9650

Diag. Cht. Nos 9380 & 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. Ph-65(50) Office No. T-9650

LOCALITY

State TERRITORY OF ALASKA

General locality SEWARD PENINSULA

Locality PORT CLARENCE -SOUTH OF POINT SPENCER

1950

CHIEF OF PARTY

H.A. Karo-Ship EXPLORER- Field Party

C.W.Clark,Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE March 1 - 1954

8-1870-1 (1)

9650

DATA RECORD

T - 9650

Project No. (II): Ph-65(50) Quadrangle Name (IV): South of Point Spencer, Alaska

Field Office (II): Ship EXPLORER Chief of Party: H. Arnold Karo

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

Instructions dated (II) (III): 19 May 1950 (field)
9 November 1950 (office)

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): MAY 23 1951 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 10-7-52

Publication Scale (IV): 1:40,000 Publication date (IV): Date of issue June 1952

Geographic Datum (III): N.A. 1927 Vertical Datum (III): ~~Mean Sea Level~~ Mean High Water

~~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): CALIBRATION POINT, 1950

Lat.: Long.: Adjusted X
Unadjusted

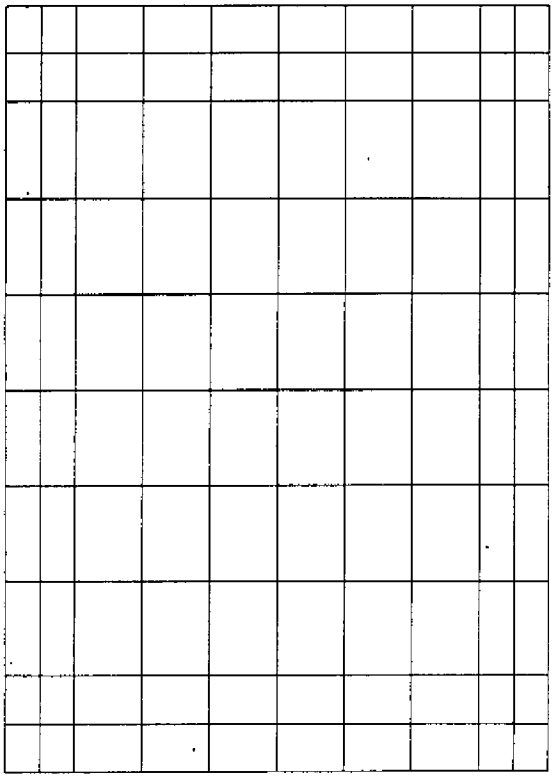
Plane Coordinates (IV): ~~State~~ Alaska Zone: 3

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.

M-2618-12(4)



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

DATA RECORD

Field Inspection by (II): E.L. Jones — Date: 5 July to 5 September 1950

Planetable contouring by (II): None — Date:

Completion Surveys by (II): None — Date:

Mean High Water Location (III) (State date and method of location): In general from measurements made in the field at triangulation, topographic, and hydrographic stations. Elsewhere as located on the field prints in numerous places and this interpretation carried forward on office photographs by analogy with the use of the stereoscope. Field season 5 July to 5 September 1950.

Projection and Grids ruled by (IV): — Date:

Projection and Grids checked by (IV): — Date:

Control plotted by (III): James L. Harris — Date: 1-31-51

Control checked by (III): R.A. Davidson — Date: 2-1-51

Radial Plot or Stereoscopic Control extension by (III): James L. Harris, Ree H. Barron and J. Edward Deal — Date: 2-20-51

Stereoscopic Instrument compilation (III):
Planimetry — Date:
Contours — Date:

Manuscript delineated by (III): Ree H. Barron — Date: 4-11-51

Photogrammetric Office Review by (III): J. Edward Deal — Date: 4-12-51

Elevations on Manuscript checked by (II) (III): None — Date:

M-2618-12(4)

Camera (kind or source) (III): U.S.C.& G.S. 9-lens focal length 8.25 inches. Camera "O" and Navy single lens.

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
27901 to 27903 Incl.	7-31-50	9:27*	1:20,000	3.0 ft. above M.L.L.W.
27905	7-31-50	9:55*	1:20,000	2.9 ft. above M.L.L.W.
27909 and 27910	7-31-50	10:06*	1:20,000	2.8 ft. above M.L.L.W.
Single lens SEW-12-073 & 074	9-1-49	Unknown	1:20,000 ratio	Unknown
" " 50-"O"-1975 to 1977 incl.	8-1-50	Unknown	1:20,000 ratio	Unknown

* It is believed that the time in effect at Port Clarence, Alaska is based on the "Time Meridian 150° West" and it is assumed that the time indicated for each photograph is on this time zone. One hour has been subtracted from the photograph time listed above before determining the stage of tide from the tide curve which is based on the "Time Meridian 165° West".

Tide (III)

	Ratio of Ranges	Mean Range	Diurnal Spring Range
Reference Station: Dutch Harbor, Alaska (Time Meridian 165° West)		2.2	3.7
Subordinate Station: Port Clarence, Alaska (Time Meridian 165° West)		1.2	1.4
Subordinate Station:			

Washington Office Review by (IV): L. Martin Gazik Date: 7-25-51

Final Drafting by (IV): M J Day Date: 11-9-51

Drafting verified for reproduction by (IV): Wm O. Hallinin Date: #6-9-52

Proof Edit by (IV): L. Martin Gazik Date: 6-10-52

Land Area (Sq. Statute Miles) (III): 9

Shoreline (More than 200 meters to opposite shore) (III): 38

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 6 Recovered: 6 Identified: 6

Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III): ~~30~~ 28

Remarks:

(*) 50-"O"-1966
-1967
-1974

Also

NOM-3 043 (field notes)
042
041
040
031
030
029
028

} date- 6-13-49; time- unknown 1:20,000 Stage of tide - unknown

SUMMARY FOR T-9650

This is one of a series of 16 planimetric ~~and 2 shoreline~~ maps at 1:20,000 scale in project Ph-65(50), covering the coastline of the SEWARD PENINSULA from CAPE DOUGLAS northward to the IKPEK LAGOON at the 66° parallel.

The planimetric survey for NOME is separate and does not adjoin the other maps in this project.

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

FIELD INSPECTION REPORT
Map Manuscript T-9650
Project Ph-65(50)

Refer to the Descriptive Report for ~~Shoreline~~ Planimetric (Photogrammetric) Survey for ~~sheets R.S.-389 to R.S.-392 inclusive Project CS-341 (1950)~~. T-9647.

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscript T-9650
Project Ph-65(50)

The photogrammetric plot report for this map manuscript is part of a combined report for T-9647 to T-9653 inclusive and is included in the Descriptive Report for T-9647.

COMPILATION REPORT
Map Manuscript No. T-9650
Project Ph-65(50)

31: DELINEATION:

Graphic methods were used for the compilation of this map manuscript.

The field inspection on the photographs was limited to the high water line and photo interpretation immediately adjacent to the shorelines. In addition, prints of sheets RS-389 to RS-392 incl., Project CS-341, showing field edit in the area, were used to supplement the field inspection. Numerous horizontal photographs were also furnished which assisted the compilers in visualizing the character of the planimetry existing in the area.

The compilation work was at first limited to the location of the mean high water line, topographic and hydrographic stations in the area of T-9647 to T-9653 incl. When this work was complete the map manuscripts were forwarded to the Seattle Processing Office so that this data could be used in processing the hydrographic surveys in the area. Upon return of the map manuscripts to the Portland Photogrammetric Office the interior details were compiled.

~~All planimetric details have been shown to the extent of the limits of detailing indicated on air photo indexes B-18 and B-19 Project Ph-65(50).~~

32: CONTROL:

The horizontal control stations were well identified and the placement and density were satisfactory. Refer to side headings 22 and 23 of the Photogrammetric Plot Report which is included with the Descriptive Report for T-9647 for additional facts.

33: SUPPLEMENTAL DATA:

Refer to paragraph 2 of Item 31 of this report.

34: CONTOURS AND DRAINAGE:

Contours are not applicable.

In general the drainage has been delineated by stereoscopic examination of the photographs.

35: SHORELINE AND ALONGSHORE DETAILS:

Along the narrow spit at the west shore of Port Clarence the mean high water line was located from measurements made in the field at hydrographic, topographic and triangulation stations. Elsewhere the high water line was indicated on the field prints at various places and this location was delineated on the office photographs by use of the stereoscope and then compiled.

The mean high water line along the narrow spit running northeasterly from Jones Point was located from measurements made in the field at stations VIA and TUB and by office delineation of the photographs by use of the stereoscope.

Some approximate shoal lines were indicated on the original compilation of sheet RS-389 Project CS-341 but since the hydrography in the area has been completed since this sheet was drawn, these approximate ~~shoal~~ shallow lines have ~~not~~ been ~~detailed.~~ recompiled.

36: OFFSHORE DETAILS:

~~There were no offshore details indicated by field inspection and none were observed by office examination of the photographs.~~
See Item 64 of the Review Report page 15.

37: LANDMARKS AND AIDS:

Refer to Item 9 "Landmarks and Aids" of the Descriptive Report for shoreline manuscripts RS-389 to RS-392 incl., Project CS-341(1950).

38: CONTROL FOR FUTHRE SURVEYS: *

The field party identified either directly or by sub station method 30 photo hydro stations to be located by radial plot. For several of these stations sextant fix locations were submitted which were used to verify the stations as located by radial intersections.

Sextant fix locations which verified the radial intersection location were for stations: VAN, AXE, FIG, HEX, KIM, and PET.

The sextant fix for station OWL did not verify the radial intersection location. Remarks by Lt. Comdr. E.L. Jones concerning this station are attached to a pricking card on which the sextant fix is entered and which is submitted with the map manuscript.

Difficulties were encountered in locating stations HUT, TUB, and VIA by the sextant fix furnished by the field party for each of these stations. Duplicate pricking cards of the stations, outlining these difficulties on the reverse side, were submitted to Lt. Comdr.

* Hydrographic surveys for this area were completed before review and therefore the hydro signals are not shown on the published map although they have been retained on the manuscript for T-9650.

E.L. Jones for clarification. The original and duplicate cards, with remarks entered by Lt. Comdr. E.L. Jones, are being submitted with the map manuscript.

Some minor discrepancies were noted in the data on the pricking cards for the locations of COD, HUM, and RAG, by the sub station method. These discrepancies were brought to the attention of Lt. Comdr. E.L. Jones, in the same manner as described above, and it is believed that he has satisfactorily clarified the data on the pricking cards.

Refer to side heading 11, "Other control" of the Descriptive Report for Shoreline Sheets RS-389 to RS-392 incl., Project CS-341 (1950) for additional facts.

A list of photo hydro stations has been prepared and included in paragraph 49. No adequate descriptions were available.

39: JUNCTIONS:

Complete and satisfactory junctions have been made with adjoining map manuscripts.

40: HORIZONTAL AND VERTICAL ACCURACY:

Refer to side heading 22 and 23 of the Photogrammetric Plot Report which is included in the Descriptive Report for T-9647.

Vertical accuracy is not applicable.

46: COMPARISON WITH EXISTING MAPS:

A visual comparison was made with U.S.G.S. reconnaissance map of Seward Peninsula, Scale, 1:509,000 edition of 1913 reprinted 1935.

47: COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with nautical chart No. 9385, Scale 1:80,000, 4th edition of September 1946, hand corrected, March 13, 1950.

A visual comparison was made with nautical chart No. 9380, Scale 1:400,000, 6th edition 1914, hand corrected November 13, 1950.

Items to be applied to Nautical charts immediately:

None

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

Respectfully submitted:
J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer

48: GEOGRAPHIC NAMES LIST:

Unless otherwise noted the following geographic names were obtained from recommendations by the Ship EXPLORER shown on a copy of Nautical Chart No. 9385 which is attached to Descriptive Report RS-389, 390, 391 and 392.

T-9650

Bering Sea
Nickle Creek
Port Clarence
Seward Peninsula
Alaska
Jones Point

Names underlined in red are approved.
7-23-51 L. Heck

49: NOTES FOR THE HYDROGRAPHER:

Photo hydro stations shown on this map manuscript are as follows:

ART
AXE
BEN
BUG
COD
FAT
FIG
GAR
GEM
HEX
HUT
HUM
KIM
LIZ
NOD
~~NOX~~
OWL
PAL
PET
RAG
RAT
SIR
SON
TUB
VAN
VIA
VIM
WAG
WEE
~~WHO~~
~~WOW~~

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-9650

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. 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. Rex H. Barrow — Reviewer

Edward 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:

M-2623-12

REVIEW REPORT T-9650
Planimetric Map
July 25, 1951

62. Comparison with Registered Topographic Surveys

T-2523	1:40,000	1900

Except for the horizontal datum difference in longitude, no important changes were noted.

For a discussion of the shallow area see Item 64 below.

63. Comparison with Maps of Other Agencies

Reconnaissance Map of Seward Peninsula, U.S.G.S., 1:500,000, 1918 Reprinted 1935.

Teller, Alaska, U.S.G.S., 1:250,000, Advance Proof 1951.

Map of Seward Peninsula, Lomen Commercial Company; 1:500,000, no date, - a source for geographic names.

Nome District, Alaska Road Commission, 1:500,000, 1923 corrected to 1943.

64. Comparison with Contemporary Hydrographic Surveys *Because of the large scale difference, a comparison is not practicable.*

H-7836	1:20,000	1950

Sand bars in the shallow area, shown on H-7836, were obtained from this survey, T-9650, before review.

The positions of the three most westerly sand bars, as now shown - about 4 mm. east of the originally compiled positions, were determined by four and five radial plot intersections. *H-7836 revised 3/4/53-GFU.*

The position of the channel opening into the shallow area was determined by four radial plot intersections to a definite point visible in the shoal area just below the channel opening.

The channel passage and shallow line are definitely visible on the photographs in this area. *(Delineated on H-7836 by 6-ft. curve)-GFU.*

65. Comparison with Nautical Charts

Charts	9385	1:80,000	January 1949
	9380	1:400,000	September 1950
	9302	1:1,534,076	December 1950
	9400	1:1,587,870	November 1950

66. Miscellaneous

(a) VEGETATION - although there are no forests in this subarctic region, this area is covered with a growth of mosses, lichens and some thickets which during the first of the thaw in June and July is essentially marsh. Only areas that are considered to be marsh during the entire period of the short summer season have been so delineated after office interpretation.

(b) RS-389, 390 and 392, partially controlled, were compiled as preliminary shoreline surveys for this project.

(c) FIELD EDIT - was not a separate or complete operation but more in the nature of a check of the compilation of RS-389, 390 and 392. See Item 51 of the Photogrammetric Field Report included in Descriptive Report T-9647

(d) TRIANGULATION - third order triangulation station, CALIBRATION PIPE, 1950, plots offshore. For verification of this condition see GH-6-8792, VOL. II. A description of the station is not presently published.

(e) CLASSIFICATION - DECLASSIFIED 3/2/54 LWS geographic positions in this area are classified "CONFIDENTIAL" and have been removed from this report. All other material of this survey has been classified "RESTRICTED".

67. Adequacy of Manuscript

This survey complies with project instructions and the National Standards of Map Accuracy.

Reviewed by:

L. Martin Gazik

Approved:

S. V. Griffith 11/25/53
Chief, Review Section
Div. of Photogrammetry

H. M. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Earl O. Hopkins
Chief, Div. of Coastal Surveys