

8015

Diag. Cht. No. 8863-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-31(1.8) Office No. T-8015

DATA RECORD

T-8015

Project No. (II): Ph-34 (48)
(CS-218) Quadrangle Name (IV): GARELOI ISLAND

Field Office (II): Ship PIONEER

Chief of Party: Thomas B. Reed

Photogrammetric Office (III): Baltimore, Md (Reading Plot)
Washington, D.C. (Compilation) Officer in Charge: Hubert A. Paton
Louis J. Reed, Chief,
Stereos-Map Section

Instructions dated (II) (III):

Copy filed in Division of

Photogrammetry (IV)

Office Files

(II) = Supplemental Instructions dated 8 Apr 48
(III) = Verbal

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000

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

Scale Factor (III): 1:1

Date received in Washington Office (IV) MAR 7 1952

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

3/5/53

Areas contoured by various personnel

(Show name within area)

00 (III)

Contoured on the ~~Reading~~ Plotter,
model B, 100% by the Instrument
Operator team of:

and Orvis N. Dalbey
Louis Levin

<i>Robinson</i> <i>J</i> LAST NAME FIRST MIDDLE INITIAL		<i>W. II</i> <i>5757</i> LOCATION EXTENSION																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">TOPOGRAPHIC SHEET NUMBER</th> <th style="font-size: x-small;">REPORT (✓)</th> </tr> <tr> <td style="text-align: center; font-size: large;">T-8015</td> <td style="text-align: center; font-size: large;">✓</td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	TOPOGRAPHIC SHEET NUMBER	REPORT (✓)	T-8015	✓							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">HYDROGRAPHIC SHEET NUMBER</th> <th style="font-size: x-small;">REPORT (✓)</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	HYDROGRAPHIC SHEET NUMBER	REPORT (✓)									<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">OTHER MATERIAL</th> </tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	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 																									
Received for Delivery Signature of Requester Received for Return to Vault	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: x-small;">SIGNATURE</th> <th style="font-size: x-small;">DATE</th> </tr> <tr> <td style="height: 40px; vertical-align: bottom;"> <i>[Signature]</i> </td> <td style="vertical-align: bottom;"> <i>11/1/93</i> </td> </tr> </table>		SIGNATURE	DATE	<i>[Signature]</i>	<i>11/1/93</i>																					
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<i>[Signature]</i>	<i>11/1/93</i>																										
ESSA FORM 62-3 (3-69) PRESCRIBED BY C&GS OFFICE CIRCULAR 63-1 VAULT MATERIAL RECEIPT OPERATIONS & REQUIREMENTS DIVISION <i>(See Instructions on Reverse)</i> U. S. DEPARTMENT OF COMMERCE ESSA-COAST AND GEODETIC SURVEY																											

DATA RECORD

Field Inspection by (II): E.L. Jones

Date: 19-20 June 50

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

Mean High Water Location (III) (State date and method of location): Shoreline was delineated on the plotting instrument using the field identification of the MHHWL as a guide. The resulting shoreline is dated 1950 since that is the date of the field inspection.

Projection and Grids ruled by (IV): Theodore L. Janson on the Reading Ruling Machine

Date: 25 Jul 51

Projection and Grids checked by (IV): Howard D. Wolfe

Date: 26 Jul 51

Control plotted by (III): Grover B. Torbert

Date: 2 Jan 52

Control checked by (III): Ruth Hartley

Date: 2 Jan 52

Radial Plot ~~of Densometer~~
~~Control~~ ~~checked~~ by (III):

Grover B. Torbert
 Frank J. Tarca

Date: 3 Jan 52

delineation
 Stereoscopic Instrument ~~operation~~ (III):

Planimetry Orvis N. Dalbey
 and
 Contours Louis Levin

Date: 15 Feb 52
 Date:

compilation by: Robert L. Sugden
 Manuscript ~~checked~~ by (III):

Date: 4 Mar 52

Photogrammetric Office Review by (III): Louis J. Reed

Date: 7 Mar 52

Elevations on Manuscript
 checked by ~~(X)~~ (III):

Louis J. Reed

Date: 7 Mar 52

Camera (kind or source) (III): USC&GS 9-lens camera, model B, f=8.25 inches.

Number	Date	Time	Scale	Stage of Tide
23876		10:59		
23877A				
23877B				
23877C				ABOUT
23877D				1ft
23877E	20 Sep 48		XXXXXX	below
23877F			20,000	MHHW
23877G				
23877H				
23877J				
23877K		11:13		

Tide Data furnished by Mr Disney of Tides and Currents, 20 Jul 51.

Tide (III)

diurnal

Reference Station: Sweeper Cove *

Subordinate Station: Ogliuga

Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	---	3.5 *

Washington Office Review by (IV):

Date: 14 Nov. 1952

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 22 sq mi

Shoreline (More than 200 meters to opposite shore) (III): 60 miles

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

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): 7

Recovered: 7

Identified: 7

Number of BMs searched for (II): None

Recovered: none

Identified: none

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): 10

Remarks:

* Data in F.E. No.1, 1945 pages 1 & 2 and in the "Tide Note for Hydro-sheet" dated Feb 23, 1945 references the tidal info. to Tamaga Bay:

"Height of MHHW above plane of reference (M.L.L.W.) is 4.1 ft."

Washington, D. C.

179° 178° 177° 176° 175°

B E R I N G

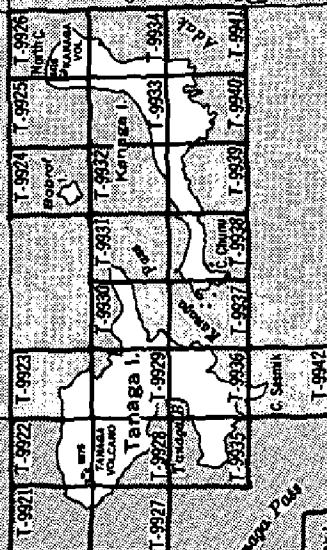
(Joins No. 14)

I S L A N D S
A N D R E A R O F

P A C I F I C
O C E A N

179° 178° 177° 176° 175°

Area	A.M.S. No.
2324 II SW	
2324 II SE	
2324 III SW	
2324 III SE	
2324 IV SW	
2324 IV SE	
2324 V SW	
2324 V SE	



PH-34 (48)

West of Greenwich

Summary to Accompany T-8015

Topographic map T-8015 is one of several similar maps of islands in the Aleutian group in Ph-34 (1948). It includes all of the volcanic island called Gareloi Island and is the most northern of the Delarof Islands.

Field inspection was accomplished in June 1950 and is rather complete for control and shoreline information.

The radial plot was run in the Baltimore Photogrammetric Office using metal mounted nine-lens photographs. The plot was run for the control of photographs on Gareloi Island only. The manuscript served as a base grid and the polyconic projection and military grid were ruled with the projection ruling machine.

The map was compiled in the Washington Office on the Reading Plotter with rectified prints with a 100 foot contour interval. The manuscript is of vinylite and the control is on the 1927 NA datum with $7\frac{1}{2}$ minutes of latitude and 10 minutes of longitude.

Depth curves and critical soundings are available from the 1952 season's work but are not verified and cannot be applied at this time. The extensive areas of kelp were taken from these unverified boat sheets, and it is not anticipated the areas shown will change position.

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

Field Inspection Report
Topographic Map T-8015
Gareloi Island, Aleutian Islands, Alaska
Project CS-218
Ship EXPLORER
H. Arnold Karo, Comdg.
1950

2. Areal field inspection.— Photogrammetric field work was started on this island by the Ship PIONEER, who established two control stations, WEST 1950 and GAR 1950, on the northwest side of the island in connection with shoran operations. Station WEST was identified on the photographs but no shoreline was inspected.

All photogrammetric data was transferred to the Ship EXPLORER on 6 June for completion of this work. However, it was not until the close of the field season in the Aleutians that this work could be undertaken. The photogrammetric field work was hastily completed in $2\frac{1}{2}$ working days on 19, 20 and 21 June. However, it is believed that, except for the possible establishment of additional vertical control, the field data obtained is sufficient to start compilation.

The volcano on this cone-shaped island is active and was smoking on the days of inspection. The pungent gasses were noticable on the lee side of the island. Most of the steep sloping sides of the mountain, at the lower levels, is covered with tundra-type grass with occasional rock outcroppings, lava flows and cinder patches.

The steep rock bluffs on the south western part of the island indicate that the island has undergone considerable sea erosion there.

A folder of twelve 2-1/4 x 3 1/4 inch photographs showing topographic features, particularly of the shoreline, is submitted. The photographs and accompanying notes may be of some assistance to the compiler in interpreting the aerial photographs.

3. Horizontal control.— Triangulation station WEST 1950, and topographic station GAR, 1950 were established to locate the shoran mast GARE. Topographic station GAR, 1950 was located by theodolite methods and should be used to control the radial plot.

The following horizontal control stations were identified on the indicated photographs:

<u>Station</u>	<u>Photo</u>
✓ GARELOI, 1944	23877-A
✓ GAR, 1950 (topo.- sta.)	23877-H
✓ LAD, 1944	23876
✓ PAR, 1944	23876
✓ PIL, 1944	23877-DC
✓ SHAG, 1944	23876
✓ WEST, 1950	23877-E

There is submitted with this report description cards or recovery notes for these stations. In addition, a card is submitted for the lost station SAL, 1944 (unmarked 3' pinnacle-shaped rock).

4. Vertical control. - - There are no bench marks on this island.

It is possible that some elevations were determined during the 1944 triangulation but this information is not available in the field and should be investigated in the Washington Office. Chart No. 8863 shows Mt. Gareloi as 5334 feet. The photo index furnished indicates station GARELOI, 1944 as 1564 feet elevation, however, the source of this elevation is also unknown. See Item 32, #2, Compilation Report.

Limited field time and poor observing weather prevented the completion of vertical control observations. Vertical angles obtained at SHAG, 1944 are attached to the back of this report.

There were no K-20 photographs taken due to poor photographic weather and lack of control to fix the positions of the camera station.

5. Contours and drainage. - - Not examined.

6. Woodland cover. - - Inapplicable.

7. Shoreline and alongshore features. - - The larger rock cliffs and bluffs along the shoreline should be shown on the manuscript by the rocky bluff symbol since they are very conspicuous when approached from offshore. These cliffs and bluffs were not indicated during the field inspection since they can easily be distinguished on the photograph. Some steep slopes and bluffs are grass covered and can be identified by the lighter photographic tone. These grass bluffs are much less conspicuous from offshore than the rocky bluffs.

The mean high water line falls within two categories: (a) rocky points, and, (b) coves and small bights. The mean high water line around the small rocky points invariably are on the offshore side of the dark (nearly black) photographic tone. These points, and there are many, are composed of a harder volcanic rock which has resisted erosion and have nearly vertical sides. They appear very dark both on the photograph and when viewed in the field. An example of the rocky-point mean high-water is shown on photograph 23877-D.

The shoreline of the coves are, in general, strewn with small rocks to those of boulder size and are water polished. The rocks, which are covered daily at mean high water, photographic dark in tone; while the rocks above mean high-water appear much lighter. An example of this has been indicated on photograph 23877-D.

The fore-shore gradient is quite steep so that no low-water line has been indicated on the photographs.

8. Offshore features. - - Should it be desirable additional elevation on offshore rocks can be obtained next season during field edit.

9. Landmarks and aids. - - Since the photogrammetric party was in this area only a short time and the landmarks were viewed from close inshore, the final recommendations should come from the hydrographic party after work is resumed next season.

There are no aids to navigation.

10. Boundaries, monuments and lines. - - Inapplicable.

11. Other control. - - A few photo-hydro stations were spotted during shoreline inspection. These stations were later examined under a stereoscope aboard the ship and pricked. Rough seas prevented the use of the stereoscope in the inspection launch. No attempt was made to identify sufficient photo-hydro stations for the control of future inshore hydrography since this can be most easily and efficiently accomplished by shipboard radial-plot methods after the map manuscript has been completed.

The photo-hydro station number and a short description is as follows:

<u>Photo-hydro Number</u>	<u>Photo</u>	<u>Description</u>
001	23877-H	S'ly and largest of two water-falls 200 meters apart. Top of cliff.
002	23877-H	Largest of dark dirt spots on top of 75 ft. grass bluff.
003	23877-J	Water falls at shoreline.
004	23877-J	Sharp rock point (10').
005	23877-J	Water falls at top of bluff.
006	23877-J	Water falls at top of bluff.
007	23877-K	Center water falls of three. top of bluff edge.
008	23877-K	Top of water falls at bluff edge.
009	23877-C	S'ly water falls of two. at bottom of bluff.
010	23877-D	Center and highest point of 50' pinnacle rock.

12. Other interior features. - - There are two small buildings on the island both of which are shacks. One shack is at shoran station GARE, 1950 while the other is near the shoreline on the north coast of the island.

13. Geographic names. - No investigation of geographic names was made since the island is uninhabited and no contacts were made with persons having local knowledge.

Recommendations for geographic names are as follows:

GARELOI ISLAND - The continuance of this previously charted name is recommended.

MT. GARELOI. - This name is shown on chart 8863 as applying to the northerly of two peaks near the center of GARELOI ISLAND. Actually this peak is an active volcano which is a better descriptive term than mountain. Also, MT. GARELOI can be loosely applied to all of the mountain mass on the island. It is recommended, then, that the name MT. GARELOI not be charted (See new descriptive name GARELOI VOLCANO).

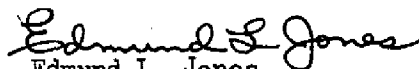
GARELOI VOLCANO - This new name is recommended as applying to the north peak which is an active volcano and during the period of field work was smoking. It is believed that the word "volcano" should be included in the name of this peak since it is more descriptive in this case than the charted term "mountain". Evidently the 1944 triangulation party was of the same opinion since this peak is station GARELOI VOLCANO, 1944.

SOUTH PEAK. - This new descriptive name is recommended for the peak about $\frac{1}{2}$ mile southwest of the volcano. It is not quite as high as GARELOI VOLCANO but is part of the same mountain mass. This peak is triangulation station SOUTH PEAK, 1944.

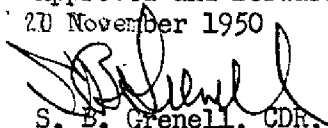
The recommended names have been shown in red on photograph 23877-F except for the name MT. GARELOI which applies to the whole mountain mass on this island.

14. Special report and supplemental data. -- See attached transmitting letter.

10 November 1950


Edmund L. Jones
LCDR, C&GS

Approved and forwarded
20 November 1950


S. B. Grenell, CDR, C&GS
Comdg., Ship EXPLORER (Acting)

PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH 34 (48)

SURVEY T-8015

21. AREA COVERED

This radial plot covers the area of Survey T-8015. This is a topographic survey of Gareloi Island, Aleutian Islands, Alaska.

22. METHOD-RADIAL PLOTMap Manuscript

A vinylite sheet with polyconic projections ruled in black, and Universal Transverse Mercator Grids in red, at a scale of 1:20,000, was furnished by the Washington Office. No base sheet was required.

All control stations and substitute stations were plotted using a beam compass and meter bar.

A sketch showing the layout of this survey and the distribution of photograph centers and control is attached to this report.

Photographs

All photographs used are nine lens metal mounted photographs at a scale of 1:20,000. Nine (9) photographs were used in the radial plot numbering as follows:

23876	23877A	23877B
23877 C,	23877E,	23877F,
23877 H,	23877J,	23877K

The symbols used on the photographs were given in special instructions for all radial plots using nine lens photographs which will be used later with a Reading Plotter.

Templets

Vinylite templets were made from all photographs using a master templet, furnished by the Washington Office, to adjust for error due to chamber displacement. Radial lines were scratched on the templets with a sharp needle point and the scratches filled in with china marking pencil. Red pencil was used for all shoreline (rectification) pass points and black pencil was used for all other radial lines.

Closure and Adjustments to Control

The radial plot was constructed directly on the map manuscript. A preliminary plot was constructed to determine whether there were any badly tilted photographs. The amount of tilt can be estimated by observing the displacement of the image points, indicated by red dots on the templets, of the shoreline points, and points of known elevations. One photograph, 23877H, was apparently tilted. This photograph was placed on top of the completed plot so the positions of all points could be pricked and circled thereon.

-2-

The final plot was constructed by laying the templets alternately from different flights. All control points except Sub. Pt. SHAG, 1944 were held. The radial plotted position was approximately .3 millimeter southwest of the plotted position. No attempt was made to prick this radial plotted position because there was some doubt about the pricking of the Sub. Pt. on the photographs.

Transfer of Points

The positions of all centers, pass points, and control stations were pricked on the top templet and circled with a 3 mm blue circle. The positions were established on the remaining templets and map manuscript by drilling down through them with a small (.01 inch) jewelers drill. All points were circled on each templet as it was removed and on the map manuscript.

23. ADEQUACY OF CONTROL

There was adequate control for a satisfactory plot. It is believed all points are within the desired accuracy.

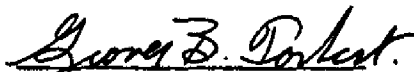
24. SUPPLEMENTARY CONTROL

No graphic control surveys were used in this radial plot.

25. PHOTOGRAPHY

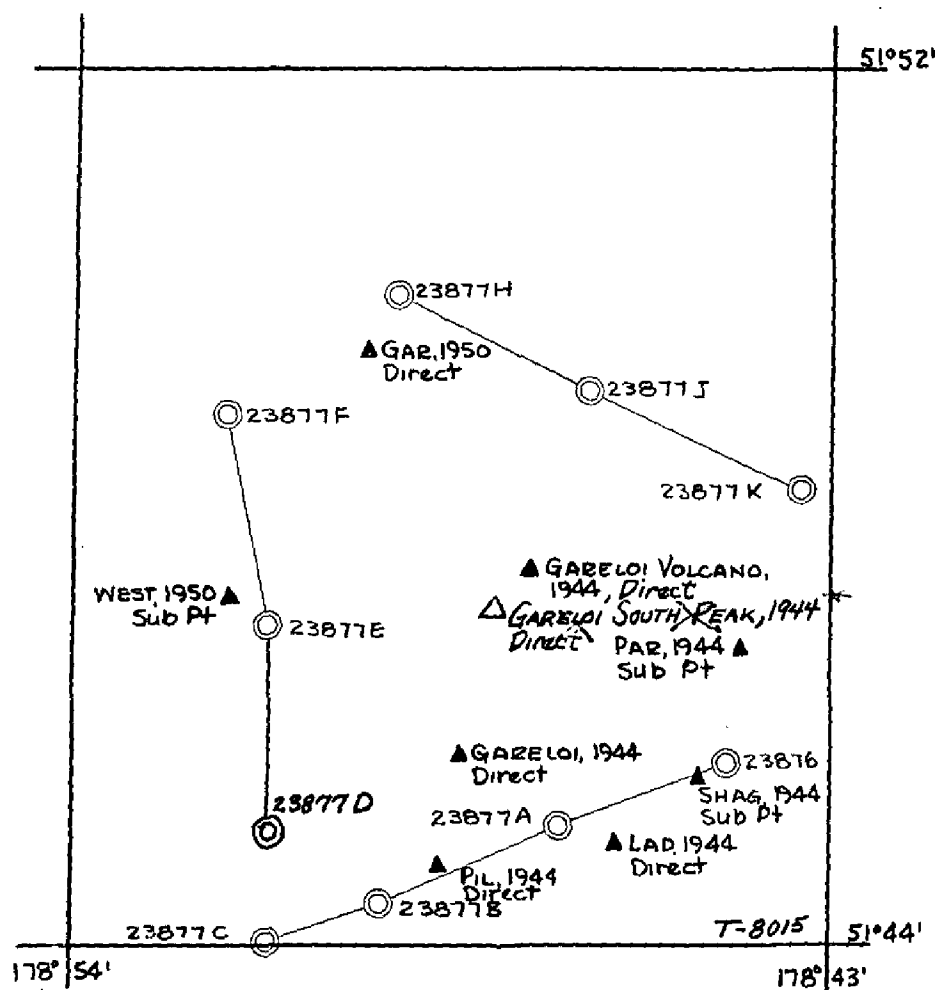
Photographic coverage, definition and overlay between flights were adequate. Photograph 23877H was found to be slightly tilted but did not affect the plot.

Respectfully submitted


Grover B. Torbert
Cartographic Photo. Aid.

Approved and forwarded


Hubert A. Paton
Comdr., C&GS
Officer in Charge



LAYOUT SKETCH
PROJECT PH-34(48)
Survey T-8015

- ◎ Nine Lens Office Photographs
- ▲ Control Stations (Identified)
- △ Control Station (Not ~~identified~~)
(Used)
- * Considered an erroneous position.

COMPILATION REPORT31. Delineation:

This island was delineated on the Reading Plotter, model B. Both field inspection and photo coverage were complete for the purpose, and the entire area of the island has been compiled except the inside of the volcano where the absence of light made it impossible.

32. Control:

Horizontal control was adequate for a satisfactory plot; refer to Photogrammetric Plot Report included herein. All but one station was located on the south half of the island, but the pictures were flown in three flight lines that crossed forming a triangle around the island. This condition caused a closed-traverse effect in the plot which permitted a tight plot of sea-level points inspite of the rather poor distribution and placement of horizontal control. A second radial plot was constructed using rectified copies of the original photographs. This resulted in excellent cuts for all pass points and in the repositioning of all pass points above the 500ft level. The new positions were used for orientation of the instrument work sheets during compilation. In addition, two high points on the island were cut in, two control stations, GARELOI SOUTH PEAK,* 1944 and GARELOI VOLCANO, 1944. Both formed perfect intersections with the later falling on the plotted position, but with the peak missing the plotted position by about 2mm. The peak* is described as the highest point but after delineation the GP position placed the station below the top contour on the military crest of the peak. Because of this, because the identification could not be very far incorrect, and because the peak is so near to the volcano station which falls into position so nicely indicating that the peak station should do likewise, the GPs for the peak must be incorrect and it is recommended that the station be deleted from the GP List (GARELOI SOUTH PEAK, 1944).

The principle vertical control for contouring and rectification purposes was sea-level as indicated by the shoreline on the photos. Two elevations were given in the GP List, for stations GARELOI, 1944, and WEST, 1950. Further, 1950 field work furnished a measured elevation on station SHAG, 1944, and a few vertical angle observations on high points. One observation from WEST, 1950, on GARELOI SOUTH PEAK, 1944, gave a computed elevation of 5173ft, but it was rejected because it was about equal to the known elevation of GARELOI VOLCANO, 1944, of 5160ft, close by, and it was also known that there is about 200ft difference in elevation between the two stations. Also, two separate elevations were computed

for GARELOI VOLCANO, 1944, the one based on a single shot from Kavalga Island (4840ft) was rejected, but the other observation, from Unalga Island, gave a 5150ft elevation which was very closely verified by readings on the plotting instrument. The instrument value was 5160ft and has been used on the manuscript in proper symbol rather than the unchecked field elevation; it is considered to be the better figure because of the very long distance of the single field observation.

33. Supplemental Data:

a. Special Report: "SHORELINE PHOTOGRAPHS and NOTES FOR THE COMPILER, TOPOGRAPHIC MAP T-8015, Gareloi Island, Aleutian Islands, Alaska, Project CS-218, Ship EXPLORER, H. Arnold Karo, Comdg, 1950"

in Photogr. files.

b. Instrument Photographs (metal-mounts):

23876, 77A, 77B, 77C, 77D, 77E, 77F, 77H, 77J, 77K.

c. Field Inspection Photographs: (trimmed paper)

23876, 23877A, B, C, D, E, F, G, H, J, and K.

34. Contours and Drainage:

Photograph quality was very good for contouring purposes and no particular difficulty was encountered during the instrument delineation. A few contours above 4000ft in elevation, near the top of the volcano, are questionable in part and have been indicated on the manuscript by dashed lines; the top of the volcano was white with frozen mist permitting a very poor to no model at all for contouring, and this is why the contours in the small area are reported as doubtful. Further, there are some contours inside the volcano which could not be delineated, again because of no model but this time due to lack of light penetration of the smoke or mist rising from the volcano mouth. An approximate depression contour was drawn inside the volcano anyhow, to better picture the feature as a volcano and to add to the value of the map as such.

35. Shoreline and Alongshore Details:

Shoreline inspection was adequate. No low-water or shoal-lines were indicated or delineated, but one foul area and a few ledge-lines were drawn on the instrument. Many rocks are shown just offshore, part of which were field identified and the other part were instrument located. They represent more-or-less the outer limits of many rocks that have broken off the cliffs and are strewn along the shoreline, in and out of the water.

- 36. Offshore Details: Not applicable.
- 37. Landmarks and Aids: No landmarks recommended, no aids exist.
- 38. Control for Future Surveys: None.
- 39. Junctions: There are no bordering quads.
- 40. Horizontal and Vertical Accuracy:

This map is considered to meet map accuracy standards in both respects; scale 1:20,000, contour interval is 20ft. 100ft, with THE 50ft contour added in places.

- 46. Comparison with Existing Maps: Never before mapped.
- 47. Comparison with Nautical Charts:

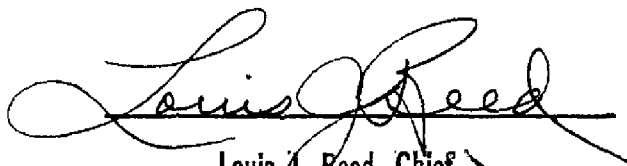
IGITKIN ISLAND TO SEMISOPOCHNOI ISLAND, No.8863, 1:300,000, April 1945.

- 48. Geographic Name List: Follows as separate numbered page.
- 49. Notes for the Hydrographer: See separate unnumbered page.
- 50. Compilation Office Review: See separate page following.

Submitted by:


 William D. Harris
 Cartographer-Photogrammetric

Forwarded by:


 Louis J. Reed, Chief
 Stereoscopic Mapping Section
 Photogrammetric Engineer

PHOTOGRAMMETRIC OFFICE REVIEW

T-8015

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒ 9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Contour interval ☒ 34. Duration ☒ 35. Latitude & longitude ☒ 36. Discrepancy

☒ = checked
☒ = non-existent

GEOGRAPHIC NAMES

Survey No.

T-8015

Name on Survey

Page 18

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
✓ <u>BERING SEA</u>								BH	1
✓ <u>AMCHITKA PASS</u>								"	2
✓ <u>SOUTH PEAK</u>									3
✓ <u>GARELOI ISLAND</u>								BH	4
✓ <u>GARELOI VOLCANO</u>									5
									6
									7
<u>Alaska</u>									8
<u>Aleutian Islands</u>									9
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} for title

Names underlined in
red are approved.

11-17-52

L. Hack

Review Report T-8015
Topographic Map
4 November 1952

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of other Agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.-
Preliminary boat sheets from the 1952 field season are listed as Bp. Nos. 49364, 49365, and 49366 and are in the Nautical Chart Branch files. These have not been verified and cannot be applied at this date. T-8015 shoreline was transmitted to the field for use as a base for the hydrography.

Other existing hydrography is of such small scale as to preclude showing as few as six individual soundings for the entire area of this manuscript.

H-7804	1:80,000	1950
H-7806	1:60,000	1950
H-7038	1:40,000-	1944-5

This map is complete in all details and has no conflict with the preliminary boat sheets from the 1952 seasons' work.

65. Comparison with Nautical Charts.-

8863	1:300,000	1951
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The two scales differ so much as to prevent giving a good comparison, and T-8015 supersedes the chart detail in all respects. The elevation of the highest part of the island (volcano) is 5160 feet above MSL as compared with the 5334 feet shown on the chart.

66. Adequacy of Results and Future Surveys.-T-8015 is a complete topographic map and has no conflict with 1952 preliminary boat sheets of the inshore hydrography.

There seems sufficient reason to believe the horizontal control station South Peak, 1944 is not good in view of the concerted attempts to hold other field identified control as brought out in 32 of the compilation report.

The vertical accuracy appears good since the conditions for bridging with the instrument are nearly ideal, and shoreline readings are supplemented by field observations to substantiate the results.

It is believed the map complies with the National Map Accuracy Standards for horizontal and vertical accuracy and is therefore, the most complete and accurate map on record as of the date of this report.

Reviewed by

Roscoe J. French
Roscoe J. French

APPROVED

S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

H. E. Edmonson
Chief, Nautical Chart Branch
Div. of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Carl O. Heaton
Chief, Div. of Coastal Surveys

HYDROGRAPHIC FIELD PARTY SUPPLEMENT
to
Field Inspection Report
Topographic Map T-8015
Gareloi Island, Aleutian Islands, Alaska
Project CS-218
Ship EXPLORER
George L. Anderson, Comdg.
1952

The shoreline inspection and identification of horizontal control for Gareloi Island was done in 1950, so a complete photogrammetric field survey by this party was not required.

Thirty-three photo-hydro signals were constructed along the shoreline of the island as control for the hydrographic launches. Seven of these stations were pre-selected and located on the manuscript by the Washington Office. The launches were able to receive Shoran signals around the southern side of the island so photo-hydro stations were not needed in this area. The positions of the signals were pricked on the nine-lens photographs and radial plotted on the Advance Topographic Manuscript Print, T-8015 that was prepared by the Washington Office.

This photogrammetric field party did not do any additional shoreline inspection. The compiled shoreline on the manuscript was found to be accurate by the hydrographic parties with the following exceptions. The reefs located at latitude $51^{\circ} 48.2'$, longitude $178^{\circ} 44.3'$ on the manuscript were not found after investigation by the hydrographic party. This is noted on Boat Sheet EX-2352b. The rock awash located at latitude $51^{\circ} 49.1'$, longitude $178^{\circ} 51.7'$ on the manuscript was searched for and not found by the hydrographic party. This is noted on Boat Sheet EX-2352c. There is kelp growing around most of the island and in general it is within the 10 fathom depth curve. The limits of the kelp are shown on Boat Sheets EX-2352a, b and c.

Deleted
from Topo 8015
11/9/53
RIF

Respectfully submitted

for Robert C. Munson
Ensign, USC&GS

by

J. P. Gossett

Approved and forwarded

George L. Anderson
George L. Anderson
Capt. USC&GS
Commanding Ship EXPLORER

