

9039

Diag Chts. Nos. 8502-3 & 8802

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. _____ Office No. T-9039

LOCALITY

State Alaska

General locality Nushagak Peninsula

Locality Amanka Lake

1947

CHIEF OF PARTY

A. Newton Stewart, Chief of Field Party

Charles W. Clark, Chief of Plot Office

Div. of Photogrammetry, Washington, D.C.

LIBRARY & ARCHIVES

DATE February 18, 1955

9039

DATA RECORD

T-9039

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

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. Officer-in-Charge: Louis J. Reed, Chief,
Stereoscopic Mapping Section
Instructions dated (II) (III): 4 February 1949 (Radial Plot) Copy filed in Division of
21 April 1948 (Field) Photogrammetry (IV)

Method of Compilation (III): Reading Plotter, Model "A"

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): 8-30-50 Date reported to Nautical Chart Branch (IV):

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

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): North American 1927

Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (2) 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. minus/plus 10 m.

Lat.:

Long.:

~~Adjusted~~
Unadjusted

Plane Coordinates (IV):

State:

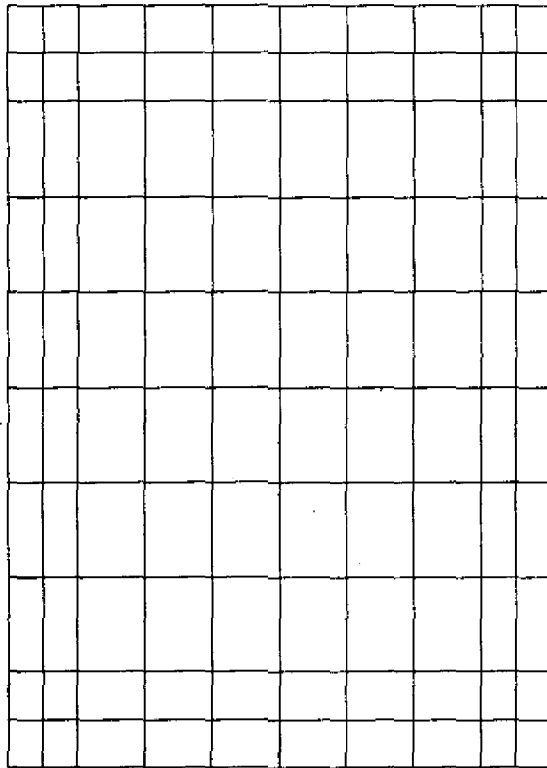
Zone:

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.



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

100% by: Clarence E. Misfeldt
Louis Levin

Inst.: Reading Plotter, Model "A"

DATA RECORD

Field Inspection by (II): **A. Newton Stewart** *None* 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 MHW line was compiled from photographs taken in 1947. ~~because~~ **None** no shoreline inspection was made. Therefore, the shoreline must be dated as of 1947.

Projection and Grids ruled by (IV): *Quiling Machine* Date: *21 April 48*

Projection and Grids checked by (IV): *Wheatley E. Ward* Date: *21 April 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 ~~or Stereoscopic~~ Date: *25 Jul 49*

~~Control extension~~ by (III): **James L. Harris & J.E. Deal (Portland)**

~~compilation~~ delineation Planimetry **Clarence E. Misfeldt** Date: **14 June 50**
Stereoscopic Instrument ~~compilation~~ and by: **Louis Levin** Date: **14 June 50**
Contours

~~delimited~~ **compilation** by (III): **Louis Levin** Date: **21 June 50**

Photogrammetric Office Review by (III): **Orvis N. Dalbey** Date: **30 June 50**

Elevations on Manuscript checked by (III): **Louis J. Reed** Date: **12 July 50**

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

Number		Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
			Time			
18036 to 18040	Incl.	10-12-46	11:37	1:20,000	3 7.5 ft. above M.L.W.	M.L.W.
20415 & 20416		8-23-47	11:12	1:20,000	7.0 ft. above M.L.W.	M.L.W.
23354 to 23359	Incl.	9- 2-48	09:45	1:20,000	10.2 ft. above M.L.W.	M.L.W.

See remarks below

Tide (III)

Reference Station: Nushagak Bay (Clark Point)
 Subordinate Station:
 Subordinate Station:

Ratio of Ranges	Diurnal	
	Mean Range	Spring Range
	15.2	19.5

Washington Office Review by (IV):

Date: *Oct. 31, 1952*

Final Drafting by (IV):

Roscoe J. French

M. J. Day

Date: *Nov 19, 1953*

Drafting verified for reproduction by (IV):

W. P. Hallum

Date: *11-24-53*

Proof Edit by (IV):

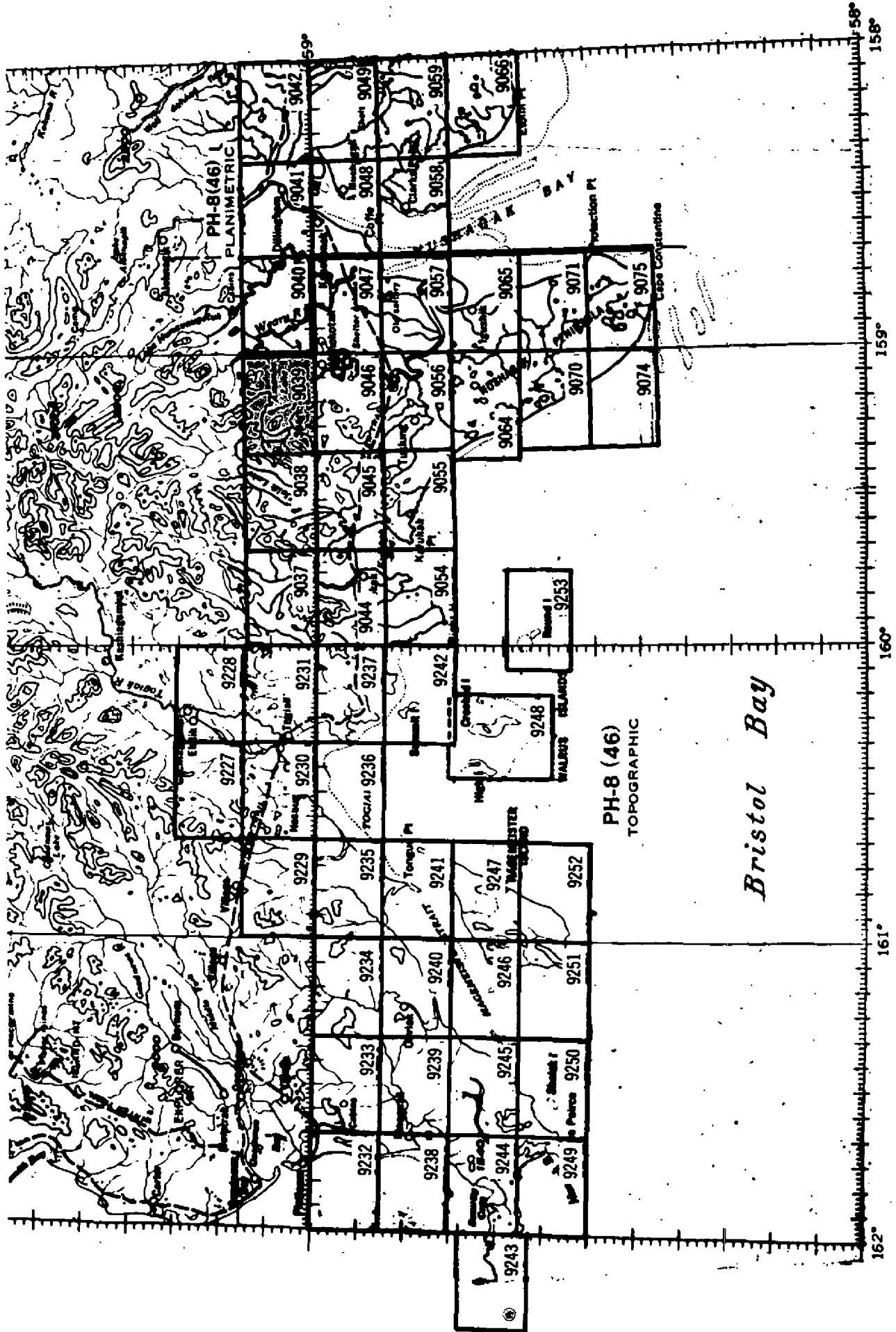
Date:

Land Area (Sq. Statute Miles) (III): 100 square miles
 Shoreline (More than 200 meters to opposite shore) (III): None
 Shoreline (Less than 200 meters to opposite shore) (III): 25 miles
 Control Leveling - Miles (II): None
 Number of Triangulation Stations searched for (II): 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 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.

TOPOGRAPHIC MAPPING PROJECT PH-8 (46)

ALASKA, Vicinity of Bristol Bay



Summary to Accompany T-9039

Ph-8(46) covers an area on 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 such as to include Hagemeister and the Walrus Islands.

Topographic map T-9039 embraces an area which includes the upper reaches of the Egegik River, Ongoke Creek, and Amanka Lake. These are the headwaters which drain into Nushagak Bay through the wide meandering tidal waters in the Igushik River valley.

The shoreline and interior detail including 50 foot contours were compiled simultaneously on Reading Plotter "A" from nine-lens metal mounted photographs taken during three different seasons; 1946, 1947, and 1948. Shoreline is from the 1947 photographs, and the approximate limits of the mud flats are from the 1946 photographs.

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 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
Radial Plot No. 2
Project Ph-8(46)B

21: AREA COVERED:

This radial plot includes an area just north of Nushagak Peninsula, Alaska between Lat. $58^{\circ} 45'$ and Lat. $59^{\circ} 07' 30''$ and comprises Map Manuscripts No'd. T-9039, T-9040, T-9046, T-9047, T-9056 and T-9057. It joins Radial Plot No. 1 of this project on the south at Lat. $58^{\circ} 45'$.

22: METHOD:

The radial plot was run from 9 lens metal mounted photographs by the usual hand templet method. Six map manuscripts, each ruled with a polyconic projection and a special grid system of 2500 square meters and six base grid sheets, which also contained a grid system of 2500 square meters, were used. The base grid sheets were used in the same manner as described in the descriptive report for Radial Plot No. 1 of this project.

The pattern of holes for matching the six base sheets, referred to in the above report, have been drilled and indicated by a note on the base sheets.

The facts relative to pass points as discussed in the descriptive report for Radial Plot No. 1 are also applicable to this radial plot.

Templets for this radial plot were made in the same manner as described for Radial Plot No. 1 except that a new supply of vinylite templets were used.

It is understood that this office may have misinterpreted subparagraph (c) under Item 17 "Templets" of the instructions for this project and clarification of this operation is requested.

All work on the photographs, map manuscripts, base grids, templets, and symbols has been done in accordance with the instructions dated 4 February, 1949 for this project.

The plot was run many times and the closure and adjustment to control of the final accepted result was very good. Most of the intersection of radials to pass points were practically perfect and a

majority of the intersections of radials to horizontal control stations were held right on their plotted position. Slightly tilted photographs and the possibility that some stations were identified slightly in error are believed to be the main factors which prevented the obtaining of a better radial plot.

The intersection of radials to pass points and control stations were drilled, with a No. 80 drill, through into the base sheets in accordance with the instructions. As an aid in holding the drill chuck vertical, when drilling the holes, it was rotated in a "V" groove, that had been cut with a three cornered file, in one face of a small block of wood, 1 1/2" x 1 1/2" x 7/8". This block of wood was mounted and centered, with the "V" groove vertical, on one face of a 3 1/2" x 3 1/2" x 1/2" angle iron 4" long. Care was taken to prevent the fine drill from bending when drilling the holes. This is only a temporary device and it is understood that a device for this purpose is being developed in the Washington Office.

After the templets were dismantled and the six base sheets separated, each photograph center, pass point, and vertical control point was transferred from the base sheets to the map manuscript on which it fell by matching grid lines which were common to the base sheet and map manuscript.

See appendix attached to this report, pages ¹⁶23 and ¹⁷24.

23: ADEQUACY OF CONTROL:

This radial plot embraces a land area of approximately 490 square statute miles, and within its limits are eight horizontal control stations. Three of the stations are concentrated in the southeastern part of the plot, four are scattered along its eastern limits, and one other lies in the mid-western area. Supplementing these stations were four stations lying just south of this radial plot and the pass points established in Radial Plot No. 1 along the junction of the two plots.

From the above it is evident that this radial plot is very poorly controlled especially in the northwestern area. The scarcity of control is intensified by the fact that two of the eight existing stations were not identified in the field, one was incorrectly identified, and one other had only been identified on a pricking card and not on any photograph.

A discussion of each control station and its value for use in the radial plot follows:

- IGUSHIK RIDGE 1947: The two sub-stations identified for this station could be clearly seen on the photographs. After numerous attempts to hold exactly to the plotted positions of these stations, an orientation was accepted where a good intersection of radials was obtained on both sub-stations at 0.25 mm. southwest of the plotted points.
- IGUSHIK RIDGE AZ. MK., 1947: This station was identified on the wrong ridge. From office inspection of the photographs and from the description it was identified in the office and held to during the running of the radial plot.
- POKE 1947: The sub-station was held to during the running of the radial plot.
- SNAKE 1947: The sub-station was held to during the running of the radial plot.
- ACORN PEAK 1947: The station identified as "ACORN PEAK" on field photograph #18046 is "PEAK 9" located about 5 miles southwest of the published position for station "ACORN PEAK". According to records in this office a geographic position for "PEAK 9" was not determined by triangulation methods. Station "ACORN PEAK" was approximately identified on tri-metrogen photograph No. 153R-83 as "PEAK 9". With the aid of this photograph and by use of the stereoscope it was possible to identify station "ACORN PEAK" on the office photographs and this identification was held to during the running of the radial plot.
- WEARY 1947: The area that had been occupied for the station in 1947 could be seen on the 1948 photographs. Also the measurements given on the pricking card from the two sub-stations to the station verified the spot seen on the photographs where the station was placed. Because this direct identification was believed more positive it was held to during the running of the radial plot and the sub-stations were not used.

PEAK "H" 1947: This station was identified in the office with the aid of the stereoscope and from its description. It was held to during the running of the radial plot.

PEAK "I" 1947: This station was not identified by the
 or 1947 field party. It is a no check position,
 "PEAK 53" not marked, and not described. A study of the
 photographs, with the aid of the stereoscope, indicates that PEAK "I" and "PEAK 53" might possibly be one and the same. This assumption could not be verified in the radial plot since "PEAK 53", as approximately identified on trimetrogen photograph No. 153R-83, could not be held to the plotted field computation position for PEAK "I", by approximately 200 meters. These facts indicate the additional possibility of an error in identification when observations were made on PEAK "I". After careful office study of the photographs and consideration of the above facts it is believed that the radially plotted position of "PEAK 53" and its elevation, computed at this office, are as correct as possible to obtain under the circumstances.

EMIGNA 1947: . It is questionable whether or not the field inspection party identified EMIGNA or EMIGNA ECC, or if the field identification was correct for either of these stations. This could not be determined during the running of the radial plot because the two stations are only 4 meters apart and isolated from all other stations in the radial plot. A copy of a letter from Mr. Carl A. Annis to Lt. Comdr. LeFevre, which is attached, was received in this office, wherein Mr. Annis states that he believes the true EMIGNA 1947 was pricked on the field photographs. A study of the photographs with the aid of the stereoscope does not prove otherwise. After numerous orientations of the templets in this area a good intersection of radials of the identified point was obtained at 0.25 mm due east of the plotted position of EMIGNA 1947.

The geographic position of EMIGNA 1947 was furnished this office by the Washington Office. Station EMIGNA ECC, is listed in a cahier of geographic positions (field computations) furnished this office for Project Ph-8(46).

The following stations are located south of this radial plot and were used to supplement the previously listed stations. Their positions are listed in the descriptive report for Radial Plot No. 1 with the control for T-9064 and T-9065.

PIKE AZ. MARK 1947: Held to during the running of the radial plot.

DENT 1947: The position for this topographic station was computed in this office from Lt. Comdr. Le Fevre's 1947 field data. The sub-station was held to during the running of the radial plot.

COPE 1947: The position for this topographic station was also computed from Lt. Comdr. Le Fevre's 1947 field data. It is believed that this station has not been identified with the accuracy used for triangulation stations, and also it is a no check position. In any event it could not be held closer than within 0.35 mm of its plotted position.

BEAK 1947: Position computed in 1949. A good intersection of radials for the sub-station was obtained 0.3 mm south of the plotted point.

Reference is made to paragraph 5 of heading "Horizontal Control" in the Descriptive Report for Radial Plot No. 1 which applies to several stations in this radial plot.

The plotted position of each horizontal control station or its substitute station has been encircled on the base sheets with a black circle 3 mm in diameter.

The radially plotted position of each horizontal control station or its substitute station has been encircled on the base sheets with a blue circle 3 mm in diameter.

Several sheets of Form M-2388-12, listing the horizontal control stations in the area are attached.

It is believed that this office, with the assistance of Lt. Comdr. A. N. Stewart and by correspondence with Lt. Comdr. Curtis Le Fevre, has made the best possible solution in all cases of horizontal control difficulties. A new identification, which would require another visit to the stations in question is probably the only other solution. Regardless of these difficulties, it is felt that the horizontal control stations available have been used to good advantage in the radial plot and that the requirements of accuracy, set forth in Paragraph 8 "Accuracy" of the instructions, dated 4 February 1949, have been met.

24: SUPPLEMENTAL DATA:

There was no supplemental data furnished for the area.

25: PHOTOGRAPHY:

The facts discussed in the Descriptive Report for Radial Plot No. 1, relative to photographs, are applicable to Radial Plot No. 2 except as follows:

Photograph No. 23343 could not be oriented into the radial plot because it is believed to be excessively tilted. It is not needed for the radial plot. The templet for this photograph was oriented as well as possible on the base grid sheets after the radial plot was completed. The radially plotted positions of the photograph points were then pricked on the templet and enclosed with black ink circles. The photograph position of the points are pricked on the templet and enclosed with red ink circles.

Photographs used in the radial plot are as follows:

18033 to 18040 inclusive
20405 to 20421 inclusive
23343 to 23357 inclusive
23370 to 23386 inclusive

26: PREVIOUS PLANIMETRIC COMPILATION:

The planimetry shown on Map Manuscript No'd. T-9040, T-9047, and T-9057 was compiled to furnish shoreline surveys to the Ship "PATHFINDER" and is based on a previous radial plot, made in June 1948, using unmounted photographs taken in 1946 and 1947. Since then an improved photograph coverage has been furnished with the new photograph flights made in 1948 and also, additional data, which helped to clarify the identification of a few of the horizontal control stations in the area, was submitted by the 1948 Alaska field party. In order that the movement between the original and new radial plot might be observed, the latest results have been shown on the above mentioned three map manuscripts with circles in red plastic ink. The planimetry has not been corrected to agree with the new radial plot and all pass points, photograph centers and minor detail points shown with circles in blue ink are the results of the original radial plot.

No previous radial plot was made for Map Manuscripts T-9039, T-9046, and T-9056 and all pass points and photograph centers shown on these three sheets with blue circles are the result of this radial plot made from metal mounted photographs.

27: VERTICAL CONTROL:

The computation of vertical control was accomplished by first establishing the elevations of Peaks 6, 7, 8, 9, 10, 11, 12, 53 and Acorn Peak from observations at triangulation stations PIKE and PIKE AZ. MARK. Then the elevations of V-100, V-106, V-107, V-110, V-113, V-114, V-115 were determined from observations on these peaks and triangulation stations which were established by Lt. Comdr. Le Fevre in 1947. The elevation of topographic station COPE was computed from PIKE and PIKE AZ. MARK.

Every computed vertical control station has from one to four checks on the elevation. The elevation on Peak 53 should be used with caution because a good check could not be obtained from the observations at PIKE and PIKE AZ. MARK. This station is discussed under Item 23, "Adequacy of Control" in this descriptive report.

In cases where the instrument station was not pricked directly, a nearby spot elevation was selected by the field party. This spot elevation was radially plotted, then the position of its instrument station was determined from horizontal ties listed on the pricking card. All distances were scaled from the instrument station. Where vertical control ties between the instrument stations and spot elevations were available, the elevations of the spot elevations were computed and listed.

The vertical control data has been assembled in a cahier entitled, "Tabulation of Elevations and Computations of Elevations, by Map Manuscripts of Vertical Control Stations in Radial Plot No. 2, Project Ph-S(46)B."

This office was able to compute the elevations of several stations falling just west of the west limits of this radial plot in the areas of Map Manuscripts No'd. T-9045 and T-9055. These stations have been included in the above tabulation.

The tabulation referred to above and three pricking cards (Form M-2226-12) for vertical control stations V-106, V-110 and V-113 are being submitted.

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

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

Station: EMIGNA
June 13, 1948

To: Lt. Comdr. Curtis LeFever

Subject: Control Station identification and Geographic Position
of EMIGNA 1947.

While at this station to recover the true EMIGNA 1947, I studied the station site with the identification card made by Mr. W.W. Husemeyer. I did not have the aerial photograph for same but believe it was pin pricked correctly as the sketch presents a true description of the station site.

The true station was under a 6 foot cairn with a pole target in its center. The light keeper last year showed an eccentric light to stations PENINSULA, CLARK and IGUSHIK RIDGE instead of removing the target and showing true. The light keeper in his sketch showing the location of the eccentric set-up etc. as being 5 feet to the left of the line to PENINSULA and it should have been 5 feet to the left of the line to IGUSHIK RIDGE. The true station now has a 5 foot cairn over it.

Respectfully,

Carl A. Annis

APPENDIX

Photogrammetric Plot Report
T-9039, T-9040, T-9046, T-9047, T-9056 and T-9057
Project Ph-8(46)

The radial plot, for these six map manuscripts, as described in the original photogrammetric plot report, has been carefully examined. Suggestions contained in a letter from the Chief, Division of Photogrammetry, 711-rs dated 27 September 1949, Subject: "Radial Plots for Topographic Maps, Project Ph-8", have been applied to the radial plot and are discussed as follows:

1. The forty-seven metal mounted photographs covering this radial plot were examined stereoscopically, point to point, to check the accuracy of transferring points between photographs. The K and E stereoscope with 36 inches between objectives, which was recently furnished this office was used for this purpose. Personnel experienced in the use of the stereoscope and believed to have acute stereoscopic vision were selected for the work. Methods outlined in the topographic manual Part II, Chapter 4, Page 4 were strictly adhered to. In every case where a point was in doubt the radials and circles were first removed from the photographs before the point was checked. In instances where the circles were not exactly 4 mm, in diameter, these were removed and new circles of the correct size were drawn. Because this was a correction job the work is not as neat as is desired and in some instances the prick holes for the pass points are large because the points were corrected and moved slightly from their original pricked locations. Also, occasionally it was impossible to prevent the photograph from being slightly marred when the original circle and radial were removed.
2. A careful check has been made to make sure that, where possible, each point has been transferred to all photographs on which it fell. Where this could not be done the points have been circled and numbered on the templets and an appropriate note has been lettered on each templet giving the reason for not pricking certain points on that particular photograph. During this operation it has been necessary, in numerous instances, to rely solely on the stereoscope for the accuracy of the transfer because the photographs were taken in two different years and the exact image point could not be found.
3. The radial plotted positions have been circled on the templets and not the photo image positions as stated in the body of the photogrammetric plot report.

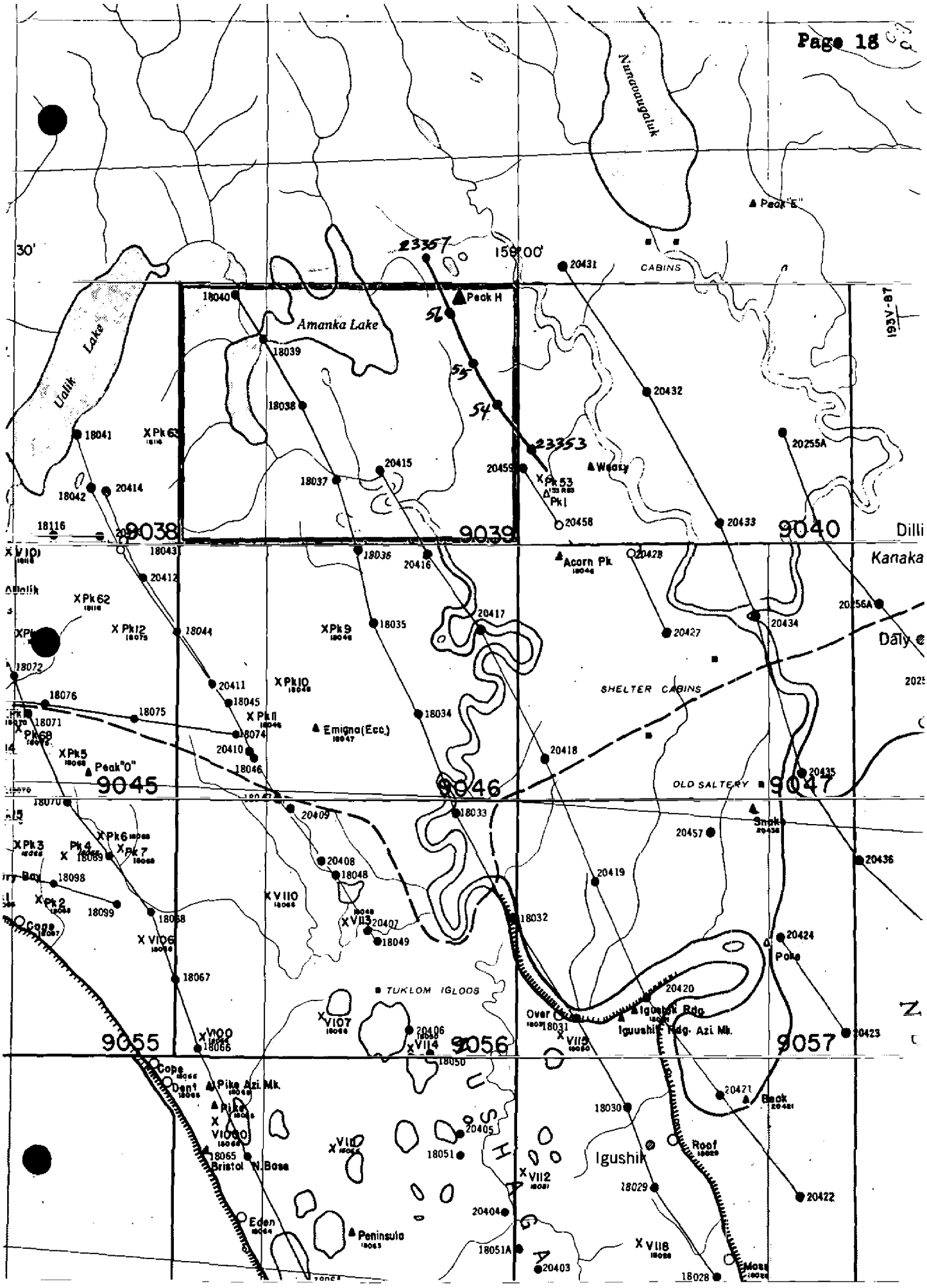
4. New templet material has been used for this radial plot.
5. Finally, the personnel of this office have gained much experience and greatly benefited from the information and criticism contained in the letter mentioned in paragraph one. They are fully aware of the accuracy requirements for radial plots to be contoured on the Reading Plotter and it is believed a sincere effort has been made to do this work to the best of their ability. As previously stated this is a correction job and does not have the neatness this office desires to obtain. It is believed that as the result of the check on this radial plot, work of a similar nature will be satisfactory in the future.

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". Photo coverage was complete even though a blank chamber existed in photographs 18036 thru 18040, the same chamber in each one. No field inspection existed.

32. Control:

Reference is made to the radial plot report contained in this report, where sideheading 23 discusses the horizontal control governing the radial plot.

Vertical control was scarce; only one elevation was established during field surveys. Therefore, bridging was necessary but made easy because of the long meandering tidal river and large lake in the area. After a careful study of several pairs of photographs on the plotting instrument, the surface elevation of the large lake (Amanka Lake) was established, and it served as vertical control in the major portion of the models covering the quad.

33. Supplemental Data:

- a. Plotting Instrument Photographs:
 - 18036 thru 18040
 - 20415 and 20416
 - 23352 " 23354
 - 23356 " 23357
- b. Field Inspection Photographs: None
- c. Graphic Control Surveys:
 - "Mountain Peaks Northwest of Nushagak Bay", T-3085, scale 1:100,000 dated 1909

34. Contours and Drainage:

A complete coverage of photography for contouring purposes was effected thru careful selection of models; a blank chamber existed on photographs 18036 thru 18040 (the same chamber in each photo), and the detail on photographs 20415 and 20416 was not of the best quality.

35. Shoreline and Alongshore Details:

The banks of the ~~Weary~~ ^{IGUSHIK} River have been delineated on the plotting instrument without the aid of field inspection. ~~No low water line or~~ Mud flats were indicated, ~~from office interpretation of similar areas.~~ ^{inspected}

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 to A. N. Stewart's 1947 Project Report, "Aerial Photograph Control and Inspection, Bristol Bay, Alaska".

38. Control for Future Surveys: None39. Junctions: Satisfactory40. Horizontal and Vertical Accuracy:

Vertical accuracy of this survey is not as strong as desired because of the limited amount of field-established elevations. However, the results are considered to be of standard accuracy.

46. Comparison with Existing Maps:

see p 66 page 23

Nushagak Bay, Alaska, Reconnaissance Topographic Series, Third Judicial Division, USGS, 1:250,000, 1949.

47. Comparison with Nautical Charts:

- a. No. 9050, scale 1:150,000, dated 23 June 1946
- b. No. 8802, " 1:1,023,188, dated 7 Nov. 1947
- c. **No. 9052** 1:100,000 " **4 Apr. 1950**

48. Geographic Name List: See separate page attached.49. Notes for the Hydrographer: None50. Compilation Office Review: See T-2 form following.

Submitted:

Approved and forwarded:

Orvis N. Dalbey
Orvis N. Dalbey
Cartographer - Photogrammetric

Louis J. Reed
Louis J. Reed, Chief,
Stereoscopic Mapping Section

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9039

- 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
n = 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. _____
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-9039

Name on Survey

	A	B	C	D	E	F	G	H	K
	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	
<u>Amanka Lake</u>									1
<u>Igushik River</u>									2
<u>Nushagak Peninsula</u>									3
<u>Sparks</u>									4
<u>Wearry River</u>									5
<u>Angake Creek</u>									6
<u>Nunavakamut</u>									7
									8
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(use old name pending B.O.A. decision)

(Names Report calls it a "large native village")

Names underlined entered are approved
10-30-57
L.H.C.

Review Report T-9039
Topographic Map
October 31, 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 20
T-9039 supersedes existing maps of this area.

64. Comparison with Contemporary Hydrographic Surveys.-

None

65. Comparison with Nautical Charts.-

See paragraph 47, page 20
No discrepancies were noted as existing between the map and the charts with the exception that details are developed more fully on the map than on the charts.

66. Adequacy of Results and Future Surveys.-No field inspection is available as an aid toward photo interpretation. All features as shown and the limits of marsh and tree areas are entirely the result of stereoscopic office interpretation.

It is not known whether tidal action affects the Igushik River this ~~far~~ inland, but it would appear that either wind or tidal waters go as far upstream as is indicated as the apparent head of tide. The river is visibly shoaled above that point and the approximate limits of the mud foreshore areas were delineated from photographs taken at the time of nearly 1/3 tide for the area.

One control station (Peak H, 1947) serves as the only primary horizontal and vertical control for this map. Since bridging to Amanka Lake to establish it as the vertical control for the western half of the manuscript, it would appear the accuracy of the contours and photogrammetric elevations were of something less than standard accuracy for the sheet, and that horizontal accuracy of planimetry does not exceed 1.5 to 2.0 mm. of true position and that vertical accuracy is good to within one contour interval.

Reviewed by:

Roscoe J. French
Roscoe J. French

APPROVED

L C Landy 26 Jan 1955
Chief, Review Section
Div. of Photogrammetry

[Signature]
Chief, Nautical Chart Branch
Division of Charts

[Signature]
Chief, Div. of Photogrammetry

Carl O. Heaton
Chief, Div. of Coastal Surveys