

9644

Diag. Cht. Nos. 9380 & 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric (Photogrammetric)

Field No. Ph-65(50) Office No. T-9644

LOCALITY

~~NEW~~ Territory of Alaska

General locality Seward Peninsula

Locality Cape Prince of Wales

1949

CHIEF OF PARTY

Marvin T. Paulson - Field

Charles W. Clark-Portland Photogrammetric

Office

LIBRARY & ARCHIVES

DATE Jan -13 -1953

B-1870-1 (1)

9644

DATA RECORD

T- 9644

Project No. (II): Ph-65(50)

Quadrangle Name (IV):

Cape Prince of Wales

Field Office (II): Shishmaref, Alaska

Chief of Party: Marvin T. Paulson

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Charles W. Clark

Instructions dated (II) (III): 9 November 1950 (Office)

17 March 1949 (Field) Ph-46(49) and Ph-28(47)

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): —

Scale Factor (III): None

Date received in Washington Office (IV):

JUN 13 1951

Date reported to Nautical Chart Branch (IV): JUN 29 1951

Applied to Chart No.

Date:

Date registered (IV):

Oct 28, 1952

Publication Scale (IV): 1:20,000

Publication date (IV):

Date of issue June 1952

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean High Water
Mean Sea Level~~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):

Lat.:

Long.:

Adjusted X

Unadjusted

Plane Coordinates (IV):

State:

Alaska

Zone:

3

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)
(II) (III)

DATA RECORD

Field Inspection by (II): J. Andrew Hinely
Ship PIONEER (Topographic Surveys)

Date: 6/22/49 to 9/22/49
~~Season 1950~~

Planetable contouring by (II): None

Date: —

Completion Surveys by (II): None

Date: —

Mean High Water Location (III) (State date and method of location): Spot located on field photographs during 1949 field season and spot located by Ship PIONEER on topographic surveys by planetable during 1950 season.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): H.J. Atkins

Date: 3/7/51

Control checked by (III): J.L. Harris

Date: 3/8/51

Radial Plot or Stereoscopic Control extension by (III): J.L. Harris and J.E. Deal

Date: 3/21/51

Stereoscopic Instrument compilation (III):
Planimetry
Contours

None

Date: —

Date: —

Manuscript delineated by (III): Helen Laube

Date: 4/3/51

Photogrammetric Office Review by (III): Ree H. Barron

Date: 5/8/51

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

None

Date: —

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
27965 thru 27969	7/31/50	11:15	1:20,000	1.5 ft. above M.H.W.
28012 thru 28015	7/31/50	12:48	1:20,000	1.0 ft. above M.H.W.

* NOTE: Tide information is very meager for this area and stage of tide is only an approximation.

^(*) use 265, Camera "O", focal length 6 inches, single-lens

O-117 8-22-48 — 1:59,000 —

Field inspection and control identification notes.

Tide (III)

Ratio of Ranges	Mean Range	Diurnal Spring
		Range
	2.2	3.7
	1.2	1.4

Reference Station: Dutch Harbor, Alaska

Subordinate Station: ~~Port Clarence, Cape Riley, Alaska~~

Subordinate Station: Lopp Lagoon, Cape Prince of Wales

(See note marked "#" below)

Washington Office Review by (IV):

Date: 11-29-51

Final Drafting by (IV):

Date: 3-17-52

Drafting verified for reproduction by (IV):

Date: 5-29-52

Proof Edit by (IV):

Date: 6-10-52

Land Area (Sq. Statute Miles) (III): 16.5

Shoreline (More than 200 meters to opposite shore) (III): 20.8 statute miles

Shoreline (Less than 200 meters to opposite shore) (III): None

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 4

Recovered: 4

Identified: 2

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): ~~2~~ 2

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

Remarks:

* ⁵ additional stations are plotted on the map manuscript which were located with ~~the tide line~~ ^{the tide line} by Ship PIONEER during season 1950.

* * * * *

The following information was available after review and at time of registration and is from Tidal Bench Marks, Western & Northern Alaska No. 51 dated 2/15/52:

MHHW - 0.60 ft.

MHW - 0.50 "

Half tide level - 0.30 ft.

MLW - 0.10 ft.

MLLW - 0.00

(This new tidal information does not effect the MHW shoreline compilation.)

SUMMARY T-9644

This is one of 16 planimetric maps at 1:20,000 scale in Project Ph-65(50) which covers the coastline of the SEWARD PENINSULA from CAPE DOUGLAS northward to the IKPEK LAGOON at the 66° parallel.

The planimetric survey for NOME is on the southern side of the peninsula and does not adjoin the other maps of this project.

Much of this coastal area has not been previously covered by maps at this large scale.

Information concerning the project in its broader aspects will be included in a project completion report to be compiled at the conclusion of the review of all surveys in this project and will be filed in the Bureau Archives.

FIELD INSPECTION REPORT
Map Manuscript No. T-9644
Project Ph-65(50)

Refer to "Project Report Aerial Photograph Control and Inspection, North Shore Seward Peninsula, Alaska Ph-46(49), Marvin To Paulson, Chief of Party."

Refer to Descriptive Reports for Topographic Surveys PI-B, C, and D-50 (1950), Thos. B. Reed CDR. USC&GS Comdg. Ship PIONEER.

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscript No. T-9644
Project Ph-65(50)

The photogrammetric plot report for this map manuscript is part of a combined photogrammetric plot report for Map Manuscripts T-9639 to T-9645 incl. and is included in the Descriptive Report for T-9639 (1949) Project Ph-65(50).

COMPILATION REPORT
Map Manuscript No. T-9644
Project Ph-65(50)

For side headings 31, 32, 34 to 37 incl., 39, 40, 46, and 47 refer to the Descriptive Report for Map Manuscript T-9639 (1949) Project Ph-65(50).

33: SUPPLEMENTAL DATA:

Topographic Survey PI-D-50, Scale 1:30,000, dated 8-15-50 was used to supplement the photographs when delineating the mean high-water line.

38: CONTROL FOR FUTURE SURVEYS:

Form 524 is being submitted with this map manuscript for the recoverable topographic station ANDY. It is also listed under side heading 49: "Notes to the hydrographer".

Approved:

Charles W. Clark
Charles W. Clark
Officer-in-Charge

Respectfully submitted:

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

48: GEOGRAPHIC NAME LIST: T-9644

The geographic names listed below were obtained from sources as follows:

Nautical Chart No. 9380
World Aeronautical Chart (76) Seward Peninsula
U.S.G.S. Reconnaissance Map of Seward Peninsula

For this part of the project neither a geographic names report nor final names sheets were furnished the Photogrammetric Office.

<u>Belmezok</u>	(only locality: not now an inhabited
<u>Bering Strait</u>	village) not a locality
<u>Cape Prince of Wales</u>	Shown on map as
<u>Cape Mountain</u>	locality because it
<u>Lopp Lagoon</u>	is a known locality
<u>Wales</u>	SN

Names underlined in red
are approved. 11-14-51
L. Heck

49: NOTES TO THE HYDROGRAPHER: T-9644

One recoverable topographic station has been located by radial plot, namely:

✓ ANDY, 1949

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9644

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 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. Ren H. Brown
ReviewerEdward Deal Jr.
Supervisor, Review Section or Unit

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:

Review Report T-9644
Planimetric Map
28 November 1951

62. Comparison with Registered Topographic Surveys.- This is the first large scale survey of this area.

63. Comparison with maps of other agencies.-Reconnaissance Map of SEWARD Peninsula, USE, 1:500,000, 1918 Reprint 1935.

Map of SEWARD PENINSULA, Lomen Commercial Company, 1:500,000, no date.

NOME DISTRICT, Alaska Road Commission, 1:500,000, 1923 corrected to 1943.

TELLER, ALASKA, USGS, 1:250,000, Advance Proof 1951.

Some of the features of the TELLER map vary as much as a half mile in position with the same features of this planimetric map as evidenced by the discrepancy in latitude of the point of land jutting into LOPP LAGOON at $65^{\circ} 40'$ and the discrepancy in longitude of the rounded cape just below WALES at $65^{\circ} 36'$.

64. Comparison with Contemporary Hydrographic Surveys.-

H-7845	1:20,000	1950
H-7849	1:20,000	1950

Graphic control, principally hydrographic shown on plane-table PI-D-50, was established in the Wales area by theodolite and traverse and included in the above hydrographic surveys.

Shoreline, located at intervals on the above surveys, is in agreement with that compiled for this survey.

Other than horizontal control and shoreline, there is no detail common between T-9644 and the hydrographic surveys.

65. Comparison with Nautical Charts.-

Charts 9380	1:400,000	August 1951
9302	1:1,534,076	December 1950
9400	1:1,587,870	November 1950

The wide difference in scale between the above charts and the present survey precludes any adequate and significant comparison.

66. Miscellaneous.-

(a) Geographic Names - the Eskimo Village of BELMEZOK, about 4 miles north of WALES, appearing in various positions on the TELLER (USGS) map, Charts 9380 and 9302, and on the

NOME aeronautical chart was not reported during field inspection (see Photo O-117) and no signs of it are visible on photo 27968. It is recommended that this name be not charted as a village but as a general locality.

(b) FIELD INFORMATION - northeastward from CAPE PRINCE OF WALES, shoreline inspection and establishment and identification of horizontal control was accomplished and originally included in Ph-46(49). See Season Report for Ph-46(49) dated 1 March 1950 by Marvin T. Paulson.

(c) FIELD EDIT - none for surveys in this project.

(d) POLITICAL BOUNDARIES - the Territory of Alaska is divided into four judicial divisions and these are then further subdivided into districts. All of project Ph-65(50) is within the SECOND JUDICIAL DIVISION, and with the exception of T-9654 (NOME DISTRICT), all of the surveys are within the PORT CLARENCE DISTRICT.

(e) AIRSTRIPS - Two suitable landing areas for light aircraft are indicated on the aeronautical chart for NOME (76D); one along the sand beach immediately north of WALES, and the second on the south shore of LOPP LAGOON.

No information about these suitable natural landing areas was furnished by the field inspection party.

Ordinarily aeronautical charts are not included as reference information material for topographic or photogrammetric parties in continental U.S. They would, however, seem to have real usefulness to field parties where there is little information available..

(continued next page)

(f) No field information was furnished concerning the coastal trail shown around the SEWARD PENINSULA by the NOME aeronautical chart and no attempt has been made to compile this feature because it cannot be positively identified on the photographs.

(g) TRIANGULATION - pending processing of the computation data and listing as third-order triangulation on Form 28B by the Division of Geodesy, topographic station Forms 524 have been submitted for the following:

Wales, U.S. Weather Bureau, N.
House, Weathervane 1950

Wales, Thornton Memorial Chapel
Belfry 1950

Law, 1950

Wales Az. Mark, 1950

S. Gable, Green House, 1950

The above listed stations are shown with the triangulation symbol on the manuscript.

(b) SECURITY INFORMATION - geographic positions of stations in this area are "CONFIDENTIAL" and have been removed from this report to permit all other material of this survey to carry the lower classification "RESTRICTED".

Reviewed by:

L. Martin Gazik
L. Martin Gazik

APPROVED

S. J. Griffin 12/1/52
Chief, Review Section
Div. of Photogrammetry

O. S. Reading
Chief, Div. of Photogrammetry

H. B. Munster
Chief, Nautical Chart Branch
Division of Charts

Carl O. Heaton
Chief, Div. of Coastal Surveys