

9046

Diag. ChTs. ORIGINAL Nos. 8802 and 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. _____ Office No. T-9046

LOCALITY

State Alaska

General locality Nushagak Peninsula

Locality MANOKOTAK

1947

CHIEF OF PARTY

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

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DEC 28 1954

DATE

9046

DATA RECORD

T -9046

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

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

Portland, Oregon (Radial Plot) Charles W. Clark
Photogrammetric Office (III): Wash. D.C. (Compilation) Officer-in-Charge: Louis J. Reed, Chief
Stereoscopic Mapping Section

Instructions dated (II) (III): 4 February 1949 (Radial Plots) Copy filed in Division of
21 April 1948 (Field) Photogrammetry (IV)

Method of Compilation (III): 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): 7-24-50 Date reported to Nautical Chart Branch (IV): 7-26-50

Applied to Chart No. Date: Date registered (IV): 28 April, 1954

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 water

Reference Station (III): *The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. plus/minus 6 m. and Long. plus/minus 8 m.*

Lat.: Long.: *h.c.h.*

~~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.

DATA RECORD

Field Inspection by (II): A. Newton Stewart

Date: Season 1947

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

Mean High Water Location (III) (State date and method of location):

The shoreline is dated 1947 since it was delineated from 1947 photography; no shoreline inspection was accomplished in the field.

Projection and Grids ruled by (IV):

*Ruling Machine*Date: *21 July 48*

Projection and Grids checked by (IV):

*Wheatley E. Ward*Date: *21 July 48*

Control plotted by (III):

Frank H. Elrod (Portland)

Date: April 1949

Control checked by (III):

James L. Harris (Portland)

Date: April 1949

Radial Plot ~~of stereoscopic~~
~~control extension~~ by (III):

James L. Harris
and

Date: 15 July 1949

J. E. Deal (Portland)

Compilation

Planimetry C.E. Misfeldt

Date:

Stereoscopic Instrument ~~extension~~ (III):

and and

14 June 1950

Contours Louis Levin

Date:

Compilation

Manuscript ~~checked~~ by (III): Clarence E. Misfeldt

Date: 21 June 1950

Photogrammetric Office Review by (III):

Orvis N. Dalbey

Date: 30 June 1950

Elevations on Manuscript
checked by (II) (III):

Louis J. Reed

Date: 12 July 1950

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

PHOTOGRAPHS (III)					
Number	Date	Time	Scale	Stage of Tide	
18034 to 18036 incl.	10-12-46	11:37	1:20,000	37.5	ft. above M.L.L.W.
20410 & 20411	8-23-47	11:10	1:20,000	7.0	ft. " "
20416 & 20417	8-23-47	11:13	1:20,000	7.0	ft. " "

See remarks below.

Tide (III)

Diurnal

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

Ratio of Ranges	Mean Range	Spring Range
	15.2	19.5

Washington Office Review by (IV): *Roscoe J. French*

Date: *Oct. 24, 1952*

Final Drafting by (IV): *M J Day*
 Drafting verified for reproduction by (IV): *W O Hallum*

Date: *7/27/53*

Date: *8-19-53*

Proof Edit by (IV):

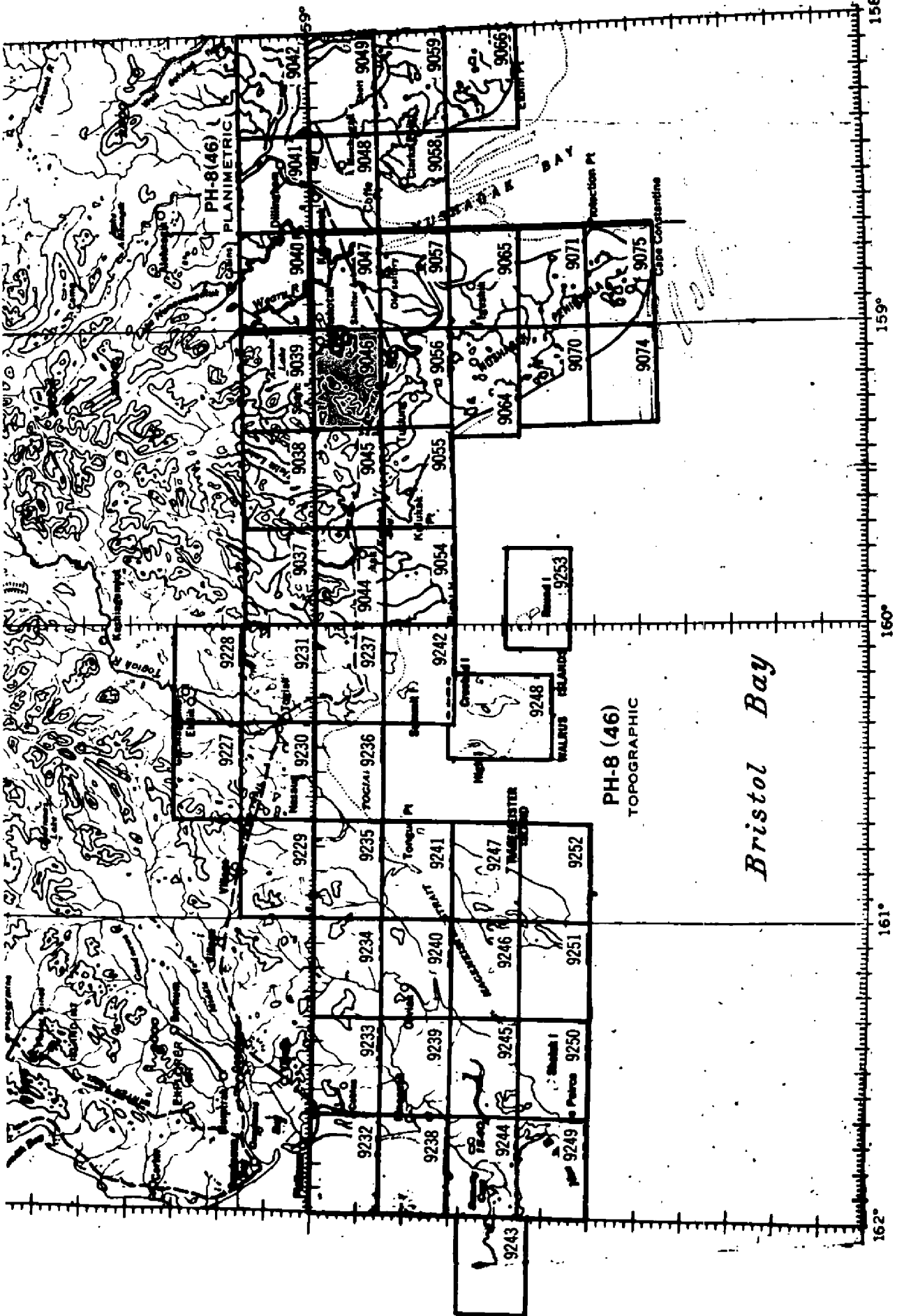
Date:

Land Area (Sq. Statute Miles) (III): *103 sq. mi.*
 Shoreline (More than 200 meters to opposite shore) (III): *None*
 Shoreline (Less than 200 meters to opposite shore) (III): *63 miles*
 Control Leveling - Miles (II): *None*
 Number of Triangulation Stations searched for (II): *None* Recovered: Identified: *One*
 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 there is not sufficient tidal data available to the compilation office to accurately determine the predicted tide in this area.

TOPOGRAPHIC MAP PH-8 (46)

ALASKA, Vicinity of Bristol Bay



Summary to Accompany T-9046

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 planimetric includes 23 maps in the general area of Kvichak Bay and extends from Egegik Bay to Nushagak Bay.

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

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

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

Topographic map T-9046 includes a portion of the main valley of the meandering Igushik River, a portion of the Tuklung River, the adjoining range of mountains on the northern end of the Nushagak Peninsula and the village of Manokotak.

All topographic and drainage features were delineated with the Reading plotter simultaneously from nine-lens photographs taken in October 1946 and August 1947.

The vertical control was established by field methods using non-reciprocal vertical angles on the checked spot elevations, and reciprocal angles on the triangulation station which served as vertical as well as horizontal control.

Horizontal control consisted of but one triangulation station within the manuscript limits and the radial plot was extended to include perimeter control.

The map manuscript consists of one sheet 7.5 minutes in latitude and 20 minutes in longitude at a scale of 1:20,000 and with a 50 foot contour interval. 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 by the Bureau.

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 No. T-9046
Project Fh-8(46)B

Side Headings 21 to 27 inclusive:

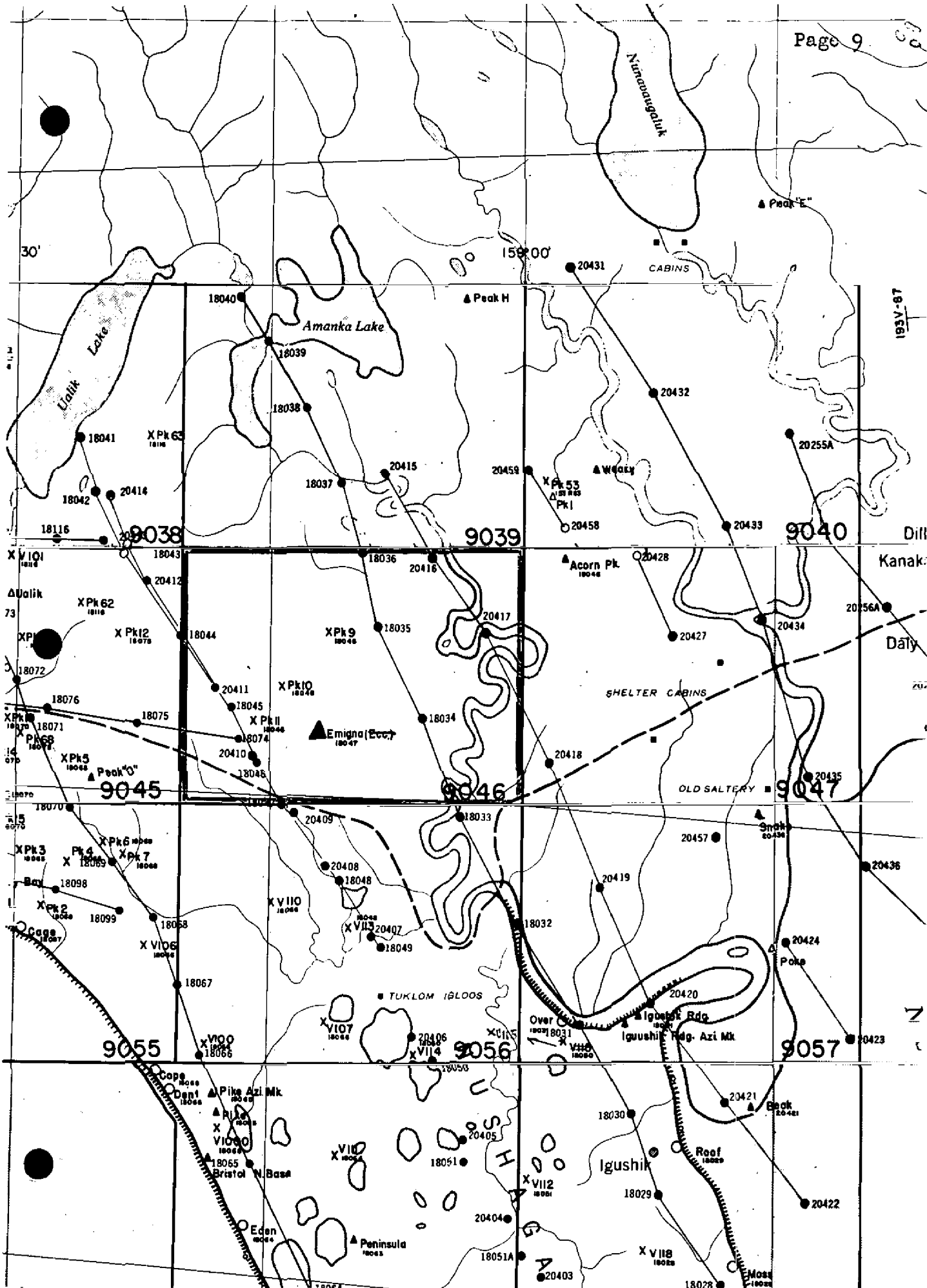
Refer to the Photogrammetric Plot Report, for "Radial Plot No. 2, Project Fh-8(46)B" Pages 8 to 22 inclusive of the Descriptive Report for T-9039 and to the Appendix of this Photogrammetric Plot Report, which is included as Page 23, of the above Descriptive Report.

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

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



COMPILATION REPORT

Washington Office

31. Delineation:

Contours and cultural features were delineated simultaneously on the Reading Plotter, Model "A". Photograph coverage was complete. No field inspection was available.

32. Control:

Reference side-heading No. 23 of the Radial Plot Report included in the Descriptive Report for quadrangle T-9039.

Both horizontal and vertical control were scarce in the area of this map; additional horizontal was established thru the radial plot and it was necessary to bridge during plotting instrument operation to secure elevations on which to base the contouring.

33. Supplemental Data:

a. Plotting instrument photographs:

20415 thru 20418
20408 " 20412
18036 and 18038
23350 and 23352

b. Field inspection photographs: None

c. Graphic control surveys: None

34. Contours and Drainage:

Portions of the instrument photographs were objectionable for contouring purposes but by selecting pairs a complete coverage was effected. In detail, photo 18035 had one blank chamber, and 20415 thru 20418 were of poor definition.

35. Shoreline and Alongshore Details:

Mud flats have been located during instrument delineation. They are believed to bare at low water and are considered approximate.

36. OFFSHORE DETAILS: None37. 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. Make reference for any to project report by A. N. Stewart, 1947, entitled, "Aerial Photograph Control and Inspection, Bristol Bay, Alaska."

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38. Control for Future Surveys: None
39. Junctions:
- Details on this manuscript, both planimetric and topographic, are matched satisfactorily with adjoining quads, T-9039 to the north, T-9047 to the east, and T-9056 to the south. ~~To date no quadrangle has been compiled to the west (T-9045).~~ *Now complete. & jct. ok.*
40. Horizontal and Vertical Accuracy: Standard
46. Comparison with Existing Maps:
- Nushagak Bay, Alaska, Reconnaissance Topographic Series, Third Judicial Division, USGS, 1:250,000, 1948³.
47. Comparison with Nautical Charts:
- | | |
|---------------------------|--------------------|
| No. 9050, 1:1:150,000 | 23 June 1946 |
| No. 8802, 1:1:023,188 | 7 Nov. 1947 |
| <i>No. 9052 1:100,000</i> | <i>4 Apr. 1950</i> |
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

GEOGRAPHIC NAMES

Survey No.
T-9046

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
<u>IGUSHIK RIVER</u>												1
<u>MANOKOTAK</u>												2
<u>NUSHAGAK PENINSULA</u>												3
<u>TUKLUNG RIVER</u>												4
<u>Alaska</u>												5
												6
												7
												8
												9
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												26
												27

*Names underlined in red
are approved
9-24-52
L. Heck*

PHOTOGRAMMETRIC OFFICE REVIEW

T-9046

- 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)

✓ = checked
∅ = non-existent

- 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 along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable 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. Louis N. Dalby
Reviewer

Louis 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:

14

Review Report
Topographic Map T-9046
October 24, 1952

62. Comparison with Registered topographic surveys.-

T-3085 1:100,000 1939

The map supersedes this survey for nautical charting purposes.

63. Comparison with Maps of other Agencies.-

Nushagak Bay, Alaska 1:250,000 1943 USGS

T-9046 supersedes this map in all respects.

64. Comparison with contemporary hydrographic surveys.- None

65. Comparison with Nautical Charts.-

See paragraph 47 Page 11

More detail is now available at this scale and an attempt has been made to better classify the valley floor features such as is peculiar to a large meandering river of this kind. The chart can now be compiled with much more detail, and since the 1946 photographs were taken at nearly low tide the limits of the mud flats are presumed to be very nearly the approximate low water lines.

66. Adequacy of results and Future Surveys.-No field inspection is available to serve as a basis for interpreting interior or shoreline details. Marsh limits and the extent to which the mud and sand deposits have been shown were determined entirely by office interpretation.

The limits of the mud flat areas in the foreshore areas and on the inside of meanders are shown as they appear on the October 1946 photography which was taken at about 1/3 tide. It is not believed the tide has as much range this far back from Nushagak Bay as the tide tables would indicate, but that the nature of this large, sluggish, meandering river would seem to substantiate the office classification of areas adjacent to the shoreline to be as indicated, and that the valley floor should be shown with a marsh symbol.

It is doubtful whether this map complies with the National Map Accuracy standards, but it is presumed that the horizontal error in position of planimetry does not exceed 1.0 mm. at compilation scale and that the vertical accuracy is accurate to within one contour interval.

Reviewed by:

Roscoe J. French
Roscoe J. French

Approved:

L C Lewis 26 Nov 1954
Chief, Review Section
Div. of Photogrammetry

H. Edmonson
Chief, Nautical Chart Branch
Div. of Charts

R. W. Swanson
Chief, Div. of Photogrammetry
~~make~~
12/20/54

Carl O. Hester
Chief, Div. of 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
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