U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: TOPOGRAPHIC

Field No.: Ph-8 (46)  Office No.: T-9047

LOCALITY

State: ALASKA
General locality: NUSHAGAK PENINSULA
Locality: JUNCTION, SNAKE AND WEARY RIVERS

1947

CHIEF OF PARTY
A.H. Stewart, Chief of Field Party.
C.W. Clark, Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE: June 12, 1953
DATA RECORD

T-9047

Project No. (II): Ph-8(46)B Quadrangle Name (IV): NUSHAGAK-JUNCTION OF SNAKE and WEARY RIVERS

Field Office (II): Nushagak Peninsula, Alaska Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Charles W. Clark

Instructions dated (II) (III): 19 March 1948 and Office Louis J. Reed, Chief, Stereoscopic

21 April 1948 (Field) Mapping Section

Planimetric: Graphic Office Files

Topography: Reading Plotter

Method of Compilation (III):

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): 7-25-50 Date reported to Nautical Chart Branch (IV): 7-26-50

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): N.A. 1927

The difference between Datum and N.A. 1927 Datum is Lat. plus, minus. 5 m. and Long. plus/minus. 9 m.

Reference Station (III):

Lat.: Long.: Adjusted

16 29' 26.33" 158 37' 43.11"

Planet Coordinates (IV):

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.

Form T- Page 1

M-0619-12-04
Areas contoured by various personnel
(Show name within area)

100% by: Clarence E. Misfeldt
and
Louis Levin
DATA RECORD

Field Inspection by (II): A. Newton Stewart manuscript Date: Season 1947 and 1948

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

Mean High Water Location (III) (State date and method of location): There was no field inspection of the shoreline in the area of this map manuscript. The mean high-water line was delineated in the office from the photographs taken 2 September 1948.

Projection and Grids ruled by (IV): Ruling Machine Date: 25 May 48
Projection and Grids checked by (IV): Wheatley E. Ward Date: 25 May 48
Control plotted by (III): James L. Harris (Portland) Date: 31 May 1948

Control checked by (III): Roy A. Davidson (Portland) Date: 1 June 1948

Radial Plot (Unmounted Photos) J.L. Harris & J. E. Deal 10 Dec. 1948
Radial Plot (Mounted " ) " Date: 14 June 1948
(Stereoscopic Instrument: X X X X X X X X X X X X)

Delineation Planimetry Date:
Contours by: Clarence E. Misfeldt and Louis Levin 14 June 1950

Manuscript delineated by (III): Roy A. Davidson & Ree H. Barron 22 Dec. 1948
( " 3rd " ) : Orvis N. Dalbey 18 May 1950
( Topography ) : Louis Levin 21 June 1950

Photogrammetric Office Review by (III): Date:
(From 2nd Radial Plot): Ree H. Barron 23 Dec. 1948
(Final review by) : Orvis N. Dalbey 30 June 1950

Elevations on Manuscript checked by (III): Louis J. Reed 12 July 1950
Camera (kind or source) (III): U.S.C. & G.S. 9-lens focal length, 8.25 inches

PHOTOGRAPHS (III)

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<tr>
<td>20427 &amp; 20428</td>
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<tr>
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Tide (III)

Reference Station: Nushagak Bay (Clark Pt.)
Subordinate Station: See below

Washington Office Review by (IV):
Final Drafting by (IV):
Drafting verified for reproduction by (IV):
Proof Edit by (IV):

Diurnal

<table>
<thead>
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<th>Ratio of Ranges</th>
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<th>Range</th>
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</thead>
<tbody>
<tr>
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<td>19.6</td>
</tr>
</tbody>
</table>

Date: 9/29/52
Date: 12/9/52
Date: 12/18/52
Date: 7/17/53

Land Area (Sq. Statute Miles) (III): 99.0
Shoreline (More than 200 meters to opposite shore) (III): 30.0 Statute Miles
Shoreline (Less than 200 meters to opposite shore) (III): 8.0 Statute Miles
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): Recovered: Identified: One
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks: The stage of tide given under "Photographs" is only approximate since the reference station is several miles distant.

The statistics given are from the compilation completed from the results of the 1st. Radial Plot.
Summary to Accompany T-9047

Ph-8(46) covers the north shore of Bristol Bay in Alaska and runs from the Egegik River and Kvichak Bay on the East to Cape Newenham on the West.

It is divided into three parts as follows:

Ph-8(46)A includes 23 planimetric maps in the general area of Kvichak Bay and extends from Egegik Bay to Nushagak Bay.

Ph-8(46)B is composed of two shoreline surveys on the Egegik River between Egegik Bay and Lake Becharof.

Ph-8(46) includes 45 topographic maps covering the area from Nushagak Peninsula westward to Cape Newenham and north to Goodnews Bay. It includes offshore islands such as Hagemeister and the Walrus Islands.

Advance copies of the map manuscripts prior to contouring were supplied as base sheets for the hydrographic surveys in progress west of Nushagak Peninsula.

Topographic map T-9047 is on the dividing line between the Ph-8(46)A planimetric and Ph-8(46) topographic projects. The Snake River and the Weary River is the dividing line and no contours are shown on the east side of them. T-9047 covers an area from the mouth of the Snake River at Nushagak Bay to Acorn Peak and includes the junction of the Weary River with the Snake River.

The shoreline and interior details on the east side of the Snake and Weary Rivers was compiled by graphic methods. Contours and interior detail on the west side were plotted with the Reading Plotter from nine-lens photographs taken in 1947 and 1948. There is no field inspection for this manuscript.

The map manuscript consists of one sheet, 7.5 minutes in latitude and 20 minutes in longitude, at a scale of 1:20,000. A cloth-backed lithographic print of the map at the compilation scale will be registered with the Descriptive Report in the Bureau Archives. This map will not be published.
FIELD INSPECTION REPORT

PROJECT REPORT
AERIAL PHOTOGRAPH CONTROL AND INSPECTION
BRISTOL BAY, ALASKA
PROJECT Ph-8(46) May to September 1947
A. Newton Stewart Chief of Party

Lib. No. 138 (1947)

Refer to the above report for any information that would be covered in Side Headings 2 to 20 if the field inspection report had been written in accordance with the instructions in the Topographic Manual.
PHOTOMETRIC PLOT REPORT
Map Manuscript T-9047
Project Ph-3(46)B

There were three separate assemblies of this radial plot.

The original plot was laid from 9-lens unmounted photographs taken in 1946 and 1947 and was included in a combined radial plot comprising Map Manuscripts No'd. T-9040, T-9041, T-9047, T-9048, T-9057 and T-9058.

This combined radial plot was laid again in December 1948 using 9-lens unmounted photographs taken in September 1948. Refer to Side Heading 31: "Delineation", Paragraph 1, of the Compilation Report.

For facts pertaining to those two radial plots refer to Side Heading 27: "Radial Plot" of the Descriptive Report for Map Manuscript T-9058(1947).

Finally, this map manuscript was included in a combined radial plot, assembled from metal-mounted photographs taken in September 1948, comprising Map Manuscripts No'd. T-9039, T-9040, T-9046, T-9047, T-9056 and T-9057.

For facts pertaining to this radial plot refer to the Photogrammetric Plot Report for these six map manuscripts which is included in the Descriptive Report for T-9039(1947) forwarded 23 November 1949.

Approved:

Charles W. Clark
Chief of Party

Respectfully submitted:

J. Edward Deal, Jr.
Cartographer
DELINEATION:

The planimetry shown on this map manuscript has been compiled entirely from the results of the second radial plot run from 9-lens unmounted photographs taken in 1947 and 1948.

The results of this radial plot are shown on the map manuscript with circles in blue ink.

The results of the latest radial plot from 9-lens metal-mounted photographs have been shown with circles in red plastic ink so that the movement between the two plots might be easily observed.

Graphic methods were used for the compilation.

The photograph coverage was satisfactory. No field inspection was made in the area of this map manuscript. Refer to the remarks contained in the field inspection report for Map Manuscript T-9058 (1947).

CONTROL:

There is one horizontal control station, namely ACORN PEAK, 1947 within the limits of this map manuscript. Facts pertaining to this station are discussed in Side Heading 23: "Adequacy of Control" of the Photogrammetric Plot Report, T-9039, T-9040, T-9046, T-9047, T-9056 and T-9057 which is included in the Descriptive Report for T-9039 (1947).

For vertical control data refer to Side Heading 27: "Vertical Control" of the above report and a cahier entitled "Tabulation of Elevations and Computations of Elevations by Map Manuscripts of Vertical Control Stations in Radial Plot No. 2, Project Ph-8(46)B" which have been submitted.

SUPPLEMENTAL DATA:

There were no supplemental data furnished for the area of this map manuscript.

CONTOURS AND DRAINAGE:

The drainage shown on this map manuscript has been interpreted from office examination of the photographs with the aid of the stereoscope.

Contours are not applicable. See Para 31, page 13.
SHORELINE AND ALONGSHORE DETAILS:

The location of the mean high-water line and alongshore details has been determined by office examination of the photographs and by comparison with similar areas in other map manuscripts which were field inspected by the party of Lt. Comdr. A. N. Stewart in 1947 and 1948.

No low-water or approximate shoal lines were indicated by the field inspection party and none were determined by office examination of the photographs. The rivers are quite narrow in the area of the map manuscript. *Limits of mud flats are shown for date and time the photographs were taken.*

OFFSHORE DETAILS:

There are no details offshore from the mean high-water line.

LANDMARKS AND AIDS:

A report of these features has been submitted by the Ship "PATHFINDER". None

CONTROL FOR FUTURE SURVEYS:

No recoverable topographic stations and photo-hydro stations were selected by the field party and none were radially plotted at the compilation office.

JUNCTIONS:

A satisfactory junction of pass points has been made between this map manuscript and adjoining map manuscripts. When the planimetry is revised to agree with the latest radial plot it will be necessary to make new junctions with adjoining sheets.

HORIZONTAL AND VERTICAL ACCURACY:

The planimetry on this map manuscript should be revised to agree with the results of the final radial plot from metal-mounted nine-lens photographs.

COMPARISON WITH EXISTING MAPS:

A comparison was made with a topographic map of Nushagak District, Alaska, U.S. Geological Survey Scale 1:250,000 dated 1930, 1931.
A comparison was made with World Aeronautical chart, Kodiak Island (136) Alaska, Scale 1:1,000,000, Seventh Edition—March 2, 1949.

Planimetric details on these maps, in the area of this map manuscript, are incomplete.

47: COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Nautical Chart No. 9050, Scale 1:150,000, last printed date 7/14/45, hand corrected 6/23/46 and nautical chart No. 8802, Scale 1:1,023,188 at Latitude 56° 00’, last printed 1/12/46, hand corrected 11/7/47. Also 9051. 11/20/50

The planimetric details on these nautical charts, in the area of this map manuscript, are incomplete.

Approved:  
Charles W. Clark  
Chief of Party

Respectfully submitted:  
J. Edward Deal, Jr.  
Cartographer
31. **DELINEATION:**

Contours were delineated on the Reading Plotter, Model "A", for the area west of the Weary and Snake rivers. Planimetry in this area, which had been graphically compiled on the manuscript, was shifted to meet the control established by the last radial plot, the plot on which the contour compilation was based.

32. **CONTROL:**

Adequate (See Review Report)

33. **SUPPLEMENTAL DATA:**

a. Photographs used for instrument delineation: 23345 thru 23352, and 20417 thru 20419
b. Field Inspection photographs: None
c. Graphic Control Surveys
   (1) T-3085, Mountain Peaks northwest of Nushagak Bay, 1909 1:100,000.
   (2) T-3091, Nushagak Bay, Mouth of Igushik River, 1910, 1:10,000.
   (3) T-2968, Nushagak Bay, Igushik River to Snake River, 1909, 1:20,000.

34. **CONTOURS AND DRAINAGE:**

Instrument photography was satisfactory for contour delineation. 20417 and 20418 were not of the best definition quality, however. (See Review Report)

35. **SHORELINE and ALONGSHORE DETAILS:**

See page 11, this report.

36. **OFFSHORE DETAILS:** Not applicable.

37. **LANDMARKS and AIDS:**

The season's reports of the PATHFINDER for 1947, 1948, and 1949, were examined and no reference to landmarks or aids could be found. Refer to project report by A.N. Stewart, 1947, entitled, "Aerial Photograph Control and Inspection, Bristol Bay, Alaska." Lib. No. 138 (1947) None.
38. CONTROL and FUTURE SURVEYS: Not applicable.

39. JUNCTIONS:
Details on this manuscript, both planimetric and topographic, are matched satisfactorily with adjoining quads, T-9040 to the north, T-9046 to the west, and T-9057 to the south. Also see page 11, and page 31 on page 13.

40. HORIZONTAL AND VERTICAL ACCURACY: Standard (See Review Report)

46. COMPARISON with EXISTING MAPS:
See page 11, this report.

47. COMPARISON with NAUTICAL CHARTS:
See page 12, this report.

48. GEOGRAPHIC NAME LIST:
See separate page attached.

49. NOTES FOR THE HYDROGRAPHER: None

50. COMPILATION OFFICE REVIEW:
See T-2 form following.

Submitted:

Orvis N. Dalbey
Cartographer - Photogrammetric

Approved and Forwarded:

Louis J. Reed, Chief,
Stereoscopic Mapping Section
PHOTOGRAMMETRIC OFFICE REVIEW
T-9047

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 alongshore cultural features  

PHYSICAL FEATURES
20. Water features  
21. Natural ground cover  
22. Planetary 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. Geographic names  
34. Junctions  
35. Legibility of the manuscript  
36. Discrepancy overlay  
37. Descriptive Report  
38. Field inspection photographs  
39. Forms  
40. Reviewer  
41. Remarks (see attached sheet)  

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.  

Compiler  
Supervisor  

43. Remarks:
<table>
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<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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Names underlined in red are approved 9/24/52

L. Hask
62. Comparison with Registered Topographic Surveys

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</tr>
<tr>
<td>T-2968</td>
<td>1:20,000</td>
<td>1909</td>
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</table>

The map manuscript supersedes these surveys for nautical charting purposes.

63. Comparison with Maps of other Agencies

Nushagak Bay, Alaska  1:250,000  1943  USGS

T-9047 supersedes the above map in all respects except for the location of a cabin and an old saltery. These features were not field identified and could not be seen by office inspection of the photographs.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

See Paragraph 47

Marsh areas and more complete detailing of the mud flat foreshore limits are shown on this map than are shown on the Nautical Chart which should be applied to the chart.

66. Adequacy of Results and Future Surveys

No field inspection was available to serve as a basis for the interpretation of interior and shoreline details. Marsh limits and the drainage pattern were delineated entirely by stereoscopic inspection and photo-interpretation.

The limits of the mud flats in the foreshore areas and on the inside of the meanders in the rivers are shown as they appear on the photographs which were taken at 1/3 tide.

It is improbable that this map complies with the National Map Accuracy Requirements but it is presumed that the horizontal error in position of planimetry is within .14 millimeter at compilation scale and that the vertical accuracy is accurate to 1 contour interval, or 25 feet.

Reviewed by:

Roscoe J. French
Approved:

S. V. Griffith 5/29/53
Chief, Review Section F
Division of Photogrammetry

A. MacDonald
Chief, Nautical Chart Branch
Division of Charts

J. F. Reading
Chief, Div. Photogrammetry

Earl O. Henderson
Chief, Div. Coastal Surveys
HORIZONTAL DATUM ADJUSTMENT

Bristol Bay, Alaska

The subject maps were radial plotted on unadjusted (Field) datum which was subsequently adjusted to the North American 1927 datum by the Division of Geodesy. The datum correction has been computed for each sheet, and stamped into the Descriptive Report on page 1, and on the manuscripts and registered cloth-backed copies near the title block. However, as the title block of each clothback sheet contains the note, "1927 North American Datum", it was necessary to stamp the word, "(Unadjusted)" beside this datum note in the title block of each sheet.

See the special report, Horizontal Control Datum, Ph-8(46), Ph-8A(46), and Ph-8B(46), filed with the Completion Report for the project for details and lists of the maps, reports, and registration copies marked with this adjustment. The following is a list of the maps in the projects:

Ph-8(46), TOPOGRAPHIC
T-9038 thru T-9040
9041 " 9047
9048 " 9057
9064, 9065, 9070
9071, 9074, 9075
9227 thru 9253

Ph-8A(46), PLANIMETRIC
T-9041 thru T-9043
9044 " 9053
9058 " 9063
9066 " 9069
9072, 9073
9076, 9078

Ph-8B(46), SHORELINE
T-8873 (E&W) and T-8874