

8622

Diag'd on diag. ch. No. 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. \_\_\_\_\_ Office No. T-8622  
CS-319

LOCALITY

State Alaska

General locality Alaska Peninsula

Locality Aniakchak Bay & Cape Kumlik

194 5

CHIEF OF PARTY

H. E. Finnegan, Chief of Party  
Div. of Photogrammetry, Washington.

LIBRARY & ARCHIVES

DATE

Dec 29-1947

B-1870-1 (1)

8622

## DATA RECORD

T-8622

Quadrangle (II):

Project No. (II): CS-319

Field Office:

Seattle, Washington

Chief of Party:

H.E. Finnegan

Compilation Office:

Baltimore Photogrammetric Office

*Washington Office*

Chief of Party:

Thomas B. Reed

*Lou Reed*

Instructions dated (II III):

Supplemental Instructions CS-279, 29 Feb. 1944

Instructions-Proj. CS-317, 27 Feb. 1945

Project Instruction CS-319, 22 Mar. 1945; 1 April 1946; 24 Feb. 1947

Completed survey received in office:

Copy filed in ~~Descriptive~~ *Div. of*  
~~Report No. T-~~ *(VI)*  
*Photogrammetry Office Files*

Reported to Nautical Chart Section: 4-47

Reviewed:

*10/20/49*

Applied to chart No. 8710

Date: 6/6/51

Redrafting Completed: 9-27-50

Registered: 7-5-51

Published: —

Compilation Scale: 1:20,000

Published Scale: —

Scale Factor (III): 1.0000

Geographic Datum (III): N.A. 1927

Datum Plane (III): ~~MLLW~~*Mean Sea Level*

Reference Station (III): BLU, 1925, r 1945

*Elev. thus (5) refer to MHW**66618. p81**Elev. thus (3) refer to MLLW*

Lat.: [REDACTED]

Long.: [REDACTED]

Adjusted

Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)



PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>150° W Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
06141 - 06143 incl.	8/5/41	1546	1:20,000	3.7 above MLLW +4'
10998- 111003 incl.	9/5/42	1421	1:20,000	3.8 above MLLW +4'

Predicted Tide Tables, Pacific & Indian Ocean 1941 & 1942.  
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) U.S.Coast & Geodetic Survey nine lens camera.  
Focal length 8 $\frac{1}{4}$  inches.

Field Inspection by: H.E.Finnegan

date: May 17 to Sept.25,  
1945

Field Edit by: *None*

date:

Date of Mean High-Water Line Location (III): Same as date of photograph with exception of NW portion (small area) which is as of field inspection in 1945.

Projection and Grids ruled by (III) TLJ

date: 3-7-47

" " " checked by: TLJ

date: 3-7-47

Control plotted by: Frank J. Tarcza

date: 3-11-47

Control checked by: Donald M. Brant

date: 3-12-47

Radial Plot by: Harry R. Rudolph  
Joseph Steinberg  
Frank J. Tarcza

date: 3-17 to 3-24-47

Detailed by: Mildred M. Trautman

date: 3-25-47 to 3-27-47

Reviewed in compilation office by: Joseph W.Vonasek

date: 3-27-47 to 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): 4.5

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

Number of Recoverable Topographic Stations established: None

Signal Sites  
Number of Temporary Hydrographic Stations located by radial  
plot: 12

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-8622

Topographic map T-8622 is one of 24 similar maps in this project located on the Alaska Peninsula. This map is on the South Coast and covers Cape Kumlik, Kumlik Island, and part of Aniakchak Bay at 157°30' W longitude.

The survey is the result of partial field inspection (Aniakchak Bay only) in the summer of 1945, the radial plot and shoreline interpretation in the Baltimore Office, and the contouring with the Reading aerocartograph in the Washington Office.

Field operations on that part of Aniakchak Bay (north of 56°40') preceding compilation were accomplished in 1945 by personnel of the Ship E. LESTER JONES, H. E. FINNEGAN commanding, and is the subject of season's report No. 106 filed in the library. The part of this survey that was field inspected is very small, and the larger part (Kumlik Island, Cape Kumlik and around to Kufulik Bay) was interpreted by stereoscopy and analogy.

A sufficient number of triangulation stations were recovered by office inspection of an accuracy to serve for horizontal control. Topographic survey T-4155 (1925) at 1:20,000 scale was used as an aid in recovering vertical control to show the topography. The original assignment was to make a junction with T-4155 for both shoreline and contours. The radial plot was laid by the Baltimore Office and returned to Washington for contours. As the work progressed it became evident that a satisfactory junction could not be made with the T-4155 contours and the decision was made to go ahead and complete both shoreline and contours without benefit of field inspection for the remainder of the survey. It must be pointed out that contours on the 1925 survey were mostly form lines although identified as planetable topography and a satisfactory junction with this survey was impossible.

The radial line plot was laid at 1:20,000 scale, and the manuscript was compiled on acetate. It is believed that in spite of the small amount of field inspection this survey surpasses T-4155 in accuracy and completeness of contours and for the MHW shoreline, excluding the MHWL on offshore features (rocks, small islands, etc. mentioned in the review report 62). The manuscript will be drafted at 1:20,000 scale.

A cloth-backed lithographic print of the manuscript at compilation scale will be registered with the descriptive report in the Bureau Archives.

FIELD REPORT

SURVEY No. T-8622

1. DESCRIPTION OF THE AREA:

T-8622 is one of <sup>21</sup>sixteen topographic surveys in Project CS-319, located on the Alaska Peninsula. The instructions for this project are dated 29 February 1944, (Supplemental), 27 February 1945 (Instructions Project CS-317); 22 March 1945 (Project Instructions); 1 April 1946; 24 February 1947.

This survey includes the area of the northern shore of Cape Kumlik bordering on Aniakchak Bay. The shoreline is alternately, gravel and sand beaches and rocky cliffs. The interior is mountainous with some lower grass areas near portions of the shoreline. The only vegetation consists of moss, grass and low alder trees.

For further information regarding field inspection in the area of this survey see "Season's Report, Project CS-319, Field Inspection of Air Photographs, South Coast of Alaska Peninsula, May 17 to September 25, 1945", submitted by H. E. Finnegan. *No. 106 (Library)*



COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8622

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 Photgry.*

28. DELINEATION:

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

Field Inspection was furnished for some details offshore from the Mean High Water Line.

The interior of the map will <sup>have been</sup> be contoured in the Washington Office with the Reading Stereocartograph. *W-73*

29. SUPPLEMENTAL DATA:

None.

30. MEAN HIGH WATER LINE:

Most of the mean high water line was delineated after stereoscopic examination of the photographs. Doubtful areas obscured by shadows on the photographs were shown with a dashed line.

31. MEAN LOWER LOW WATER LINE:

None.

31A. SHOAL AND REEF LINES:

No comment.

*See review report 62.*

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

No comment.

*See review report 61 and 62.*

33. WHARVES AND SHORELINE STRUCTURES:

None.



34. LANDMARKS AND AIDS TO NAVIGATION:

None.

35. HYDROGRAPHIC CONTROL:

Fourteen hydrographic signal sites were selected by the field party. These signal sites were identified by a short description but were not picked by the field party. Two of the signal sites could not be identified because they were obscured by deep shadows on all photographs. The remaining twelve have been shown on the map. A list of the descriptions of all of the signal sites is attached to this report.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

37. GEOGRAPHIC NAMES:

The following three (3) geographic names are shown on the map manuscript.

ANIAKCHAK BAY )  
CAPE KUMLIK ) Taken from Nautical Chart No. 8502

WOLVERINE CREEK - Taken from U. S. Geological Survey Topographic map Kanatak District.

*See attached  
Geo. Names  
sheet  
M-234*

38. JUNCTIONS:

The junction to the north with Survey T-8621 has been made and is in good agreement. The junction to the south and west is with a planetable survey, Register No. 4155 dated 1925. To the east is an all water area. 39 and 40. See bottom page 7.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES: *Poor junction - This survey supersedes T-4155. See review report.*

Due to a great scale difference, it was not practicable to make a comparison with the United States Geological Survey Topographic map of Kanatak District Alaska Peninsula, scale 1:250,000, published in 1925.

45. COMPARISON WITH NAUTICAL CHARTS:

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

The following topographic information is of sufficient importance to warrant immediate application to the chart.

~~None.~~ *Contours on this survey have been shown more complete and accurate, changes in shoreline etc.*

*See Review Report  
62.  
65.*



45. COMPARISON WITH NAUTICAL CHARTS: (cont'd)

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. ?

*See review report. 62.*

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

Respectfully submitted:  
1 April 1947

Michael M. Szwedman  
Photogrammetric Aid  
Compilation and Descriptive  
Report

H. R. Rudolph  
Supervisor

Joseph W. Donack  
Photogrammetric Engineer  
Photogrammetric Office Reviewer

Approved and Forwarded  
22 April 1947

Thos O. O'Connell  
Officer in Charge  
Baltimore Photogrammetric Office

39. DIVISION OF WORK:

a. The radial plot and shoreline compilation was completed in the Baltimore Field Office, and the contours were compiled on the Reading Plotter in the Washington Office.

40. QUALITY OF CONTOURS:

See footnote on manuscript.

ADDENDA  
TO  
DESCRIPTIVE REPORT FOR SURVEY NO. T-8622

PROJECT NO. CS-319

ALASKA PENINSULA

After the interior of T-8622 was contoured and inked in the Washington Office, it was returned to the Baltimore Photogrammetric Office for the completion of the delineation of the shoreline covered by planetable Survey No. 4155. Rectified prints of photographs Nos. 11000, 11001, 11002, 06142, and 06143 were furnished the compiler for this purpose. Regular office prints of photographs Nos. 10998, 10999, and 11003 were also used in delineation. There was no field inspection covering the entire area; consequently, the delineation was accomplished by stereoscopy and analogy, supplemented by a planetable survey, Register No. 4155. *from 56' 20" on south; See Ralston Report 61.*

It is believed that the mean high water line along Cape Kumlik and Kumlik Island is within a fair degree of accuracy. This, however, is in disagreement with the planetable survey made in 1925. Considerable effort was made to show small pinnacle rocks, islands, islets, etc. appearing offshore on the photographs but it was difficult for the compiler to differentiate between reefs and high water rocks since it was necessary in some cases to delineate from the outer wing of the photograph. Consequently, these features (especially the larger islands) are very doubtful as to size and shape but it is believed that their location is accurate enough to warn the navigator of their existence. Nautical Chart No. 8710 scale 1:77,477, published October, 1927 and corrected to July 20, 1946, and planetable survey, Register No. 4155, scale 1:20,000 were used as a guide in determining the approximate locality of the rocks and reefs but no feature was delineated unless visible on the photographs. *See Ralston Report 62.*

Geographic names Kumlik Island and Kujulik Bay were added to the manuscript.

When comparing the manuscript with Nautical Chart No. 8710 it was obvious that numerous additional pinnacle rocks, reefs, islets, and kelp areas exist offshore in this area but were not discernible on the clouded photographs. As these were not field inspected in recent years, no definite statement can be made as to their existence. However, there is a great possibility that there are numerous hazardous features in the area that do not appear on the chart.

It should be noted that Chart No. 8802, scale 1:1,023, 188 also covers the area of T-8622 but no comparison could be made because of the great difference in scale.



Respectfully submitted:  
29 July 1947

Gloria M. Senasack  
Photogrammetric Aid  
Additional shoreline delineation  
and addenda

Joseph W. Donnell  
Photogrammetric Engineer  
Photogrammetric Office Reviewer

Harry R. Rudolph  
Supervisor

Approved and forwarded  
19 August 1947

Thos. B. ...  
Officer in Charge  
Baltimore Photogrammetric Office

LIST OF HYDROGRAPHIC SIGNAL SITES

<u>Station</u>	<u>Photo.</u>	
2201	6141	Abandoned Clam Cannery.
2202	6141	House.
2203	6141	Sharp Rock Ledge.
2204	6141	Black Rock Ledge.
2205	6141	Top of sharp ledge, Eagle's Nest.
2206	6141	Top and end of rock bluff.
2207	6141	Base of bluff at small stream.
2208	6141	Sharp ledge at bottom of bluff. (could not be identified on photographs).
2209	6141	Rock ledge 10 feet high at bottom of bluff. Rock at Low Water Line just outside of it.
2210	6141	Detached pinnacle 40 feet high.
2211	6141	Sharp edge at end and bottom of rock bluff.
2212	6141	End of rock bluff.
2213	6141	Low vertical rock bluff. (Could not be identified on photographs).
2214	6141	End and bottom of rock bluff.

Listed By:

Walden W. Lantieri  
Photogrammetric Aid

Checked By:

Joseph W. Woreck  
Photogrammetric Engineer

# GEOGRAPHIC NAMES

Survey No. T-8622

GEOGRAPHIC NAMES		Survey No. T-8622										
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			
Alaska			(for title)								1	
Alaska Peninsula			( - )						USGS		2	
											3	
Aniakchak Bay									USGS		4	
Kumlik Island											5	
Cape Kumlik			(large application)									6
Wolverine Creek											7	
Kujulik Bay									USGS		8	
											9	
											10	
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Names underlined in  
red are approved.  
10-3-49 L. Heck



Review Report T-8622  
Topographic Map  
October 21, 1949

61. General Statement.~ Inasmuch as this survey was accomplished in large part without benefit of field inspection, it should be understood that the interpretation of the MHWL and offshore features is the result of stereoscopic examination and analogy by the office compiler. The reviewer found it necessary to differ considerably with the MHWL shown by the compiler and to change it accordingly. All changes are shown in red ink on the manuscript.

Undoubtedly some offshore features here shown with the rock awash symbol bare at MHW. Those features that appear to be definitely above MHW are shown with a shoreline, but survey T-4155 (1925) at 1:20,000 scale is the only source for showing elevations for them.

The contours and inland drainage were compiled on the Reading Plotter after the plot had been laid in Baltimore. The shoreline was then added in Baltimore and the survey was submitted for review. See "addenda" in the body of the compilation report.

62. Comparison with Registered Topographic Surveys.~

T-4154 (1925)	* 1:20,000
T-4155 (1925)	1:20,000

~~This~~ survey supersedes both T-4154 and 4155 for charting purposes for inland drainage and contours on Kumlik Island and the mainland. The delineation of the MHWL for Kumlik Island and the mainland is believed to be quite accurate. The delineation of the islands just offshore  $3/4$  of a mile south of Cape Kumlik is believed better than that shown on T-4155 but is not necessarily complete. The outlines of the jagged rock islands at Station Bram, 1925 have been shown with a broken line since the images fall far out in the wings of the photographs. Their placement is within 1.0 m.m. of true position, and even though the shapes lack character and are generalized because of a poor model they appear better than the T-4155 survey shows them.

The positions of three reefs between Kumlik Island and the island at station Pav 1925 is considered better than on T-4154 and should be used. The approximate position <sup>of the reef</sup> south of Kumlik Island had only one satisfactory cut. The two surveys agree favorably, however, on its position.

Those features offshore that appear to bare at MHW are shown with a shoreline, and those features that appear to be awash at some range in the tide have been assigned a "rock awash" symbol (\*), but with no attempt to show elevations

above the datum plane or a definite reference to MHW. No doubt some of those features shown as rocks awash bare at MHW and should be investigated during later surveys. A dashed line, general in outline, is used to show the limits of foul areas and kelp areas. This survey should supersede previous surveys of the area as a base map for construction of nautical charts with the qualifications stated above.

- 63. Comparison with Maps of other Agencies.- None
- 64. Comparison with Contemporary Hydrographic Surveys.- None
- 65. Comparison with Nautical Charts

8502	1:969,761	September 1947
8802	1:1,023,188	December 1947
8710	1:77,477	July 1946

See notes in 62 above for details concerning features to be added and/or revised.

66. Adequacy of Results and Future Surveys.-This map (T-8622) does not completely fulfill the project instructions because of the lack of field inspection data, but it is considered of sufficient accuracy for small scale chart construction, and except for the qualifications listed in 62 above, no field inspection is deemed necessary prior to recompilation except that the hydrographic party should investigate the above mentioned offshore features (62) for a check on the MHWL.

No low later line could be shown from these photographs.

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

Reviewed by:

Roscoe J. French  
Roscoe J. French

Approved by:

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

W. M. Scaife  
Chief, Nautical Chart Branch  
Division of Charts

W. M. Scaife  
Chief, Div. of Photogrammetry

W. M. Scaife  
Chief, Div. of Coastal Surveys