

8621

8621

Diag. Cht. No. 8502-3

Form 804

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. \_\_\_\_\_ Office No. T-8621

CS-319

LOCALITY

State Alaska

General locality Alaska Peninsula

Locality Aniakchak Bay

194 5

CHIEF OF PARTY

H. E. Finnegan, Chief of Party

Div. of Photogrammetry, Washington D.C.

LIBRARY & ARCHIVES

DATE

Dec 29-1947

B-1870-1 (1)

8621

# DATA RECORD

T-8621

Project No. (II): CS-319

Quadrangle Name (IV):

Field Office (II): Seattle, Washington

Chief of Party: H. E. Finnegan

Photogrammetric Office (III): Baltimore Photo Office  
Washington, D. C.

Officer-in-Charge: Thos. B. Reed  
L. J. Reed

Instructions dated (II) (III):

See Field Report, page 4.

Copy filed in Division of  
Photogrammetry (IV)

*Office Files*

Method of Compilation (III): *9-Lens Reading Plotter*

Manuscript Scale (III): 1:20,000

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

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): *7-3-51*

Reviewed: *12-7-49*

*Drafting 9-6-50*

Publication Scale (IV):

Publication date (IV): —

Geographic Datum (III): N.A. 1927

Vertical Datum (III): —

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (2) refer to sounding datum

i.e., mean low water or mean lower low water

Datum Plane — Mean Sea Level

Shoreline — MHW

Rocks Awash — MLLW

Reference Station (III):

LAND, 1945 G 6618, Pg. 83

Lat.:

Long.:

Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

Y=

X=

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.

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
06075-78 incl.	8-5-41	1412	1:20,000	6.0' above MLLW +0
06113-15 incl.	8-5-41	1503	1:20,000	4.8' above MLLW +2
06141-42 incl.	8-5-41	1545	1:20,000	3.7' above MLLW +3

Predicted Tide tables, Pacific Ocean and Indian Ocean 1945.  
Tide from (III): Reference Station, KODIAK, ALASKA, with corrections to  
Chignik, Anchorage Bay.

Mean Range: 6.6'      ~~Spring~~ Range: 8.7'  
Diurnal

Camera: (Kind or source) United States Coast and Geodetic Survey nine  
lens camera. Focal length 8 $\frac{1}{4}$ ".

Field Inspection by:  
H.E. Finnegan

date:  
May 17 to Sept. 25, 1945

Field Edit by: *None*  
*None*

date: —

Date of Mean High-Water Line Location (III): Summer of 1945

Projection and Grids ruled by (III) T.L.J.

date: 3-7-47

" " " checked by: T.L.J.

date: 3-7-47

Control plotted by: D.M. Brant

date: 3-10-47

Control checked by: H.R. Rudolph

date: 3-10-47

Radial Plot by: F.J. Tarcza, J. Steinberg and  
H.R. Rudolph

date: 3-17-47 to 3-24-47

Detailed by: F.M. Senasack

date: 3-25-47 to 3-28-47

Reviewed in compilation office by: H.R. Rudolph

date: 3-28-47

Elevations on Field Edit Sheet  
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore): 14

Shoreline (Less than 200 meters to opposite shore): 11

Number of Recoverable Topographic Stations established:

2

Hydrographic Signal Sites  
Number of ~~Temporary Hydrographic Stations~~ located by radial  
plot: 11

Leveling (to control contours) - miles:

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-8621

Topographic map T-8621 is one of 24 similar maps in this project located on the Alaska Peninsula. This map falls on the south coast SE of Aniakchak Crater at the mouth of Aniakchak River where it empties into the head of Aniakchak Bay at 157° 30' W longitude.

The survey is the result of combined operations resulting from field inspection in the summer of 1945, the radial line plot and shoreline compilation in Baltimore, and the contouring with the Reading Aerocartograph in the Washington Office.

Field operations preceding compilation were accomplished in 1945 by personnel of the ship E. LESTER JONES, H. E. Finnegan commanding, and is the subject of seasons report No. 106 filed in the Library. Field operations included establishing both horizontal and vertical control to supplement work done in 1925, and the field inspection of 9-lens photography flown in August, 1941 at 1:20,000 scale. Several hydrographic signals were identified (additional ones during compilation) for use in the hydrographic surveys to follow.

The radial plot was run successfully in the Baltimore Office with vinylite templates on a dyrite base using metal mounted nine-lens photographs and a polyconic projection ruled at 1:20,000 scale.

The shoreline and field inspection were interpreted and compiled by the Baltimore Office and contours and inland drainage were drawn by the Reading plotter from rectified prints.

A cloth-backed lithographic print of the manuscript at compilation scale, plus a cloth-backed color print at 1:25,000 scale will be registered with the descriptive report in the Bureau Archives. This map will not be published by this Bureau.

FIELD REPORT

SURVEY NO. T-8621

1. DESCRIPTION OF THE AREA:

T-8621 is one of <sup>24</sup>sixteen topographic surveys in Project No. CS-319, located on the Alaska Peninsula. The instructions for this project are dated:

12 March 1943 (from CS279)

29 February 1944

22 March 1945

1 April 1946

(Instructions to the compilation office are dated)

27 February 1945

24 February 1947 30 Dec 1946

4 April 1947

This survey includes an area at the head of Aniakchak Bay on the Alaska Peninsula. Aniakchak Bay has fairly uniform depths throughout, and relatively deep water to its head, which is marked by a steep-to sand and gravel beach, broken near the southwest end and at the northeast corner by shallow, muddy rivers. Low grassy sand dunes and marsh area extend well back from the head of the bay to numerous volcanic hills and peaks. The northeast shore is bordered by high sheer cliffs, and the southwest shore by two low rocky cliffs, separated by a low sand and gravel beach, near the center of which is a very large, steep-sided pinnacle rock. Slopes covered with brush and grass rise abruptly from the southwest shore.

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For the remainder of the field report, read the applicable paragraphs in the Seasons Report, Project No. CS-319 Field Inspection of Air Photographs, South Coast of Alaska, submitted by H. E. Finnegan, Chief of Party, Ship E. LESTER JONES, covering the field inspection done from May 17 to September 25, 1945. No. 106 (Library)

COMPILATION REPORT

MAP MANUSCRIPT - SURVEY NO. T-8621

26. CONTROL:

See radial plot report for layout of control in this area.

27. RADIAL PLOT:

See report for combined radial plot covering the areas of T-8620, T-8621, and T-8622, submitted to the Washington Office 11 April 1947. *Filed in CS 319 general files in Div. of Photog.*

28. DELINEATION:

The compilation is in accordance with the written instructions pertaining to Project No. CS-319.

In order to complete the delineation of the shoreline in the time allotted for this manuscript, rectification of photographs to be used was not requested.

Contours are to be compiled with the Reading stereocartograph in the Washington Office.

30. MEAN HIGH WATER LINE:

Nearly all of the mean high water line was field inspected. In areas where there was no inspection the mean high water line was delineated after stereoscopic examination of the photographs.

A small portion of the MHWL at the head of Aniakchak Bay was shown only approximately because of the clouds which obscured that area on the photographs.

31. MEAN LOWER LOW WATER LINE:

None shown.

31A. SHOAL AND REEF LINES:

Shoal and reef lines visible on the photographs have been delineated.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

No comment.

33. WHARVES AND SHORELINE STRUCTURES:

None.

34. LANDMARKS AND AIDS TO NAVIGATION:

None.

35. HYDROGRAPHIC CONTROL:

Four hydrographic signal sites were identified on the field photographs by the field party and seven additional sites were selected in this office. A list of their descriptions is attached to this report.

*Signal numbers are 2101 to 2111 inclusive. Signal list not available*

37. GEOGRAPHIC NAMES: *for inclusion with this report. See map manuscript for signal locations, also photographs.*

The following geographic names within the survey have been taken from Nautical Chart No. 8502 and U. S. Geological Survey Map, Kanatak District, Alaska Peninsula.

Aniakchak Bay  
Aniakchak River  
Black Creek

Cape Horn  
Village Creek  
Wolverine Creek

*See List of  
GeoNames in  
back of report.*

38. JUNCTIONS:

Junctions with T-8620 to the east and T-8622 to the south have been made and are in agreement. Shoreline only. *All map detail junctioned.*

44. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS:

A comparison with the United States Geological Survey topographic map of Kanatak District, Alaska Peninsula, scale 1:250,000, published in 1935, was deemed inadvisable because of the difference in scale and the continuing change in the sandy deltas of that area.

45. COMPARISON WITH NAUTICAL CHARTS:

No comparison was made with the United States Coast and Geodetic Survey Chart No. 8502, scale 1:1,000,000, published August 1944, because of the great difference in scale.

The following topographic information shown on T-86<sup>21</sup>~~2~~ is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

None

Low water features are shown in part and will be completed by the the hydrographic party.



Respectfully submitted:  
March 30, 1947

Gloria M. Senesack  
Photogrammetric Aid  
Compilation and Descriptive  
Report

H. R. Rudolph  
Supervisor

Joseph W. Wmack  
Photogrammetric Engineer  
Photogrammetric Office  
Reviewer

Approved and Forwarded  
22 April 1947

Thosozand  
Officer in Charge  
Baltimore Photogrammetric  
Office

## GEOGRAPHIC NAMES.

Survey No. T-8621

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
<u>Alaska</u>			(for title)							1
<u>Alaska Peninsula</u>			" "					US+B		2
										3
<u>Aniakchak Bay</u>								US+B		4
<u>Wolverine Creek</u>										5
<u>Village Creek</u>										6
<u>Black Creek</u>										7
<u>Aniakchak River</u>										8
<u>Cape Horn</u>			(mt.)							9
<u>North Fork</u>			(of Aniakchak R.)							10
										11
										12
										13
										14
										15
										16
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										19
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										24
										25
										26
										27

Names underlined  
in red are approved

10-6-44. L. Healy

Review Report T-8621

Topographic Map

September 27, 1949

October

61 General Statement

This map could not be finished in its North and Northwestern extremities due to inadequate photographic coverage. There are several small gaps in the contouring where clouds obscure the detail.

Field inspection was limited to along shore features and to the identification of control. The nature of the low lying land at the head of Aniakchak Bay is difficult to show due to the contour interval since most of the area is well under 100 feet. The seasons report No. 106 (1945) describes this area as marshy, but from stereoscopic examination most of the land is several feet higher than the marsh and is marked with pot holes filled with water, perhaps seasonally. There is no vegetation aside from grass and tundra. The sand and gravel wash extending in a SE-NW direction appears to be an old stream bed and was added during review without benefit of field interpretation.

62 Comparison with Registered Topographic Surveys

No previous surveys of this area.

63. Comparison with Maps of other Agencies

None.

64. Comparison with Contemporary Hydrographic Surveys

None.

65. Comparison with Nautical Charts

8502	1:969,761	Sept. 1947
8802	1:1,023,188	Dec. 1947
9302	1:1,534,076	July 1945

The charts are of too small a scale to make a satisfactory comparison of shoreline details.

66. Adequacy of Results and Future Surveys

This map (T-8621) fulfills the project instructions completely and complies with the National Standards of Accuracy with the following qualifications:

Gaps in the contouring occur due to inadequate photo coverage. Accurate pricking of the images of two peaks, which were cut in as intersection stations during triangulation, could not be accomplished with sufficient accuracy to hold in the plot as horizontal control. These stations were both round topped and serve as vertical control only. They have been listed on Form 524 cards under T-8621 in Photogrammetry files, and the Division of Geodesy has been notified of the change.

No low water line could be shown from these photographs.

It would appear that those hydrographic signal sites chosen in the office, Nos. 2105 thru 2110, should be used with caution. They appear to be well identified sites on these photographs, but the inlet where they are located will change shape over the years. This inlet bares at low MLLW water, so that they may not be used at that stage of tide.

No horizontal or vertical accuracy tests have been done on this survey.

Reviewed by:

Roscoe J. French  
Roscoe J. French

Approved by:

L. V. Griffith  
Chief, Review Section  
Division of Photogrammetry

A. E. Schwaner  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Division of Photogrammetry

Wm. Scifie  
Chief, Div. of Coastal Surveys