

9040

ORIGINAL

diag. Chs. 8502-3 and 8802

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Tonographic

Field No. \_\_\_\_\_ Office No. T-9040

LOCALITY

State Alaska

General locality Nushagak Peninsula

Locality WEARY RIVER

1948

CHIEF OF PARTY

A. Newton Stewart, Chief of Field Party  
Charles W. Clark, Chief of Plot Office  
Div. of Photogrammetry, Wash. D.C.

LIBRARY & ARCHIVES

DATE **DEC 17 1964**

9040

## DATA RECORD

T-9040

Project No. (II): Ph-8(46)B      Quadrangle Name (IV): ~~NUSHAGAK~~ - UPPER WEARY RIVER

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

Photogrammetric Office (III): Portland, Oregon      Officer-in-Charge: Charles W. Clark  
Wash, D.C.      Louis J. Reed, Chief Stereoscopic  
Mapping SectionInstructions dated (II) (III):  
Copy filed in Division of  
Photogrammetry (IV)Method of Compilation (III):      Planimetric: graphic  
Contours:      Reading Plotter

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): 6-11-53

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927 *(Unadjusted)*

Vertical Datum (III):

Mean sea level except as follows:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low waterReference Station (III): The difference between *Unadjusted* Datum  
and N.A. 1927 Datum is Lat. plus/minus 4 m.  
and Long. plus/minus 9 m.

Lat.:

Long.: *hck*~~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.


Areas contoured by various personnel  
(Show name within area)  
X(X) (III)

100% by: Clarence E. Misfeldt  
and  
Louis Levin

## DATA RECORD

Field Inspection by (II): A. Newton Stewart

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 September 2, 1948.

Projection and Grids ruled by (IV):

*Ruling Machine*Date: *21 April 48*

Projection and Grids checked by (IV):

*Wheatley E. Ward*Date: *21 April 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 Photographs) J.L.Harris &amp; J.E.Deal

Radial Plot ~~Unmounted~~ (Mounted " ") &  
Control plotted by (III): (Portland)Date: "10 Dec. 1948  
15 July 1949

delineation

Planimetry

Date:

Stereoscopic Instrument ~~used~~ (III):Contours by: Clarence E. Misfeldt  
and  
Louis Levin

Date: 14 June 1950

compiled

Manuscript ~~prepared~~ by (III):

(From final Radial Plot):- Orvis N. Dalbey  
(From 1st Radial Plot):- Carita Wiebe & Roy A. Davidson  
(Topography):- Clarence E. Misfeldt  
Photogrammetric Office Review by (III):  
(From 1st. Radial Plot):- Ree H. Barron  
(Final review):- Orvis N. Dalbey

Date: 18 May 1950

Date: 5 Jan 1949

Date: 21 Jun 1950

Date: 5 Jan 1949

Date: 30 Jun 1950

Elevations on Manuscript

checked by ~~him~~ (III):

Louis J. Reed

Date:

Date: 12 July 1950



Camera (kind or source) (III): U.S.C. & G.S. 9-lens, focal length 8.25 inches.

Number		Date	Time	Scale	Stage of Tide	MLLW
20255A & 20256A		8-7-47	09:50	1:20,000	9.5 ft. above	M.S.L.
20431 to 20434 Incl.		8-23-47	11:32	1:20,000	5.8 ft. above	M.S.L.
23318 & 23319		9-1-48	14:04	1:20,000	6.1 ft. above	M.S.L.
23352 & 23353		9-2-48	09:41	1:20,000	12.0 ft. above	M.S.L.
23358 to 23362 Incl.		9-2-48	09:51	1:20,000	12.4 ft. above	M.S.L.

Tide (III)

Diurnal

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

Ratio of Ranges	Mean Range	Surge Range
	15.2	19.5

Washington Office Review by (IV):

*Roscoe French*

Date: 10-3-52

Final Drafting by (IV):

*M. J. Day*

Date: 1-5-53

Drafting verified for reproduction by (IV):

*W. O. Hallum*

Date: 1-28-53

Proof Edit by (IV):

*H. Steinfler*

Date: 3/11/53

Land Area (Sq. Statute Miles) (III): 100.0

Shoreline (More than 200 meters to opposite shore) (III): 15.0 Statute Miles

Shoreline (Less than 200 meters to opposite shore) (III): 41.0 Statute Miles

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II):

Recovered:

Identified: Two

Number of BMs searched for (II): None

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): None

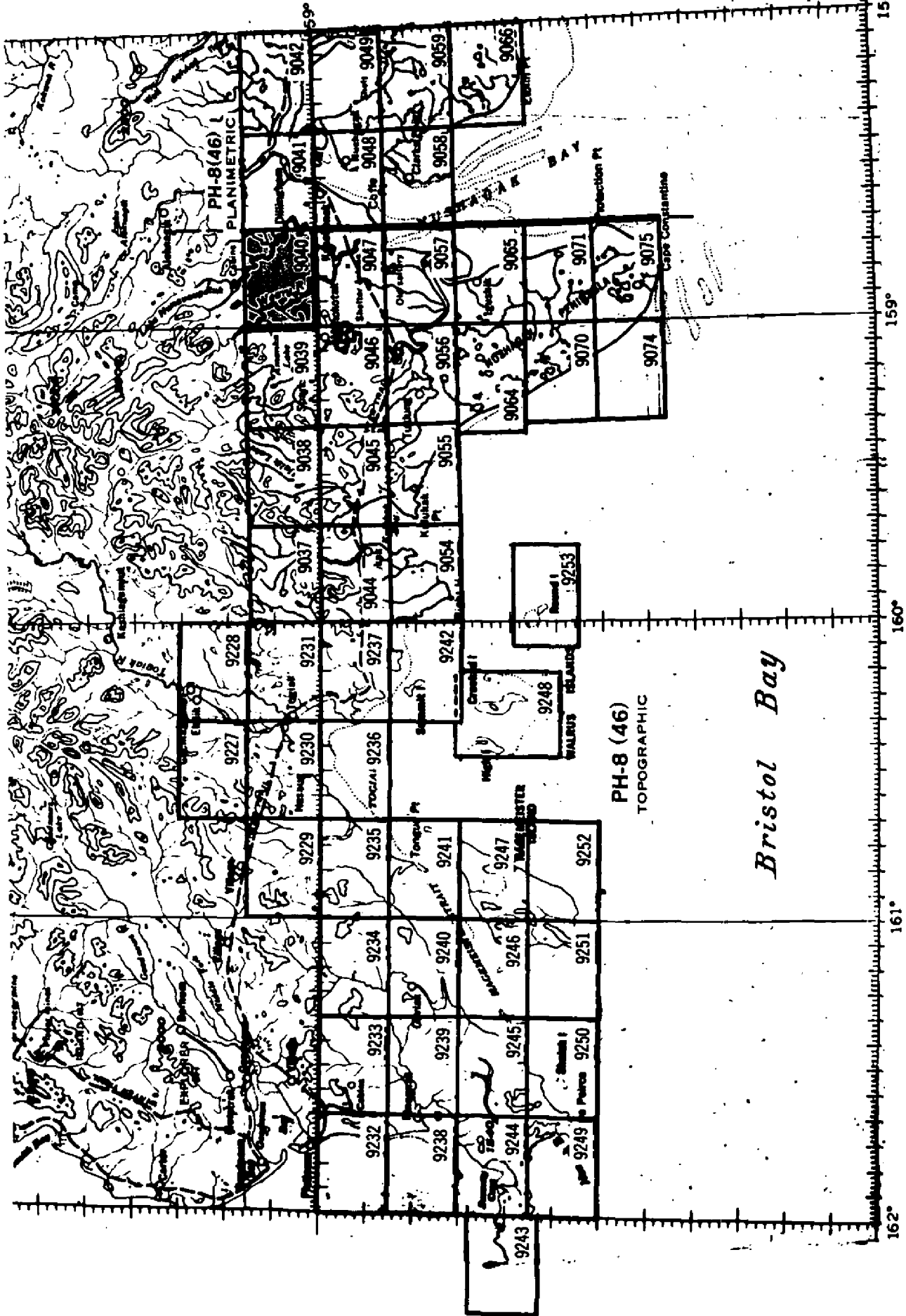
Remarks:

The stage of tide given under "Photographs" is only approximate since the reference station is several miles distant. There is not sufficient data to determine if the waters in the area of this map manuscript are subject to tidal action.

The statistics given are from the compilation completed from the results of the 1st. Radial Plot.

TOPOGRAPHIC MAPPING PROJECT PH-8 (46)

ALASKA, Vicinity of Bristol Bay



162° 161° 160° 159° 58° 59°

## SUMMARY TO ACCOMPANY T-9040

Ph-8(46) covers the north shore of Bristol Bay in Alaska and extends 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) C includes 45 topographic maps covering the area from Nushagak Peninsula westward to Cape Newenham and north to Goodnews Bay. It covers off-shore islands to include such islands 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-9040 is on the dividing line between the Ph-8(46) A planimetric and the Ph-8(46) topographic projects. The Weary River is the dividing line and no contours are shown to the east of it. T-9040 covers an area that includes the meandering vally flood plains of the Snake River on the east and the Weary River on the west.

The shoreline and interior details excluding contours and the tree cover was compiled by graphic methods. Contours and interior details on the west side of the Weary River were plotted and compiled with the Reading Plotter from nine-lens photographs taken in 1947-48. 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, with a contour interval of 50 feet.

A cloth-backed lithographic print of the map at compilation scale will be registered with the Descriptive Report in the Bureau Archives. This map will not be published.



FIELD INSPECTION REPORT

2-20:

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.



PHOTOGRAMMETRIC PLOT REPORT  
Map Manuscript T-9040  
Project Ph-8(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 these 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.

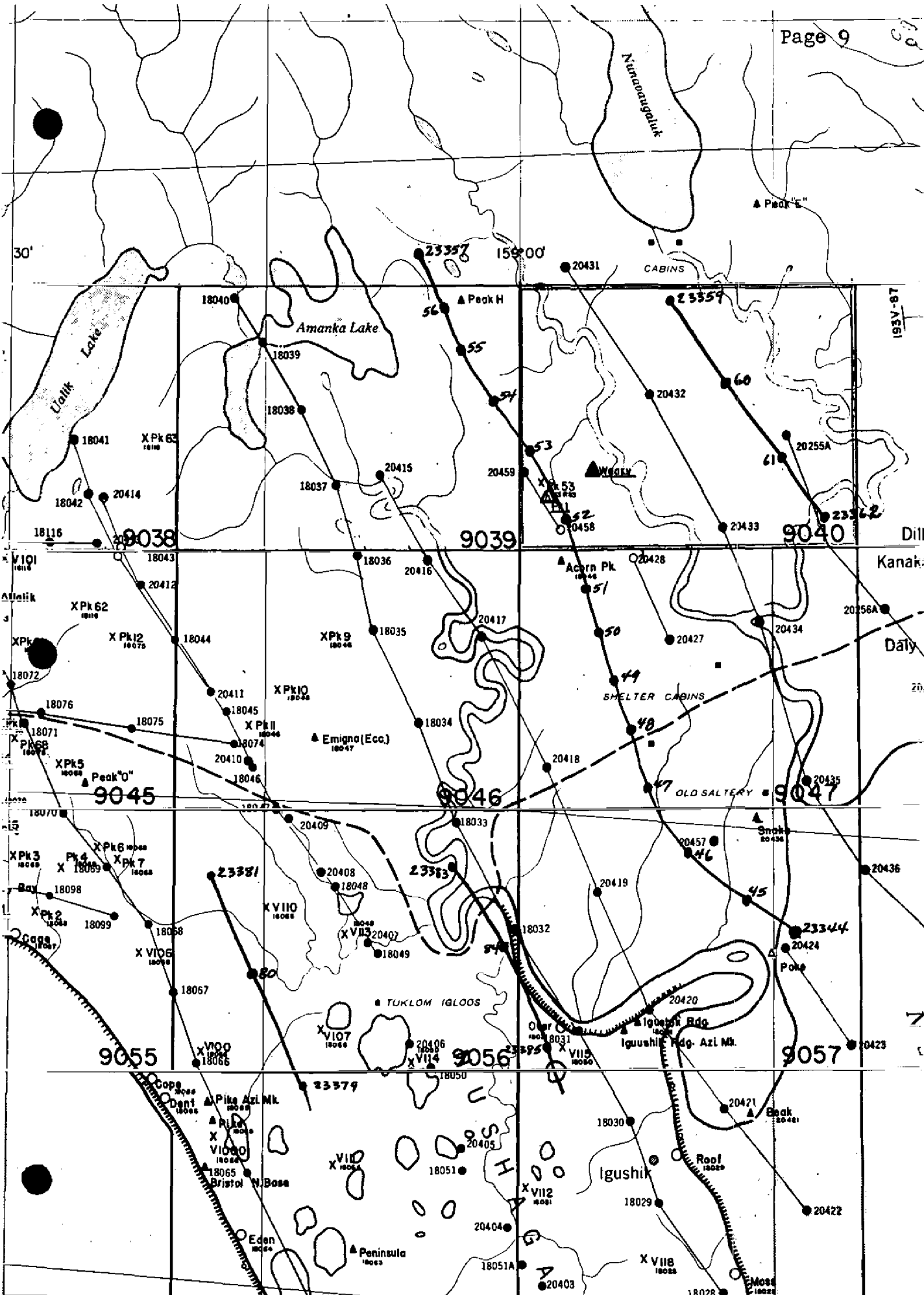
For facts pertaining to this radial plot refer to the Photogrammetric Plot Report for these six map manuscripts which is included in the Descriptive Report for T-9039(1947) forwarded 23 November 1949.

Approved:

*Charles W. Clark*  
Charles W. Clark  
Chief of Party

Respectfully submitted:

*J. Edward Deal Jr.*  
J. Edward Deal, Jr.  
Cartographer



COMPILATION REPORT  
Map Manuscript T-9040  
Project Ph-8(46)R

31: 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 September 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).

32: CONTROL:

There are two horizontal control stations within the limits of this map manuscript.

For a complete discussion of the facts pertaining to these stations, namely, "WEARY, 1947" and "PEAK 1, 1947" (or "PEAK 53") refer to Side Heading 23: "Adequacy of Control", 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)R" which have been submitted.

33: SUPPLEMENTAL DATA:

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



34: 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 par. 31 page 13*

35: 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.

36: OFFSHORE DETAILS:

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

37: LANDMARKS AND AIDS:

A report of these features has been submitted by the Ship "PATHFINDER".

*None*

38: 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.

39: 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.

*see par. 31 page 13*



40: 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.

46: 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  $56^{\circ} 00'$ , last printed 1/12/46, hand corrected 11/7/47.

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

Approved:

*Charles W. Clark*  
Charles W. Clark  
Chief of Party

Respectfully submitted:

*J. Edward Deal Jr.*  
J. Edward Deal, Jr.  
Cartographer

COMPILATION REPORT  
Washington Office31. Delineation:

Contours were delineated on the Reading Plotter, Model "A", for the area west of the Weary River. 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

33. Supplemental Data:

- a. Photographs used for instrument delineation:  
23350, 23352, 23354, 23356, and 23357
- b. Field Inspection Photographs: None
- c. Graphic Control Survey:  
T-3085, Mountain Peaks Northwest of  
Nushagak Bay, 1909, 1:100,000

34. Contours and Drainage:

Instrument photography was satisfactory for contour delineation. No particular difficulty was encountered.

35. Shoreline and Alongshore Details.-See page 11, this report.

36. Offshore Details: Not applicable.

37. Landmarks and Aids:

The seasons 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". *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-9039 to the west, and T-9047 to the south. *also see 39, page 11, and 31, page 13.*

40. Horizontal and Vertical Accuracy: Standard  
*See 66. page 17*
46. Comparison with Existing Maps: See page 12, 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*  
\_\_\_\_\_  
Orvis N. Dalbey  
Cartographer-Photogrammetric

Approved and Forwarded

*Louis J. Reed*  
\_\_\_\_\_  
Louis J. Reed, Chief,  
Stereoscopic Mapping Section

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9040

- 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
- 7. Photo hydro stations 7
- 8. Bench marks 7
- 9. Plotting of sextant fixes 7
- 10. Photogrammetric plot report
- 11. Detail points 7

ALONGSHORE AREAS

(Nautical Chart Data)

- 12. Shoreline
- 13. Low-water line 7
- 14. Rocks, shoals, etc.
- 15. Bridges 7
- 16. Aids to navigation 7
- 17. Landmarks 7
- 18. Other alongshore physical features
- 19. Other along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable contours 7
- 23. Stereoscopic instrument contours
- 24. Contours in general
- 25. Spot elevations
- 26. Other physical features

CULTURAL FEATURES

- 27. Roads 7
- 28. Buildings 7
- 29. Railroads 7
- 30. Other cultural features 7

BOUNDARIES

- 31. Boundary lines 7
- 32. Public land lines 7

MISCELLANEOUS

- 33. Geographic names
- 34. Junctions
- 35. Legibility of the manuscript
- 36. Discrepancy overlay 7
- 37. Descriptive Report
- 38. Field inspection photographs
- 39. Forms

40. Louis M. Dalbey  
Reviewer

Louis J. Reed, Chief  
Supervisor, Review Section or Unit  
Stereoscopic Mapping Section

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:



GEOGRAPHIC NAMES

Survey No.

T-9040

Name on Survey

On Chart  
No.

On previous survey  
No.

On U. S. quadrangle  
Maps

From local  
information

On local Maps

P. O. Guide or Map

Page 15  
Rand McNally Atlas

U. S. Light List

Name on Survey	A	B	C	D	E	F	G	H	K
NUSHAGAK PENINSULA		(for title)							1
SNAKE RIVER									2
WEARY RIVER									3
<u>Alaska</u>									4
									5
									6
									7
									8
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									26
									27

Names underlined in  
red are approved  
10-8-52  
L. H. C. J.

17

Review Report T-9040  
Topographic Map  
October 3, 1952

62. Comparison with Registered Topographic Surveys.-

T-3085                      1:100,000                      1909

The map manuscript supersedes this survey for nautical charting purposes.

63. Comparison with Maps of other Agencies.-

See paragraph 46                      page 12

T-9040 supersedes existing maps except for its lack of contours east of the Weary River.

64. Comparison with Contemporary Hydrographic Surveys.-

None

65. Comparison with Nautical Charts.-

See paragraph 47                      page 12

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 are generalized and the drainage pattern including the marsh limits were delineated entirely by stereoscopic inspection and photo-interpretation.

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

Due to a lack of primary horizontal control on the east side of the Weary River, it is doubtful if this map complies with the National Map Accuracy Standards. It is believed the horizontal error in position of planimetry does not exceed 1 1/2 mm. at compilation scale in this area.

The vertical accuracy of the area contoured on the west side of the Weary River is dependent on vertical angle observations on the two triangulation stations and is believed not to be in error in excess of one contour interval.

It is apparent the outside flight of photographs is uncontrolled other than by pass points set up by the controlled area at station WEARY. However, the planimetry was compiled as a source of data for the nautical chart and should meet those requirements without further field survey.

REVIEWED BY:

  
\_\_\_\_\_  
Roscoe J. French

Due to insufficient control  
APPROVED in the northern portion of  
this map, it is possible that details  
could be displaced from their true position  
by as much as 2.5 mm. 11-24-54

H. C. Gandy  
Chief, Review Section  
Division of Photogrammetry

W. E. Edmister  
Chief, Nautical Chart Branch  
Division of Charts

W. W. Swanson  
Chief, Div. Photogrammetry

Carl O. Heaton  
Chief, Div. Coastal Surveys

### NAUTICAL CHARTS BRANCH

SURVEY NO. T 9040

#### Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12/2/50	9052	J.A. Wilson	<del>Before</del> After Verification and Review
			<i>Part. applied.</i>
11-1-91	16322	W.O. Chrus	Before <del>After</del> Verification and Review <i>Consider adequately applied</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.



## 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  
9044 " 9047  
9054 " 9057  
9064, -9065, -9070  
9071, -9074, -9075  
9227 thru 9253

### Ph-8A(46), PLANIMETRIC

T-9041 thru T-9043  
9048 " 9053  
9058 " 9063  
9066 " 9069  
9072, -9073  
9076, -9078

### Ph-8B(46), SHORELINE

T-8873 (E&W) and T-8874