

8620

Diag. Cht. No.. 8802 & 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. _____ Office No. T-8620

LOCALITY

State Alaska

General locality Alaska Peninsula

Locality Amber Bay

1945 1-'45

CHIEF OF PARTY

H.E.Finnegan, Chief of Party

T.B.Reed, Balto. Photo Office

Div. of Photogrammetry, Wash., D.C.

LIBRARY & ARCHIVES

DATE

July 7-1947

B-1870-1 (1)

8620

DATA RECORD

T-8620

Quadrangle (II):

Project No. (II): CS-319

Field Office:
Seattle, Washington

Chief of Party: H. E. Finnegan

Compilation Office:
Baltimore, Maryland

Chief of Party: Thomas B. Reed

Instructions dated (II III):
29 February 1944 (Supplemental)
27 February 1945, 22 March 1945,
1 April 1946 (Field Sup. 1, 2/24/47.Copy filed in Descriptions
~~Report No. 1~~ (VII)
Div. of Photogrammetry
General Files
OfficeCompleted survey received in office:
April 1947 (Shoreline-Baltimore Photogr. Office)Reported to Nautical Chart Section: *June, 1947*

Reviewed: 23 May, 1949 Applied to chart No. Date:

Redrafting Completed: *3-14-50*

Registered: 1 Nov. 1949

Published:

Compilation Scale: 1:20,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): MSL: contouring elev
MLLW: Foreshore
features
MHW: shorelineReference Station (III): GOON, 1945
G-6618, p. 81

Lat.: Long.:

Adjusted
~~unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)
150°W

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
06072-06074 incl.	8/5/41	1405	1:20,000	6.1' above MLLW
06116-*06117	8/5/41	1505	1:20,000	4.7' above MLLW
06140	8/5/41	1542	1:20,000	3.8' above MLLW

Rectified print was also furnished.

Predicted Tide Tables, Pacific and Indian Oceans - 1945.
Tide from (III); Reference Station KODIAK, Alaska, with corrections to
Chignik, Anchorage Bay.

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

Camera: (Kind or source) U.S. Coast and Geodetic Survey nine lens camera-
focal length 8 1/2"

Field Inspection by: H.E. Finnegan (*Ship E. Lester Jones*) date: May-June 1945

Field Edit by: *Nine* date:

Date of Mean High-Water Line Location (III): Same as data of photographs
except portions of Garden Island and Eagle Island which were identified at
the time of the field inspection in 1945.

Projection and Grids ruled by (III) T.L.J. date: 3-6-47

" " " checked by: T.L.J. date: 3-6-47

Control plotted by: H.R. Rudolph date: 3-10-47

Control checked by: D.M. Brant date: 3-11-47

F.J. Tarcza and
Radial Plot by: L.A. Senasack date: 3-17-47 to 3-24-47

Shore line / Off-shore

Detailed by: Ruth E. Rudolph date: 3-25-47 to 4-2-47
Contours by G.M. Dalbey & N.D. Harris on Reading Plotter June, 1947.

200-ft. contours. (Except 100-ft. contours around shoreline; and portions of odd numbered contours shown as ---).

Reviewed in compilation office by: J.W. Vonasek date: 4-3-47

manuscript
Elevations on ~~Field Edit Sheet~~
checked by: J.W. Vonasek date: 4-3-47

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

Number of Temporary Hydrographic ^{Signal Sites} ~~Stations~~ located by radial plot: 23

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-8620

Topographic map T-8620 is one of 24 similar maps in Project CS-319, Alaska Peninsula. It is the most northeasterly map in the project and covers the AMBER BAY arm of ANIAKCHAK Bay, from Latitude $56^{\circ} 44' N$ / Longitude $175^{\circ} 15' W$, northward and westward.

The field inspection covered shoreline and off-shore data.

Unmarked supplementary horizontal (and vertical) control was established for use in drawing contours by the Reading Stereocartograph at the Washington Office and for shore and offshore detailing at the Baltimore Photogrammetric Office.

Data pertaining to T-8620 is filed as follows:

A. DIVISION OF PHOTOGRAMMETRY General Files:

1. Acetate Manuscript
2. Duplicate of Descriptive Report
3. Field inspection photographs

B. BUREAU ARCHIVES

1. Original Descriptive Report
2. A cloth-backed lithographic print of the reviewed map manuscript at compilation scale.

C. LIBRARY AND ARCHIVES:

H. E. Finnegan, Season's Reports, 1945
(Nos. 100 and 106).

Lena T. Stevens
31 October 1949

FIELD REPORT

SURVEY NO. T-8620

1. DESCRIPTION OF THE AREA:

T-8620 is one of ²⁴sixteen topographic surveys in Project No. CS-319 located on the Alaska Peninsula. The instructions for this project are dated

12 March 1943 (from C.S. 279)
29 February 1944 (Supplemental) CS-279
27 February 1945
22 March 1945
1 April 1946 (Field Supplement #1)
24 February 1947 *30 Dec. 1946*
4 April 1947

This survey includes the area around Amber Bay and Garden and Eagle Islands. Amber Bay has moderate depths in the entrance but it is quite shallow in the inner half of the bay where there are a number of reefs which bare, and shoals marked by kelp, and where the water is discolored by the rivers at the head of the bay. The eastern shore is marked by numerous reefs close along shore, several waterfalls, and high rocky peaks only a short distance inshore. The only forms of vegetation are alder brush and grass. High, steep cliffs mark the western shore, and the relatively low rolling hills on the cape between Amber Bay and Aniakchak Bay are covered with alder brush and grass. Eagle and Garden Islands, separating the entrances to Amber and Aniakchak Bays, are grass covered, table top formation, with sheer cliffs almost continuous on all sides. Eagle Island is nearly round, and Garden Island somewhat crescent shaped. A sand and gravel spit extends from Garden Island well over toward Cape Ayutka, which divides Amber and Aniakchak Bays. South of Cape Ayutka is an extensive foul area marked by kelp. At the southwest end of Garden Island, there are two prominent pinnacles, the outermost needle-shaped with an eagle's nest at the top.

For addition^{al} information refer to Season's Report-1945, Project No. CS-319, submitted by H. E. Finnegan. *No 106 (Library) & No. 100*

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8620

26. CONTROL

See radial plot report of Surveys T-8620 to T-8622 incl. submitted to Washington Office 11 April 1947, for layout of control in this area.

WATER, 1925 was identified by the field unit but no geographic position was available. It has been shown on the manuscript with a $2\frac{1}{2}$ millimeter circle. Form No. 524 is being submitted for this station.

27. RADIAL PLOT

Refer to the report for combined radial plot covering the areas of T-8620 to T-8622, inclusive, submitted to the Washington Office 11 April 1947. *Filed under CS 319 general file in Div. of Hydrog.*

28. DELINEATION:

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

Because of the urgent need for completion of this map, rectified photographs were not requested for use in delineation.

30. MEAN HIGH WATER LINE:

Since only a very small portion of the mean high water line, approximately 10%, was identified by the field party most of the shoreline was delineated after stereoscopic examination of the photographs.

31. MEAN LOWER LOW WATER LINE:

None shown.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

The approximate outline of a shoal area, a reef area, and a few offshore rocks have been located using sextant fix data submitted by the field party.

The $1\frac{1}{2}$ millimeter red ink circles on the back of the manuscript are the positions of the sextant fixes. Several positions were located for each of fixes Nos. 4, 5, 6, and 8, from angular data submitted. In locating the position of fix No. 4, two of the positions were approximately 150 mm. apart. From an analysis of the results obtained, the positions deemed best were shown on the map. However, these positions should be used with extreme caution.

33. WHARVES AND SHORELINE STRUCTURES:

None.

34. LANDMARKS AND AIDS TO NAVIGATION:

None

35. HYDROGRAPHIC CONTROL:

Twenty three hydrographic signal sites were selected by the field party but only twenty sites could be pricked.

A list of descriptions of all the sites is attached to this report. Two copies have been furnished for the use of the hydrographic party.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None.

37. GEOGRAPHIC NAMES: 817 ✓

Geographic names have been taken from Nautical Chart No. 8502 and United States Geological Survey topographic map, Kanatak District. A list of names is attached to this report.

38. JUNCTIONS:

Junction of shoreline with T-8619 to the east and T-8621 to the west has been made and is in agreement.

Junction of contours with T-8619 to be made when contouring of T-8620 is completed. However, because the position of some pass points on map manuscript T-8619 was adjusted after contouring of T-8619 was completed, it may be necessary to pull in contours of T-8620 to those of T-8619. (See paragraph 16 of radial plot report for Survey T-8620 to T-8622).

(photog files)

This was done during review. (See Review Report)

To the south is an all water area and to the north is undetailed interior.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

No comparison with the United States Geological Survey topographic map, Kanatak District, Alaska Peninsula, scale 1:250,000, published in 1935, was practicable for the following reasons:

- (a) Great difference in scale.
- (b) The greater portion of the area common to both maps is unsurveyed on the Geological Survey map.

45. COMPARISON WITH NAUTICAL CHARTS:

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

45. COMPARISON WITH NAUTICAL CHARTS:(Continued)

The following topographic information shown on T-8620 is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are now 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 hydrographic party.

Respectrully submitted:
3 April 1947

Rich E. Rudolph
Photogrammetric Aid
Compilation and Descriptive Report

H. R. Rudolph
Supervisor

Joseph W. Bonarck
Photogrammetric Office
Reviewer

Approved and Forwarded
22 April 1947

Thos O. Baird
Officer in Charge
Baltimore Photogrammetric
Office

(Data copied from field inspection photograph
No. 06074)

Point No. 1 Δ Amber 53°20' Rock ledge bares 3 ft. and
 Δ Goon 57°40' extends in broken line to
 Δ Aspen shore.

Point No. 2 Same 51°45' Kelp beds
 70 29'

Point No. 3 On large flat reef, Amber Bay, high point
 bares 7 feet at 11:30, 6/1/45

 Δ Goon 57° 04:30 Reef extends 450 m. toward
 Δ Nest Aspen.
 Δ Aspen 144° 50 Reef extends 600 m. toward
 head of Bay.

Point No. 4 Δ Amber ^{28° 20' on map manuscript}
 ~~43° 07'~~ *
 Δ Goon 61°03' Reef extends 400 m. toward head
 Δ Nest of bay.
 Δ Aspen 150°10' Reef extends 200 m. toward Δ Nest
 Reef extends 250 m. toward Δ Goon

Point No. 5 30°15'
 62°00' Reef extends 100 m. toward Δ Goon
 Same 141°10' Reef extends 80 m. toward ~~4~~ South

Point No. 6 Bares 2' at 12:20, 6/1/45
 31°52' ^{37° 20' on map ms.} Reef extends 400 m. to South
 Same 59°03' Reef extends 400 m. toward Δ Amber
 136°38'

Point No. 7 Bares 1 ft. at 12:30, 6/1/45
 32°18'
 Same 56°58' Reef extends 700 m. toward Δ EastTwin
 134°14' Reef extends 500 m. toward Δ Amber

Point No. 8 High point bares 6 ft. at 12:35, 6/1/45
 31°46' ^{16' on map ms}
 Same 57°12' Reef extends 500 m. toward Δ Aspen.
 139°05'

* "28" had been written above "43" in blue pencil.

Shoal about center of Amber Bay

Note: Fixes taken in delp at point of shoalest sounding
 obtained (2.0 fms. at 14¹⁵ May 3, 1945, 150°
 Meridian time. (Depths of ~~38.4~~ fms. in other parts of
 kelp patch.) 38.4

Rick (Mt. peak) 98°13'
 East Twin
 Beak 73°40'

Aspen 128°19'
 Gale
 Beak 09°24'

Beak-Amber 68°40'

Amber 72°18'
 Goon
 Aspen 81°08'

From point at which angles were taken kelp extends
 about 100 m. on a line 50° to left of Δ Amber; and about
 50 m. on a line to left of Δ Aspen.

NOTES
FOR
HYDROGRAPHIC PARTIES

ALASKA PENINSULA

MAP MANUSCRIPT, SURVEY NO. T - 8620

PROJECT NO. CS-319

The 2½ millimeter circle, accompanied with a name and date, is the position of a recoverable photo (topographic) station. The 2½ millimeter circles, accompanied with a number only, are the positions of the hydrographic signal sites. Two copies of the list of descriptions of the signal sites have been furnished for your use. The 1½ millimeter circles are the positions of points located by sextant fixes. Positions located by sextant should be used with caution.

The outline of shoal and reef areas are approximate and are for your advance information only. They are shown with long and short dashed lines accompanied with the notes "Shoal" and "Reef" respectively.

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

The following topographic information shown on T-8620 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 hydrographic party.

Respectfully submitted
3 April 1947

Rita E. Lindquist
Photogrammetric Aid

Approved and forwarded
22 April 1947

Thos B. Reed
Officer in Charge
Baltimore Photogrammetric Office

LIST OF HYDROGRAPHIC SIGNAL SITES

Site No.	Description	Pricked on Photo. No.
2001	Foot of sharp pointed light colored slide.	06140
2002	Highest point of dark slide	06140
2003	Tip of pronged slide	06074
2004	Flat rock point 4' high.	06140
2005	Rocky point of sharp bluff	06140(not pricked)
2006	Rocky point of bluff	06140
2007	End of point of vertical bluff (caves on north side.)	06140
2008	End of rock ledge, 3' above mean high water-base of bluff	06140(not pricked)
2009	Rocky point on end of ledge, 6' above mean high water	06140
2010	End of rocky point	06140
2011	Top of sand bluff	06140
2012	Ledge on point 12' above mean high water	06140
2013	Small pinnacle	06140
2014	Sharp rock point	06140(not pricked)
2015	Grass topped pinnacle, nub at foot of rocky point.	06115
2016	Top of triangular gray slide, shows as gable of house. This slide is about half-way between brown dirt spot on bluff to eastward and grass covered draw to westward.	06115
2017	Highest point of detached pinnacle on rock ledge.	06140
2018	Large grass topped detached pinnacle.	06140
2019	Largest rock (with vertical face) in pile of rocks at foot of sharp crevice in cliff.	06116
2020	Base of rocky point.	06140
2021	Sharp point of vertical cliff	06140
2022	Sharp rock point, 20' high.	06075
2023	Sharp rock point, 12' high.	06075

Listed by:

Florance M. Sinsack
Photogrammetric Aid

Checked by:

Joseph W. Vonnack
Photogrammetric Engineer

~~Chief, Division of Geodesy~~

28 May 1947

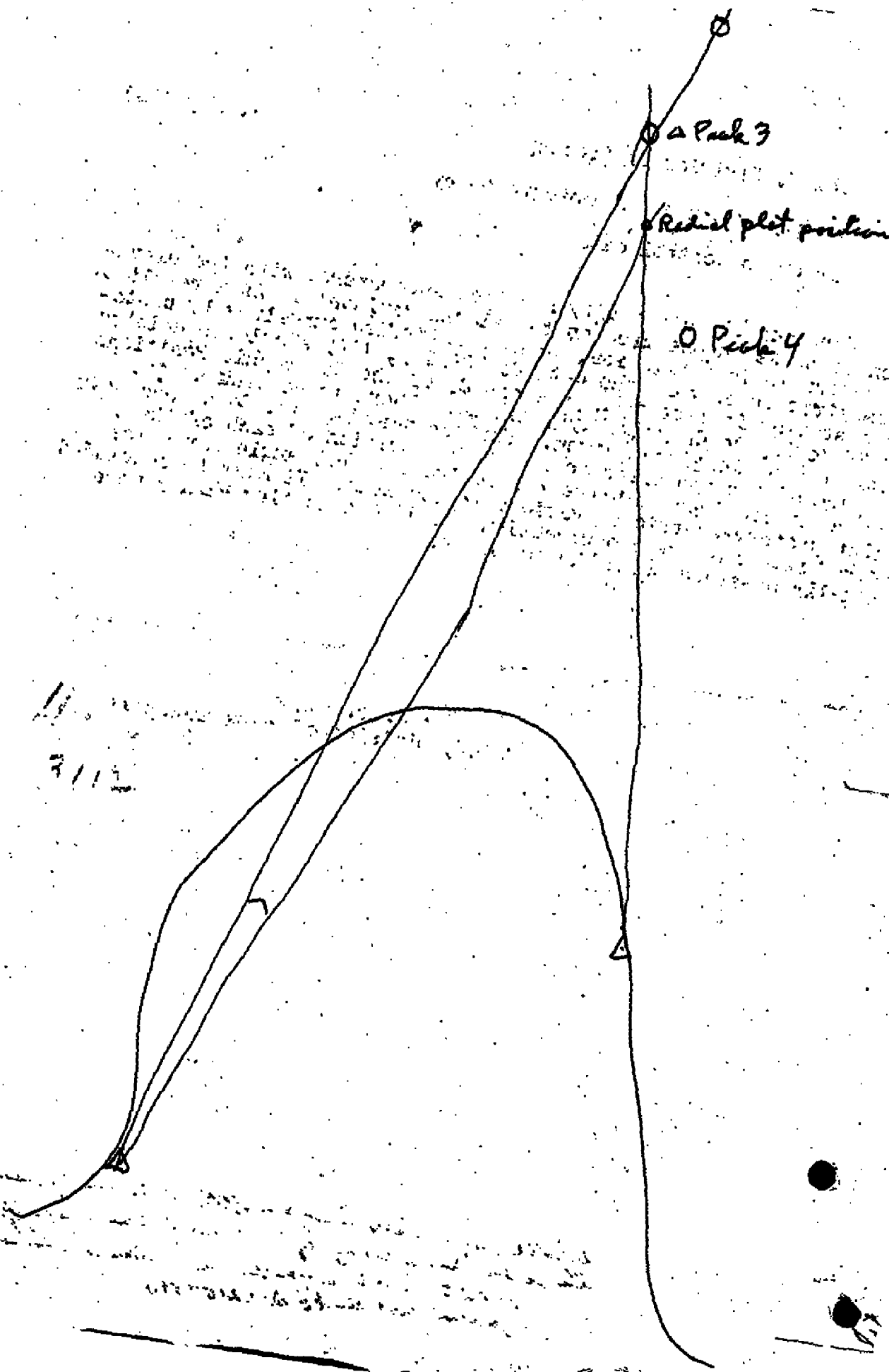
~~Chief, Division of Photogrammetry~~

Error in control data

Considerable difficulty has been encountered with the elevation of peaks in one area on the Alaska Peninsula. As a result of considerable investigation, we have satisfied ourselves by photogrammetric means that the data for PEAK 3, 1945 should be deleted. This station is listed on page no. 83 of the Geographic Positions as "Wide Bay to Chignik Bay", Alaska. There is no peak at the latitude and longitude given. Furthermore, we have found one peak on each of the two directions and the position of each of these two peaks combined with the respective vertical angle satisfies other photogrammetric elevations in the area. It must be concluded therefore, that the two directions used in computing PEAK 3 were actually observed to different peaks.

K. T. Adams
Chief, Division of Photogrammetry

*Deleted from map manuscript at time of review.
The elevation (judging by contours) of the radially
plotted peak corresponds to the elevation
given for Peak 34 (2159 ft.)*



3/12

GEOGRAPHIC NAMES

- ✓ Amber Bay -
- ✓ Aniakhak Bay *
- ✓ Cape Ayutka -
- ✓ Eagle Island -
- ✓ Garden Island -
- ✓ Main Creek -
- ✓ Mountain Creek -
- ✓ Northeast Creek -
- ✓ West Creek -
- ✓ Yanarni Creek -
- ✓ Alaska Peninsula *

* = decision of
U.S.G.B.

Names preceded by • are
approved. 5-24-41
L. Heck

Division of Photogrammetry
Review Report of T-8620

26 Control

Nine of the eighteen new horizontal (and vertical) control stations established during 1945 lie within the area of T-8620. Six of these stations are located around the shore of Amber Bay and were used in the radial plot. Three inland stations, Peak No. 3, Peak No. 4 and Peak JN could not be identified and pricked on the photographs, and were used only as vertical control.

All radially intersected points, pricked as "peaks", (except Peak No. 3) which did not coincide with the Geodetic position of the triangulation stations for the peaks, nonetheless, fell very close to the station and within the contour enclosing the station. These pricked points are retained on the map as of possible future use, and are represented by a 2½ mm circle. ~~labeled "radially plotted position of peak"~~

Peak No. 3, mentioned in the above paragraph, was deleted from the map manuscript. (See Memorandum and sketch appended to the Descriptive Report.)

28 Delineation

Practically no shoreline was drawn on the field inspection photographs; but the vertical bluffs on the west shore of Amber Bay, and the visible high-water line on the sandy shore for the remainder of the bay, fixes the shoreline within close limits. No changes to shoreline were made during review.

32 Details off-shore from the Mean High Water Line

Sextant fix data for off-shore detail (stations 1 to 8 inclusive) was recorded on the back of Field Inspection photograph 06074. A copy of this data is attached to the Descriptive Report. No Field Inspection data appear on field photographs for sextant fixes for points 9, 10, 11, 12; and for some map manuscript notes regarding reefs and rocks, nor were other field records available.

37 Geographic Names

The names Yantarni Creek and Alaska Peninsula were added to the map manuscript during review.

38 Junctions

In order to make a complete matching of detail with T-8618, Yantarni Creek was delineated during review. The contours on T-8620 were slightly altered to conform with the adjusted contours of T-8619.

43 Comparison with Nautical Charts

8502 1:969,761 11th Ed. Aug. 1944

Though rocks and reefs alongshore on T-8620 do not wholly agree with those on the chart, the low-water line on the chart extends as far off-shore as to include any hazards ^{to} ~~of~~ navigat'on recorded along-shore on T-8620.

A large reef area (indefinite bounding line) in the northern part of Amber Bay is suggested on the chart by only two "sunken" rocks. This area is not included within the low-water line of the chart. The ledge requires hydrographic investigation.

46 Accuracy Tests

No horizontal or vertical accuracy tests were made for this mapped area. Control around Amber Bay was adequate to place the shoreline and delineation is good. Contours on the inshore area were drawn by the Reading Plotter. Known elevations fall within the designated contour in all cases except Peak No. 3 (see 26 above).

The map meets the standard of accuracy for charting purposes and for topographic quadrangles for the 200-ft contour interval.

Reviewed by:

Lena T. Stevens
Lena T. Stevens 19 May 1949

Approved by:

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

H. Edmundson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

K. G. Cowley
Chief, Div. of Coastal Surveys *149*