

# 8052

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-8052

### LOCALITY

State Aleutian Islands, Alaska

General locality Delarof Group

Locality Ulak Island

1943-'48

### CHIEF OF PARTY

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

### LIBRARY & ARCHIVES

DATE August 28, 1950

B-1870-1 (1)

# 8052

LAST NAME	FIRST	MIDDLE INITIAL	LOCATION	EXTENSION
K			114 1211 1971	18757

TOPOGRAPHIC SHEET NUMBER	REPORT (✓)	HYDROGRAPHIC SHEET NUMBER	REPORT (✓)	OTHER MATERIAL
7-8052	✓			

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

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## INSTRUCTIONS

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## DATA RECORD

T-8052

Quadrangle (II): ULAK ISLAND

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

Field Office: Ship SURVEYOR Chief of Party: C.D. Meaney

Compilation Office: Washington Chief of Party: Louis J. Reed, Chief,  
Stereoscopic Mapping SectionInstructions dated (II III): 8 April 1948 Copy filed in ~~Descriptive~~  
~~Report No. X~~ (VI) x  
Division of Photogrammetry  
Office Files

Completed survey received in office: 3-7-49

Reported to Nautical Chart Section: 3-9-49

Reviewed: 6-21-49

Applied to chart No.

Date:

Redrafting Completed:

Registered: 9-22-49

Published:

Compilation Scale: 1:20,000

Published Scale: 1:25,000  
Vault Copy " 1:20,000

Scale Factor (III): 1:1

Geographic Datum (III): NA-1927

Datum Plane (III): MSL

Reference Station (III): ULAK, 1944

Bare Rocks: MHW

Vol 5 -P203

Rocks Awash: MLLW

Lat.:

Long.:

Adjusted  
Unadjusted

State Plane Coordinates (VI): None

X =

Y =

Military Grid Zone (VI) Universal Transverse Mercator, Zone No. 1

*Plotted by K.N. Maki 1-19-50*  
*Checked by L.M. Gazik 1-20-50*



PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
<u>Compilation Photography (9-lens)</u>				
23793 thru 23798 and 23801 thru 23805	19 Sept 48	9:07 <del>to</del>	1:20,000	1.6' above MLLW

Field Inspection Photography (5-lens USN)				
472 thru 480	1943	###	1:24,000	###

Tide from (III): Sweeper Cove Reference Station

Mean Range: 3.8' Spring Range: MSL = 2.2' above MLLW

Camera: (Kind or source) US C & GS 9-lens "B" f=8 1/4"

Field Inspection by: Ship SURVEYOR, date: 1945 Season  
C.D. Meaney, Com'dg

Field Edit by: *None* date:

Date of Mean High-Water Line Location (III): MHW Line not furnished by field party; delineated on Reading Plotter Dec. 1948.

Projection and Grids ruled by (III) Ruling Machine date: 9 Nov 48

" " " checked by: W.E. Ward date: 9 Nov 48

Control plotted by: John B. McDonald date: 17 Nov 48

Control checked by: Clarence E. Misfeldt date: 17 Nov 48

Radial Plot by: William D. Harris date: 15 Dec 48

Detailed by: Orvis N. Dalbey date: 31 Dec 48  
(Topo & shoreline) and

Compilation By: Clarence E. Misfeldt  
John B. McDonald date: 10 Feb 49

Reviewed in compilation office by: date:

*Manuscript*  
Elevations on ~~Field Edit Sheet~~  
checked by: Louis J. Reed date: 10 Feb 49

STATISTICS (III)

Land Area (Sq. Statute Miles): about 13 Sq Mi

Shoreline (More than 200 meters to opposite shore): about 40 miles

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

Number of Recoverable Topographic Stations established: three

Number of Temporary Hydrographic Stations located by radial  
plot: none

Leveling (to control contours) - miles: none

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

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

Remarks:



Summary to Accompany T-8052  
Ulak and Tanadak Islands

Field inspection work was performed in 1944 and 1945 by personnel operating from the Ship SURVEYOR, C. D. Meaney Commanding. Five-lens Navy photographs were used for the field inspection.

The radial plot was run in the Washington Office using templets of nine-lens photographs on a vinylite base ruled with a polyconic projection at 1:20,000 scale on the North American 1927 Datum. The manuscript was compiled on acetate ruled in the same manner as the vinylite base, but with the addition of a Military Grid. The shoreline and contours were compiled from rectified nine-lens photographs on the Reading Plotter, using a contour interval of 50 feet and a supplemental contour interval of 25 feet.

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

A cloth-backed lithographic print, <sup>without depth curves and soundings</sup> scale 1:20,000, will be registered with the Descriptive Report. After publication, a cloth-backed color print at 1:25,000 scale will also be registered.

*K. N. Maki*

K. N. Maki  
6/9/49



## FIELD INSPECTION REPORT

### 1. Description of Area:

Ulak Island is saddle-shaped with the north end rising in headlands and peaks while the south end has fewer peaks. In general, all slopes are gentle except for the rocky bluff line along the southeast and north east sides of the island, and except for the west and northwest shores which are steep but not quite as rugged. From the blufflines inland the surface is tundra covered.

Tanadak Island, due west off the center of Ulak Island, is a small, flat, and tundra covered rocky area.

Kelp growth is found around both islands but is most pronounced in the waters between the two and south off Tanadak.

### 1 thru 25:

Photogrammetric field surveys were made prior to compilation by parties from the ship SURVEYOR as part of the hydrographic work in this area. The field report on this work is included in descriptive reports T-6991, T-6993, and H-7053.

*3 forms 524<sup>f</sup> filed T-6991 Div. Photogr. General Files*



## COMPILATION REPORT

26. Control: Twenty-three control stations were plotted by GP's and can be found listed on two sheets elsewhere in this report. Of the 23, two are located on ~~Pueda~~ <sup>Tanodak</sup> Island to the east of Ulak Island and six are on the NE coast of Amitignak Island which lies SW of Ulak.

Eight of the control stations were held to by the radial plot, namely: Black, Rog ss, Vic, Mesa, Doc, Bluff, Sow, and Dom. Four stations on Amitignak Island fell outside the area of the plot; they were Knob, Monk, Lit, and Amitignak. The balance, eleven control stations, were not held to by varying amounts, the reason being poor identification or no identification at all. An attempt was made to office identify each and each was cut in on the plot. The amount of variance depended on the skill ~~and luck~~ of the office inspector and is denoted on the base plot sheet.

The only known elevation on the island was 531' for the station Ulak as given in the GP list. A check was made into its authenticity and it was discovered that it was computed by Geodesy from a single non-reciprocal observation 25,500 meters in length. Therefore it carried little weight for the instrument work, and without it an elevation of 527' was read. During the process of rectification it was discovered that the flying height was 0.6% too high to give 1:20,000 scale photographs, and this correction was used to arrive at the 527' value.

27. Radial Plot: The plot was tied to control plotted by beam-compass on a single vinylite base sheet. Eight metal-mounted 9-lens photos were used, 23793 thru 23798, 23801 and 23805; eight separate hand templets were made on vinylite, one for each photo. The original photos were printed using the 1948 Transformer Templet and the hand templets were checked against the 1948 calibration templet. The plot was laid in the usual manner holding to as many of the best identified control points as possible. See paragraph 26 above for details as to what control was held to.

Control density was adequate for this type of plot although the general lay-out could have been improved. In particular, very little control was established on the NE coast of the island whereas the west coast had sufficient. Also, the control stations were a bit too closely established on the west coast; for example, three stations were grouped at the south tip of the island.

Control identification was generally poor. The selection of station sites varied; some were unmistakable, others were impossible to identify even with the field photos. Very poor photography for field identification use is the reason for the poor work; the photos were 1935 Navy 5-lens with very hazy



detail. Therefore, a station located on an isolated pinnacle offshore, for example, could be quickly and perfectly identified in the office, whereas an inland object became a guess at best.

28. Detailing: Because of the very poor photos for field inspection purposes, there was no shoreline inspection and all detailing was done in the office on the Reading Plotter. The compilation is complete and is in agreement with the Hydrographic sheet of the island, Register No. 7053, insofar as offshore rocks etc. are concerned.

29. Supplemental Data: The following were used to supplement the 9-lens compilation photographs:

Graphic Control Survey	SU-H-45, T-6991, 1945, C.D.Meaney, SURVEYOR
Graphic Control Survey	SU-J-45, T6993, 1945, C.D.Meaney, SURVEYOR
Hydrographic Survey	SU 2345, H-7053, 1945, C.D.Meaney, SURVEYOR
Photogrammetric	
Shore-line Survey	--- T-8006, 1946, Div. of Photogrammetry

The above are all at a scale of 1:20,000. The Graphic Control Survey sheets were of little use in the compilation process because the Topo Stations located thereon were not identifiable--like the primary control, an attempt was made to office identify them and a few attempts were successful. The Hydro sheet was used to check the instrument delineation of offshore detail; where there was a difference, judgment was exercised for the compilation. The 1946 office shoreline compilation was of little use except as a guide and index; a new shoreline was detailed since this former one was compiled from unstable photos of poor detail based on Topo control which the present radial plot discovered to be out of agreement with the primary control now available.

~~Tanodak~~ <sup>Tanodak</sup> Island has also been compiled as part of this Quad. There was a stab made at field inspection of the island but the photo detail of the area is so poor that the work is given but little weight. The manuscript, therefore, shows an instrument delineation of ~~Tanodak~~ <sup>Tanodak</sup> Island in agreement with only general characteristics depicted on the field inspection photo.

30. Mean High-Water Line: MHW Line has been delineated from the compilation photos exposed Sept. 1948 at a time when the tide was about two feet below MHW.

31. Low Water and Shoal Lines: The foul area along the shore, which stretches nearly all the way around the island, has been shown as a ~~dotted~~ <sup>dashed</sup> line on the manuscript. It has been delineated on the instrument as the beginning of surf action as the waves proceed shoreward, and represents an area awash, the exact topographic nature of which is uncertain.

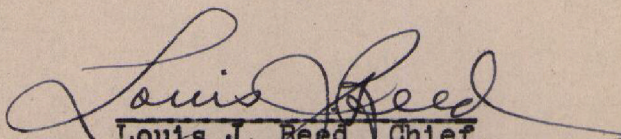


35. Hydrographic Data:

Hydrography will be added to the limits of this manuscript by the Nautical Charts Branch, Division of Charts. *"History of Hydrographic Information" attached.*

40. Quality of Contours:

All contours on this sheet conform to the national standards of accuracy for a contour interval of 50 feet except where the 25 foot supplemental contour is shown, in which areas all contours conform to the national standards of accuracy for contour interval of 25 feet.

  
Louis J. Reed, Chief,  
Stereoscopic Mapping  
Section



HISTORY OF HYDROGRAPHIC INFORMATION

8052

~~T-9260~~

Ulak and Tanadak Islands, Quadrangle  
Aleutian Islands

The soundings and depth curves are referred to mean lower-low~~er~~water, and originate with surveys by this Bureau:

H-7053 (1945) 1:20,000

H-7050 (1945) 1:40,000

The danger curve (foul line) originates with the photographs except for minor adjustments made in applying hydrography.

Hydrography applied by: R. E. Elkins - 5/5/49

Hydrography checked by: G. F. Jordan - 5/9/49

*R. E. Elkins*

R. E. Elkins  
5/10/49



# GEOGRAPHIC NAMES

Survey No. T-8052

GEOGRAPHIC NAMES										
Survey No. T-8052										
Name on Survey	<div>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</div>									
	A	B	C	D	E	F	G	H	K	
✓ <u>Alaska</u>										1
✓ <u>Aleutian Islands</u>										2
✓ <u>Delarof Islands</u>										3
✓ <u>Pacific Ocean</u>										4
✓ <u>Ulak Island</u>										5
✓ <u>Tanadek Island</u>										6
✓ <u>Patton Cove</u>										7
✓ <u>Dinkum Point</u>										8
✓ <u>Pratt Cove</u>										9
✓ <u>Hasgor Point</u>			(not Hasgok)							10
✓ <u>Ulak Pass</u>			(between Ulak and Amatignak Islands)							11
										12
										13
			Names underlined in red are approved.							14
					6-13-49		L. HECK			15
					3-14-		A. J. S.			16
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									10	27

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Division of Photogrammetry  
Review Report of T-8052

39 Geographic Names

A list of Geographic Names compiled by the Geographic Names Section, Division of Charts has been attached to the Descriptive Report.

44a Comparison with Previous Surveys

T-6991	1:20,000	1945
T-6993	1:20,000	1945
T-8006	1:20,000	1946
H-7050	1:40,000	1945
H-7053	1:20,000	1945

The use of these surveys for supplemental data is discussed under item 29 of the Compilation Report.

45 Comparison with Nautical Charts

8863	1:300,000	3-7-49
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47 Adequacy of the Compilation

This map, T-8052, 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 Ulak and Tanadak Islands as of the date of this report.

48 Accuracy Tests

Horizontal

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

Vertical

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

Reviewed by:

K. H. Mahi  
6/21/49

Approved by:

S. J. Luffin  
Chief, Review Section

O. S. Reading  
Chief, Division of Photogrammetry

W. B. Schmonder  
Chief, Nautical Chart Branch  
Division of Charts

W. M. Scaife 11  
Chief, Div. of Coastal Surveys & H