE OF AUTHORIZED OFFICIAL

*[Signature]*

Received for Delivery .....  
Signature of Requester .....  
Received for Return to Vault .....

| SIGNATURE          | DATE    |
|--------------------|---------|
| <i>[Signature]</i> | 11/1/69 |
|                    |         |

ESSA FORM 62-3  
(3-69)  
PRESCRIBED BY C&GS  
OFFICE CIRCULAR 63-1

**VAULT MATERIAL RECEIPT**  
**OPERATIONS & REQUIREMENTS DIVISION**  
(See Instructions on Reverse)

U. S. DEPARTMENT OF COMMERCE  
ESSA-COAST AND GEODETIC SURVEY

## INSTRUCTIONS

1. PRINT name of Requester, location (room and building) and phone.
2. Write Only Consecutive Numbers on this form.
3. Use a separate form for requesting Classified Material. (See 6 below).
4. Use blue for Hydrographic surveys and reports, pink for Topographic surveys and reports and white for all other material.
5. Copy number 1 (original) for Vault Numerical File - must be Signed and dated by Requester. Copy number 2 will be stamped "Canceled" and returned to Requester by Vault when Requester surrenders material. Copy number 3 for Vault Alphabetical File.
6. For withdrawal of Classified Material check the Classified Material Box and have an authorized official sign the Authorization.



|           |       |                |          |           |
|-----------|-------|----------------|----------|-----------|
| LAST NAME | FIRST | MIDDLE INITIAL | LOCATION | EXTENSION |
| WIN       | J     |                | 1001     |           |

| TOPOGRAPHIC<br>SHEET NUMBER | REPORT<br>(✓) | HYDROGRAPHIC<br>SHEET NUMBER | REPORT<br>(✓) | OTHER MATERIAL |
|-----------------------------|---------------|------------------------------|---------------|----------------|
| T-80288                     | ✓             |                              |               |                |
|                             |               |                              |               |                |
|                             |               |                              |               |                |
|                             |               |                              |               |                |

|  |                                  |
|--|----------------------------------|
| <input type="checkbox"/> Classified Material - Authorization: This is to certify that the above named employee is authorized to use the classified material listed hereon. | SIGNATURE OF AUTHORIZED OFFICIAL |
|  | <i>[Signature]</i>               |

|                              |                    |         |
|------------------------------|--------------------|---------|
| Received for Delivery        | SIGNATURE          | DATE    |
| Signature of Requester       | <i>[Signature]</i> | 11/1/73 |
| Received for Return to Vault |                    |         |

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Areas contoured by various personnel  
 (Show name within area)  
 (II) (III)

(100%) by Michael G. Misulia  
 on  
 the Stereoplanigraph

# DATA RECORD

Field Inspection by (II):

Date:

Ogliuga and Skagul IIs.: L. C. Wilder -- July-Aug. 1944  
Kavalga : R.F.A. Studds -- July 1945

Planetable contouring by (II):

Date:

Completion Surveys by (II): *None*

Date:

Mean High Water Location (III) (State date and method of location):

Occasional short stretches of shoreline were located by field inspection and the balance, a majority, was delineated on the stereoplanigraph

Projection and Control by (IV): Ruling Machine

Date: 10 Feb. 1949

Projection and ~~Grids~~ <sup>ok</sup> checked by (IV): Wheatley E. Ward Jr.  
*Grids " " K.N. Maki*

Date: 10 Feb. 1949  
*22 Mar. 1950*

Control plotted by (III): Clarence E. Misfeldt

Date: 15 Dec. 1948

Control checked by (III): John B. McDonald

Date: 18 May 1949

Radial Plot of Stereoscopic Control extension by (III): Michael G. Misulia

Date: 20 April 1949

Stereoplanigraph

Planimetry

Date:

Stereoscopic Instrument compilation (III): Michael G. Misulia  
Contours

Date: 9 May 1949

Date:

Manuscript delineated by (III): John B. McDonald

Date: *22 JUNE 49*

Photogrammetric Office Review by (III):

Date:

Elevations on Manuscript checked by (II) (III):

Louis J. Reed

Date: *24 JUNE 49*

Camera (kind or source) (III): USC&GS "0" Camera, 6" metrogon, cartographic

| Number   | Date | Time  | Scale  | Stage of Tide |
|----------|------|-------|--------|---------------|
| 48-0-453 |      |       |        |               |
| thru     |      | 10:00 |        |               |
| 48-0-462 | 19   |       |        |               |
| and      | Sept |       | 27:500 | 1.5' above    |
| 48-0-478 | 1948 |       |        | MLLW          |
| thru     |      | 11:00 |        |               |
| 48-0-490 |      |       |        |               |

Tide (III)

Reference Station: Sweeper Cove  
Subordinate Station: Ulak Island  
Subordinate Station:

| Ratio of Ranges | Mean Range | Spring Range |
|-----------------|------------|--------------|
|                 |            | 3.8          |
|                 |            |              |
|                 |            |              |

Diurnal

Washington Office Review by (IV): *K.N. Maki*

Date: *10-14-50*

Final Drafting by (IV): *Day, Betty*

Date: *4-22-50*

Drafting verified for reproduction by (IV): *Kupiec*

Date: *5-11-50*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 13 sq. mi.

Shoreline (More than 200 meters to opposite shore) (III): 43 miles = *7-5982,374*

Shoreline (Less than 200 meters to opposite shore) (III): none

Control Leveling - Miles (II): none

Number of Triangulation Stations searched for (II): (111) *13* Recovered: *13*

Identified: *13*

Number of BMs searched for (II): none Recovered:

Identified:

Number of Recoverable Photo Stations established (III): ~~none~~ *13* /

Number of Temporary Photo Hydro Stations established (III): none

Remarks:



Summary to Accompany T-5982

Topographic map T-5982 is one of 40 similar maps in project Ph-34(48). It covers the west end of Kavalga Island of the Delarof <sup>Islands</sup> Group in the Aleutian Islands. Field inspection was done on 1934 Navy five lens photographs and consisted of the identification of control points. No shoreline inspection was furnished on the photographs with the exception of a few offshore rocks. Field operations for Kavalga Island were carried out by parties operating from the U.S.C. & G.S. Ship PATTON.

A radial plot was not required. Compilation was performed in the Washington Office on the stereoplanigraph using a contour interval of 50 feet supplemented by a contour interval of 25 feet. The manuscript was compiled on acetate ruled with a polyconic projection at 1:20,000 scale on the North American 1927 Datum. A Military Grid, one thousand meter universal transverse mercator, was also ruled on the manuscript. Photography for the instrument was taken with the U. S. Coast and Geodetic Survey 6" Cartographic ("O") Camera. Instrument delineation was supplemented in part by 1944 and 1945 Graphic Control and Hydrographic Surveys.

Depth curves and critical soundings were applied to the manuscript by the Division of Charts.

A cloth-backed lithographic print at compilation scale will be registered with the Descriptive Report in the Bureau archives. After publication, a cloth-backed color print at 1:25,000 scale will also be registered.

*K. N. Maki*  
K. N. Maki  
10/14/49



Field Inspection Report

1. Description of the Area:

This report covers the east central islands of the Delarof Group which is located just east of the international date line between Amchitka and Tanaga in the Aleutian Islands. Specifically, it covers Kavalga, Ogliuga, and Skagul, plus several small rocky islands near by.

In general, the islands have rocky shorelines with many off-lying rocks; bluffs rise from the beaches and the tops are relatively flat, comparatively low in elevation, and are grass covered. The surrounding waters are kelp chocked which extends outward from the shore as far as a 1000 feet.

For a detailed description of each island see field reports listed in paragraph 29, this report, "Supplemental Data".

1-25.

Field inspection was accomplished during World War II by field parties from several Coast and Geodetic Survey Ships as a part of the hydrographic work in the area. The work is not considered adequate by present standards but a report of it is to be found in six different field reports as listed under "Supplemental Data", paragraph 29, this report, three Hydrographic Surveys and three Graphic Control Surveys. *All six surveys filed in the Bureau Archives.*  
*See H-7052 for graphic control report*

COMPILATION REPORT  
T-5982, T-5983, T-5984

26. Control:

See triangulation stations on manuscript. All were plotted on the single work sheet covering the three quadrangles. In addition, all the topo and hydro stations shown on the three graphic control sheets were transferred to the work sheet. During the instrument compilation work it was found that two topo stations as photo-identified did not conform to the control network and therefore were not held to. The two stations were PINNACLE and WEE and are located near the center of Kavalga Island. In addition, many topo stations that were not photo-identified were not held to.

Vertical control was based primarily on the surface of the sea. A few field elevations on established control were available and used for checking purposes. An elevation was read for each on the plotting instrument and all fell within the required limits of accuracy.

28. Detailing:

Topography and planimetry was accomplished on the stereoplanigraph, therefore, eliminating the need for a radial plot. Field inspection furnished on Navy 1934 5-lens photographs was barely adequate because the quality of the photography was so poor.

All field inspection data were applied to instrument compilation on the manuscript. This compilation is to supersede that previously reported in descriptive report "Photogrammetric Shoreline", T-8005, 1946, which report is filed in the Bureau Archives.

Distortions were present on the edges of most of the models in this area. These distortions were compensated wherever possible by making use of similar areas in the adjoining models. If this was not possible the distorted areas were isolated from the rest of the model and worked independently.

29. Supplemental Data:

(a) Hydrographic Surveys:

| <u>Date</u> | <u>Name</u> | <u>Ship</u> | <u>No.</u> | <u>Scale</u> | <u>Area Covered</u>                                    |
|-------------|-------------|-------------|------------|--------------|--|
| 1944        | C.D.Meaney  | SURVEYOR    | H-7039     | 1:20,000     | Inshore around Skagul, Ogliuga, and E. half of Kavalga |



29. Supplemental Data: (continued)

| <u>Date</u> | <u>Name</u> | <u>Ship</u> | <u>No.</u> | <u>Scale</u> | <u>Area Covered</u>             |
|-------------|-------------|-------------|------------|--------------|---------------------------------|
| 1945        | C.D.Meaney  | SURVEYOR    | H-7033     | 1:10,000     | Pass between Skagul and Ogliuga |
| 1945        | C.D.Meaney  | SURVEYOR    | H-7052     | 1:20,000     | Inshore, Kavalga and Unalga     |

(b) Graphic Control Surveys:

|      |              |           |                    |          |                          |
|------|--------------|-----------|--------------------|----------|--------------------------|
| 1944 | L.C.Wilder   | DERICKSON | T-6980             | 1:20,000 | Skagul & Ogliuga Islands |
| 1945 | C.D.Meaney   | SURVEYOR  | T-6976             | 1:20,000 | Ogliuga Island           |
| 1945 | R.F.A.Studds | PATTON    | <del>T-6999a</del> | 1:20,000 | Kavalga Island           |

*Not registered  
Destroyed 3/1/51  
Report with H-7052  
G.F.I.*

30. Mean High-Water Line:

The mean high-water line was delineated on the compilation base sheets using the plotting instrument except in a few places where the details which had been obtained from the field inspection were compiled from the photographs by graphic methods.

32. Offshore Details:

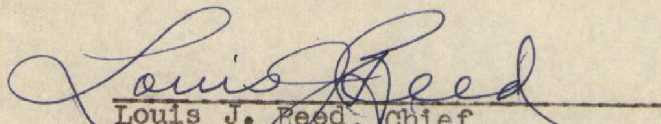
Offshore details were compiled by graphic methods and reconciled with the previous and contemporary hydrographic and topographic surveys of the area.

37. Hydrographic Data:

Hydrographic data are to be added to this compilation to the limits of the three manuscripts by the Nautical Chart Branch. "History of Hydrographic Information" attached.

40. Quality of Contours:

All contours on these manuscripts conform to the national standards of map accuracy for a contour interval of 50 feet; in areas where the supplemental 25 foot contour is shown, the accuracy conforms to the 25 foot interval requirement.

  
 Louis J. Reed, Chief  
 Stereoscopic Mapping Section



# GEOGRAPHIC NAMES

Survey No.

T-5982

Name on Survey

|                      | A | B | C | D           | E | F | G | H | K    |    |
|----------------------|---|---|---|-------------|---|---|---|---|------|----|
| ✓ Alaska ✓           |   |   |   | (for title) |   |   |   |   |      | 1  |
| ✓ Aleutian Islands ✓ |   |   |   | "           |   |   |   |   |      | 2  |
| ✓ Delarof Islands ✓  |   |   |   | "           |   |   |   |   |      | 3  |
|                      |   |   |   |             |   |   |   |   |      | 4  |
| ✓ Bering Sea ✓       |   |   |   |             |   |   |   |   | USGB | 5  |
| ✓ Pacific Ocean ✓    |   |   |   |             |   |   |   |   |      | 6  |
| ✓ Kavalga Island ✓   |   |   |   |             |   |   |   |   |      | 7  |
|                      |   |   |   |             |   |   |   |   |      | 8  |
|                      |   |   |   |             |   |   |   |   |      | 9  |
|                      |   |   |   |             |   |   |   |   |      | 10 |
|                      |   |   |   |             |   |   |   |   |      | 11 |
|                      |   |   |   |             |   |   |   |   |      | 12 |
|                      |   |   |   |             |   |   |   |   |      | 13 |
|                      |   |   |   |             |   |   |   |   |      | 14 |
|                      |   |   |   |             |   |   |   |   |      | 15 |
|                      |   |   |   |             |   |   |   |   |      | 16 |
|                      |   |   |   |             |   |   |   |   |      | 17 |
|                      |   |   |   |             |   |   |   |   |      | 18 |
|                      |   |   |   |             |   |   |   |   |      | 19 |
|                      |   |   |   |             |   |   |   |   |      | 20 |
|                      |   |   |   |             |   |   |   |   |      | 21 |
|                      |   |   |   |             |   |   |   |   |      | 22 |
|                      |   |   |   |             |   |   |   |   |      | 23 |
|                      |   |   |   |             |   |   |   |   |      | 24 |
|                      |   |   |   |             |   |   |   |   |      | 25 |
|                      |   |   |   |             |   |   |   |   |      | 26 |
|                      |   |   |   |             |   |   |   |   |      | 27 |
|                      |   |   |   |             |   |   |   |   |      | 28 |

Names underlined in red are approved. 7-7-49

W. Heck

5-17-50

2.1.11

Review Report T-5982  
Topographic Map  
14 October 1949

62. Comparison with Registered Topographic Surveys

|   |          |      |
|---|----------|------|
| <del>T-8000</del> <i>Not registered</i> | 1:20,000 | 1945 |
| T-8005                                  | 1:20,000 | 1946 |

These surveys are superseded for nautical charting purposes by T-5982.

64. Comparison with Contemporary Hydrographic Surveys

|        |          |      |
|--------|----------|------|
| H-7038 | 1:40,000 | 1945 |
| H-7050 | 1:40,000 | 1945 |
| H-7052 | 1:20,000 | 1945 |

These surveys were compared with T-5982 and they are in agreement.

65. Comparison with Nautical Charts

|      |           |                       |
|------|-----------|-----------------------|
| 8863 | 1:300,000 | 1945, corr. to 3/7/49 |
|------|-----------|-----------------------|

66. Adequacy of Results and Future Surveys.-This map, T-5982, is a complete topographic map and has been compared and reconciled with all hydrographic and topographic surveys of record in this Bureau and becomes, therefore, the most authoritatively complete and accurate topographic map of record for the area covered on Kavalga Island as of the date of this report.

There is no security classification designated for this area.

Adequate photo coverage, adequate horizontal control and instrument compilation methods ensure that this map meets the National Map Accuracy Standards.

No vertical accuracy tests have been made in the area of this map. See item 40 of the Compilation Report for accuracy statement on contours.

67. Recoverable Topographic Stations.-Form 524 has been submitted for the following marked recoverable topographic station and is filed in the Division of Photogrammetry General Files:

Andy, 1945

Reviewed by:

K. N. Maki  
K. N. Maki

Approved by:

S. V. Gifford  
Chief, Review Section  
Division of Photogrammetry

H. C. Edmonston  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Div. of Photogrammetry

Wm. Sciffe  
Chief, Div. of Coastal Surveys



# HISTORY OF HYDROGRAPHIC INFORMATION

T-5982

Kavalga Island (western extremity) Quadrangle  
Delarof Islands, Aleutian Islands

Hydrography was applied to this topographic manuscript in accordance with general specifications of May 18, 1949, by the Division of Photogrammetry; and with detailed specifications by A.M.S., "Technical Memorandum No. 35, XVII".

The soundings and depth curves are expressed in fathoms referred to mean lower low-water, and originate with the following surveys by this bureau.

|        |        |          |
|--------|--------|----------|
| H-7052 | (1945) | 1:20,000 |
| H-7050 | (1945) | 1:40,000 |
| H-7038 | (1945) | 1:40,000 |

The reliability of these surveys is considered good and complete except inshore where kelp and rocky areas prevented development.

The depth curves were drawn at 1, 3 and 5 fathoms wherever developed and at 10 fathoms. The danger curve was detailed from the photographs.

Hydrography applied by R. E. Elkins and verified by G. F. Jordan.

*R. E. Elkins*  
R. E. Elkins  
Nautical Chart Branch  
December 8, 1949