9577

Diag. Cht. No. 9302

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-53 (49) *Office No.* T-9577

LOCALITY

State ALASKA

General locality ST. LAWRENCE ISLAND

Locality PUNGOKOSIT SPIT

194 50

CHIEF OF PARTY

F.A.Riddell,Chief of Field Party.

H.A.Paton,Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

9577

DATA RECORD

T - 9577

Project No. (II): Ph-53(49) Quadrangle Name (IV):

Field Office (II): Portland, Oregon Chief of Party: Fred A. Riddell

Photogrammetric Office (III): Baltimore, Md. Officer-in-Charge: Hubert A. Paton

Instructions dated (II) (III): 4 May 1950, supplemented by letter dated 29 March 1951 from Acting Director to Comdr. Hubert A. Paton

Copy filed in Division of Photogrammetry (IV)

Office Files

Method of Compilation (III): Air photographic (Multiplex)

Manuscript Scale (III): 1:20,000 Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 5-22-51 Date reported to Nautical Chart Branch (IV): May 29, 1951

Applied to Chart No. Date: Date registered (IV): 1-30-53

Publication Scale (IV): 1:25,000 Publication date (IV):

Geographic Datum (III): NA 1927 (Unadjusted) Vertical Datum (III): 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 lower low water
shoreline at MHW

Reference Station (III): NASKOK EAST BASE, 1950

Lat.: Long.: Unadjusted
~~Unadjusted~~

Plane Coordinates (IV): UTM grid State: Alaska Zone: 2

~~XX~~= NORTHING ~~XX~~= EASTING

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)

(1)

DATA RECORD

Field Inspection by (II): Ray H. Skelton II
Jack S. Chamberlain
Victor E. Serena
Sheridan D. Jones
Robert S. Tibbetts

Date: June 1950

Planetable contouring by (II): None

Date: —

Completion Surveys by (II): None

Date: —

Mean High Water Location (III) (State date and method of location):
Sept. 24, 1948 (Same as date of photography)

Projection and Grids ruled by (IV): T.L.J.

Date: Nov. 1950

Projection and Grids checked by (IV): R.S.

Date: Nov. 1950

Control plotted by (III): R.S.

Date: Dec. 1950

Control checked by (III): S.W.Trow

Date: Dec. 1950

Horizontal and vertical
Stereoscopic
Control extension by (III): A. K. Heywood

Date: Feb. 1951

Stereoscopic Instrument compilation (III):
Planimetry A. K. Heywood Date: Feb. 1951
Contours A. K. Heywood Date: Feb. 1951

Manuscript delineated by (III): C. A. Lipscomb

Date: March 1951

Photogrammetric Office Review by (III): A. K. Heywood

Date: April 1951

Elevations on Manuscript checked by (II) (III): A.K.Heywood

Date: April 1951

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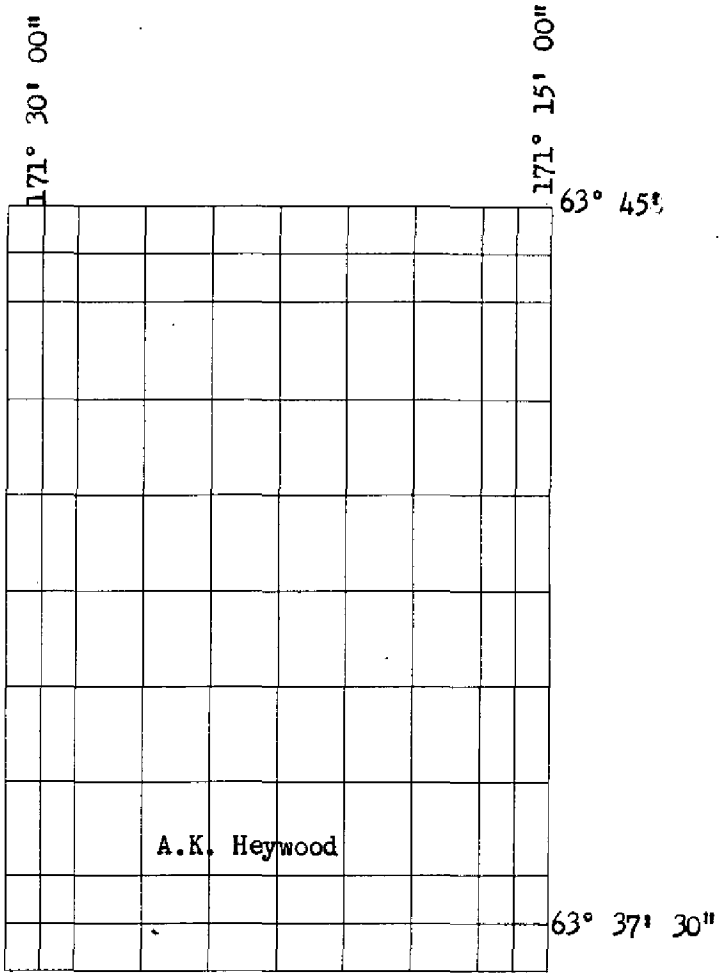
(3)



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

(4)

Camera (kind or source) (III):

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
STL 11 - 101 - STL 11-105	8-24-48		1:20,000	(No time of photo available)

Tide (III)

From Predicted table of tides

Reference Station: DUTCH HARBOR

Subordinate Station: ST. LAWRENCE ID., ALASKA.

Subordinate Station:

Diurnal

Ratio of Ranges	Mean Range	Spring Range
	2.2	3.7
0.5	1.3	1.9

Washington Office Review by (IV): Everett H. Ramey Date: 13 Aug 1952

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 2

Shoreline (More than 200 meters to opposite shore) (III): 5

Shoreline (Less than 200 meters to opposite shore) (III): 5

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): Recovered: * Identified: 1

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

Number of Recoverable Photo Stations established (III): 1

Number of Temporary Photo Hydro Stations established (III): 0

Remarks:

* This figure given by compilation office

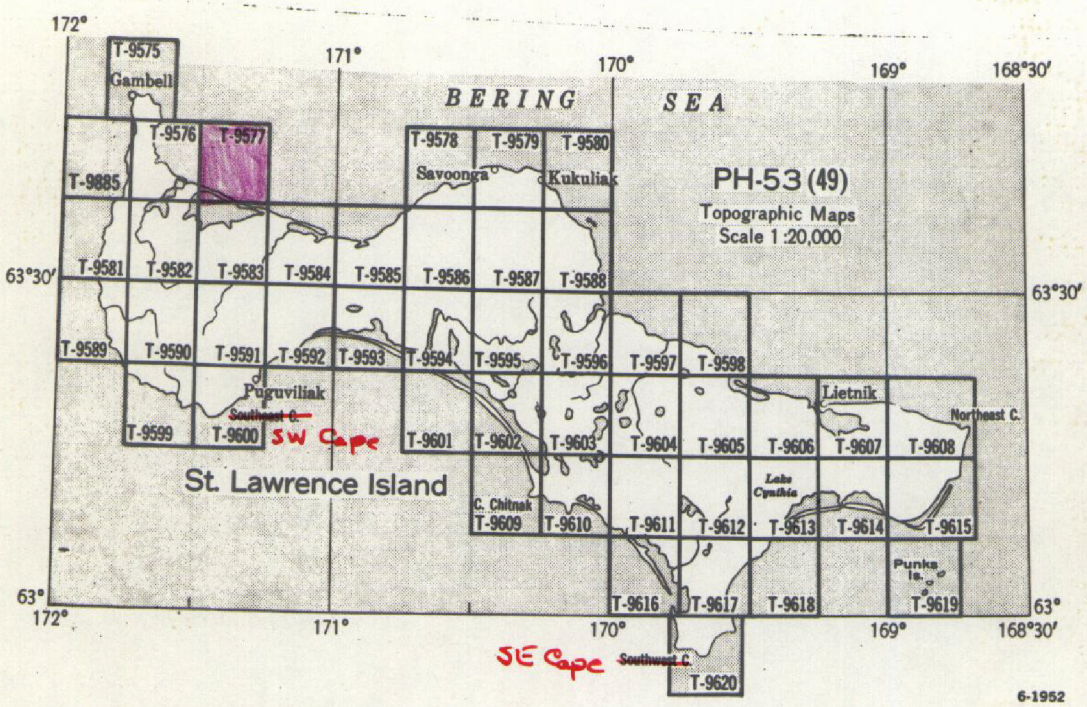
M-2618-12(4)

(5)

TOPOGRAPHIC MAPPING PROJECT PH-53

ALASKA - Bering Sea, St. Lawrence Island

Compiled by the U. S. Coast and Geodetic Survey at scale of 1:20,000 from U. S. Navy 1:20,000 scale single-lens photographs taken August 1948.
(Refer to U. S. Navy mosaic index)



OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Sq. Miles Area	Sheet No.	Sq. Miles Area	Sheet No.	Sq. Miles Area
T-9575	7	T-9590	67	T-9605	64
T-9576	39	T-9591	67	T-9606	49
T-9577	2	T-9592	52	T-9607	39
T-9578	16	T-9593	42	T-9608	33
T-9579	36	T-9594	56	T-9609	3
T-9580	7	T-9595	66	T-9610	40
T-9581	24	T-9596	64	T-9611	64
T-9582	63	T-9597	41	T-9612	66
T-9583	60	T-9598	16	T-9613	53
T-9584	56	T-9599	21	T-9614	38
T-9585	50	T-9600	28	T-9615	45
T-9586	67	T-9601	2	T-9616	12
T-9587	67	T-9602	31	T-9617	54
T-9588	53	T-9603	65	T-9618	5
T-9589	18	T-9604	65	T-9619	1
				T-9620	19
				T-9885	3
				TOTAL	1836

SUMMARY FOR T-9577

This topographic survey is one of a series of 49 quadrangles, each $7\frac{1}{2}$ minutes in latitude and 15 minutes in longitude at 1:20,000 scale that cover ST. LAWRENCE ISLAND, ALASKA.

This BERING SEA island is approximately 100 miles long and averages 20 miles in width and has not been previously mapped at this large scale.

ST. LAWRENCE ISLAND is within the CAPE NOME DISTRICT of the SECOND JUDICIAL DIVISION.

The maps of this island are to be published at 1:25,000 scale by the Army Map Service.

For information concerning the project in its broader aspects see the project completion report which will include, among other items, two detailed field reports - a preliminary report dated 21 September 1950 and a project report dated June-September 1950 - both submitted by Fred A. Riddell.

The registered data to be permanently filed in the Bureau Archives under T-9577 will include a cloth-mounted lithographic print of the map manuscript at 1:20,000 scale together with a cloth-mounted published color print at 1:25,000 scale and the original descriptive report.

COMPILATION REPORT FOR T-9577

FIELD INSPECTION REPORT

Refer to project report, part 1, bound under separate cover.

PHOTOGRAMMETRIC PLOT REPORT

This report was submitted with the descriptive report for Survey T-9575, filed as part of that report and covers Surveys T-9575 to T-9577.

31. DELINEATION

Refer to photogrammetric plot report for quadrangles T-9575 to T-9577, item 22. See above.

32. CONTROL

Refer to photogrammetric plot report for quadrangle T-9575 to T-9577, item 23. See above.

33. SUPPLEMENTAL DATA

None. See sub-heading 49

34. CONTOURS AND DRAINAGE

Complete.

35. SHORELINE AND ALONGSHORE DETAILS

The MHW line was delineated by the multiplex with the aid of "ticks" furnished by the field party on the contact photographs.

36. OFFSHORE DETAILS

None.

37 LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

1 Form 524 is submitted with this report.

This station was located by multiplex

A list of recoverable topographic stations is included in paragraph 49 of this report.

39. JUNCTIONS

Junctions have been made to the west with Survey T-9576 and to the south with Survey T-9583. There are no contemporary surveys to the north and east.

40. HORIZONTAL AND VERTICAL ACCURACY

This subject is fully discussed in the photogrammetric plot report for T-9575 - T-9577 inclusive, filed as part of Descriptive Report for T-9575

46. COMPARISON WITH EXISTING MAPS

Comparison was made with USGS map, scale 1:250,000, printed in 1949.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 9302, scale 1:534,076 at Lat. 60° 00', published in July 1945 and corrected to August 29, 1949.

Items to be applied to nautical charts immediately:

None.

Items to be carried forward:

None.

After completion of hydrographic surveys the map should supersede all previous charts.

Respectfully submitted

A. K. Heywood

Albert K. Heywood
Cartographic Photo. Aid

Approved and forwarded
12 June 1951

Hubert A. Paton

Hubert A. Paton
Comdr., C&GS
Officer in Charge

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ — STRIKE OUT ONE

Baltimore, Maryland — March 30, 1951

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by Albert K. Heywood

Albert K. Heywood

Hubert A. Paton — *Chief of Party.*

STATE / CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CABIN	Northeast gable of cabin (westerly of two	PUK	63 39	241	171 30	292	St.Law.Id. (Gambell) Astrolabe	Photo Plot	1950				9302
				Corrections to NAD 1927 datum.									
				Latitude: −4.″19									
				Longitude: −70.″60									
													1-0

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by

Form T-2

50 PHOTOGRAMMETRIC OFFICE REVIEW

T-9577

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. _____ Reviewer

_____ 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

48. GEOGRAPHIC NAME LIST

Bering Sea
Niyrakpak Lagoon
Pungokosit Spit
St. Lawrence Island

Names underlined in red are approved. 8-11-72
L. Heck

49. NOTES FOR THE HYDROGRAPHER

The following is a list of recoverable topographic stations:

SAND, 1950.(*)

Special attention is called to the special volume part 2 of the Project Report containing "jumbo" size prints of topographic and hydrographic stations prepared for the use of the hydrographic party.

(*) Form 524 for this station gives the position on the St. Lawrence Island (Gambell) Astrolabe datum. Position on registered copy on NAD27.

REVIEW REPORT
Topographic Map T-9577
13 August 1952

62. Comparison with Registered Topographic Surveys:

T-2337 ~~1:1,100,000~~ 1898

The above
~~This~~ is a ~~copy of a~~ sketch by an Eskimo. There were no prior surveys by this Bureau.

63. Comparison with Maps of Other Agencies:

St. Lawrence, Alaska 1:250,000 1949
(Reconnaissance quadrangle, USGS)
Comparison satisfactory considering difference in scale.

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

9302 1945 corrected 51-10/1 Scale 1: 1,534,076
Scale difference precludes detailed comparison.

66. Adequacy of Results and Future Surveys:

No accuracy tests were run for T-9577. This survey meets the National Standards of Map Accuracy and complies with the project instructions.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

Approved:

S V Griffith 4/14/53
Chief, Review Section
Division of Photogrammetry

H R Edmonston
Chief, Nautical Chart Branch
Division of Charts GFH

O B Reading
Chief, Div. of Photogrammetry
RLS

Earl O Heaton
Chief, Div. of Coastal Surveys
HR 7