

11091

Diag. Cht. Nos. 8802 and 8859.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline (photogrammetric)

Field No. Ph-40 Office No. T-11091

LOCALITY

State Alaska

General locality Port Moller

Locality Nelson Lagoon

1942-50

CHIEF OF PARTY

J.H.Brittain, Chief of Field Party
E.H.Kirsch, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE May 15, 1958

B-1870-1 (1)

11091

DATA RECORD

T-11091

Project No. (II): Ph-40(49)

Quadrangle Name (IV):

Field Office (II): Portland, Oregon

Chief of Party: J. H. Brittain

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: E. H. Kirsch

Instructions dated (II) (III):

Office: 16 Dec. 1952

29 Nov. 1954

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): 1.000

MAR 28 1955

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 18 Sept 1957

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927 (Unadjusted)
To adjust to N.A. 1927 projection and
grid to be moved 4.00 meters south,

Vertical Datum (III): MHW

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): MINOR, 1950

Lat.: 55° 58' 04.374" (135.3m)

Long.: 161° 07' 47.948" (831.8m)

Un Adjusted
Unadjusted

Plane Coordinates (IV):

State: Alaska

Zone:

No. 4

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): I. Zirpel, Jr.

Date: June to Sept. 1950

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): Office identification on photos dated July & Aug. 1952, based on field inspection.

Projection and Grids ruled by (IV): S. Rose

Date: 1/2/53

Projection and Grids checked by (IV): H. D. Wolfe

Date: 1/5/53

Control plotted by (III): G. E. Varnadoe

Date: 1/7/55

Control checked by (III): A. Queen

Date: 1/11/55

Radial Plot ~~by (III)~~ ~~Stereoscopic~~

Date: 1/17/55

~~Control Extension~~ by (III): A. Queen

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): J. B. Phillips
J. Honick

Date: 2/16/53
2/25/55

Photogrammetric Office Review by (III): R. Glaser

Date: 3/4/55

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

Date:

Camera (kind or source) (III): U.S.C. & G. S. - Nine lens

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide		
		Time					
10809	9/2/42	1318		1:20,000	6.6	above	MLLW
14210	6/9/43	1312		"	6.1	"	"
14276 to 14279	"	1442		"	6.7	"	"
38465 to 38467	7/23/52	1706		"	1.8	"	"
38676 to 38678	8/13/52	1624		"	12.1	"	"

Tide (III)

From Predicted Tables

Reference Station: Nushagak Bay
Subordinate Station: Port Moller (Entrance Point)
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	15.2	19.5
*	7.5	10.6

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 12

Shoreline (More than 200 meters to opposite shore) (III): 56 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 2 mi.

Control Leveling - Miles (II): none

Number of Triangulation Stations searched for (II): **

Recovered:

Identified:

Number of BMs searched for (II): none

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III): 4

Remarks:

*Ratio of Ranges at Port Moller:

0.6 high tide

0.9 low tide

**Ten (10) stations established and identified.

PHOTOGRAMMETRIC PLOT REPORT
Project Ph-40
Survey T-11091

21. AREA COVERED

This radial plot covers the area of survey T-11091, a shoreline survey of Nelson Lagoon, near Port Moller, Alaska. This radial plot joins Project Ph-92, Survey T-11465.

22. METHOD - RADIAL PLOT

Map manuscripts:

A vinylite sheet, with polyconic projections in black and U.T.M., Alaska, grid in red, at a scale of 1:20,000, was furnished by the Washington office.

All control stations and substitute stations were plotted using the beam compass and meter bar.

A sketch, showing the layout of surveys, distribution of control, and photograph centers, is attached to this report.

Photographs:

The following ten (10) nine-lens photographs, scale 1:20,000, were used in this radial plot:

14276 thru 14279
38465 thru 38467
38676 thru 38678

Templets:

Vinylite templets were made from all 1952 photographs using a master templet to correct for error due to film and paper distortion. Uncorrected templets were made from photographs 14276 thru 14279.

Closure and Adjustment to Control:

The radial plot was constructed on vinylite base sheets on which all control points had been transferred from map manuscripts, T-11465 and T-11091.

The radial plot was started at the northeastern corner of the survey and extended just beyond the western limits of survey T-11091 to tie into control stations SURF, 1950 and CARIBOU, 1950 in Survey T-11465, Project Ph-92. In the area around these stations a junction was made with the radial plot completed by personnel of the Portland Photogrammetric office in Survey T-11465. It was necessary to change the position of several pass points and photograph centers established by the Portland radial plot in this area. These changes resulted in a satisfactory junction. A complete explanation of what was done in Baltimore was given in a letter sent to Portland. A copy of this letter is attached to this report.

The radial plot laid in Baltimore held all control stations and was a satisfactory and rigid plot.

22. METHOD - RADIAL PLOT (cont'd)

Transfer of Points:

The map manuscript was laid over the completed radial plot and after adjusting to control, all photogrammetric points were pricked on the manuscripts.

23. ADEQUACY ON CONTROL

The control identified was adequate for obtaining a satisfactory radial plot.

Station FRANK, 1950 was not used because of clouds on all photograph coverage of that station.

24. SUPPLEMENTAL DATA

No supplemental data was used in this radial plot.

25. PHOTOGRAPHY

The photographic coverage was adequate for a satisfactory plot. Four (4) photographs were used having no fiducial marks. There was no master templet to correct for errors due to paper and film distortion of these photographs. Clouds on some photographs prevented our use of station FRANK, 1950 in this radial plot.

Respectfully submitted
7 March 1955

Albert Queen, Jr.
Albert Queen, Jr.
Cartographic Aid (Photo.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Balto. Photo. Office

POST-OFFICE ADDRESS: 518 East 32nd St., Baltimore 18, Maryland

TELEGRAPH ADDRESS:

11 February 1955

EXPRESS ADDRESS:

To: Comdr. Fred Natella,
U. S. Coast and Geodetic Survey,
405 Custom House,
Portland 9, Oregon

Subject: Junction, Projects Ph-40 and Ph-92

This office has completed the radial plot of Project Ph-40, tying in satisfactorily in the area of control stations SURF, 1950 and CARIBOU, 1950 in Survey T-11465, Project Ph-92. However, east of station SURF, 1950, it was necessary to move several pass points and photo centers 38465 and 38466, established for the control of survey T-11465, Project Ph-92, in order to assure getting a good junction with Project Ph-40. This office held all control stations which resulted in a rigid plot.

In the junction area this office utilized photograph 38467, which evidently was not available to you for use in your plot, materially strengthening our plot and which caused the movement of the several pass points and photo centers. It was noted that the movement, radially eastward, is toward RUBY, 1950, which was used as a tie-in your plot with slim cuts from the corners of only two photographs. Control station KRAFT, 1950, was marked "very poor" on these same two photographs and not having photograph 38467, and also with the large water areas, the positions of the pass points furnished for junctioning were evidently weak.

Three new pass points were established at the junction 161° 20' and shown on T-11465, along with photo center for 38467 and new positions for the several pass points that were moved. None of your circles were removed, but new positions are indicated by temporary blue circles on face of map manuscript (Craftint No. 111 blue ink). The positions of new pass points were circled in red on your photos.

A small area of our delineation has been indicated on T-11465, so that your delineation can join Survey T-11091 in Ph-40. Map manuscript T-11465 is being returned to you with field and office photos. Also, included are all original identification cards and Forms 524; for control, recoverable topographic stations, vertical control points and hydrographic signals which we have west of the junction at 161° 20'. Field photo. 14276, has considerable field inspection on both sides of the junction and will be returned to you later next week, after use for delineation of T-11091. Office photo. 38467 can, also, be made available to you for delineation at that time.

E. H. Kirsch,
Comdr. USC&GS
Officer in Charge

encl.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T 11091

PROJECT NO

Pb-40

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
MINOR, 1950	G-10049 p. 287	N.A. 1927	55	58	04.374			FORWARD	(BACK)	FORWARD	(BACK)
			161	07	47.948			135.3	(1720.4)		
Sub. Pt. MINOR, 1950	Comp.	"	55	57				831.8	(209.0)		
			161	07				1571.8	(283.9)		
FRANK, 1950	G-10049 p. 282	"	55	54	12.932			729.4	(311.4)		
			161	05	52.830			400.0	(1455.7)		
Sub. Pt. "A" FRANK, 1950	Comp.	"	55	54				917.9	(124.6)		
			161	05				389.3	(1466.4)		
Sub. Pt. "B" FRANK, 1950	"	"	55	54				903.5	(139.0)		
			161	05				362.3	(1493.4)		
NELSON, 1950	G-10049 p. 283	"	56	00	39.923			913.0	(129.5)		
			161	07	49.103			1234.8	(620.9)		
YARD, 1950	G-10049 p. 288	"	56	00	05.928			850.8	(188.8)		
			161	12	05.152			183.3	(1672.4)		
NELSON LAGOON NO. 37 (U.S.A.F.) 1950	G-10049 p. 292	"	55	59	59.771			89.3	(950.6)		
			161	12	08.091			1818.7	(7.0)		
RUBY, 1950	G-10049 p. 283	"	55	58	48.361			140.2	(899.7)		
			161	18	26.062			1495.8	(359.9)		
HILL, 1950	G-10049 p. 290	"	55	57	54.294			451.9	(588.6)		
			161	01	17.450			1679.3	(176.4)		
Sub. Pt. HILL, 1950	Comp.	"	55	57				302.7	(738.2)		
			161	01				1561.2	(294.5)		
∞			55	57				236.9	(804.0)		
			161	01							

1 FT. = 3048006 METER

COMPUTED BY J. Steinberg

DATE 2/2/55

CHECKED BY G. E. Varnadoe

DATE

2/4/55

COMM. DC-57843

SCALE FACTOR

3

COMPILATION REPORT
Project Ph-40
Survey T-11091

A 1953 Descriptive Report is available for delineation in the vicinity of Port Moller done previously in 1953.

For the Field Report, refer to Project Report, Aerial Photograph Control and Inspection, North Shore, Alaska Peninsula, Project Ph-40(49) June - September 1950.

31. DELINEATION

Graphic methods were used to delineate this manuscript.

All delineation east of Longitude 161° 03' was done previously in 1953.

The approximate locations of the centers of the field photos used for delineation but not used in the radial plot are shown with broken circles.

The MLLWL on this manuscript is incomplete due to insufficient low water photography.

32. CONTROL

Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate except as discussed below. The MHWL was delineated from photos taken in 1952, based on field inspection on the old photos dated 1942 - 43.

In the area of the Kudobin Islands, an approximate MHW line was sketched by the field party (refer to page 10 of the Field Report). Some parts of this line seem to be unchanged on the new photos and are shown on the manuscript as a definite MHW line. The remainder of the islands were outlined on the new photos and the approximate MHW line symbol was used.

48. GEOGRAPHIC NAMES LIST

Alaska Peninsula

Big Hill

Cape Rozhnof

Frank Creek

* Franz Point

Kritskoi Island (Arp Island)

Kudobin Islands

** Lagoon Point

Miner Hill

Mud Bay

Nelson Lagoon

Nelson Lagoon Cannery

Trap House Hills

*Names approved
5-2-57
ALW*

* Source: Field Photo. 14215

** Source: Chart No. 8802

35. SHORELINE AND ALONGSHORE DETAILS (cont'd)

No low water line was furnished by the field party. The approximate low water lines that appear on the manuscript were delineated by office interpretation.

Where there appeared to be additional areas of interest to the hydrographic party beyond the low water line, they were indicated as shallow areas.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Form 567 is being submitted for three landmarks recommended by the field party.

38. CONTROL FOR FUTURE SURVEYS

A list of photo-hydro stations, with descriptions, is included in paragraph 49.

39. JUNCTIONS

Junctions have been made and are in agreement with T-11093 to the south and T-11092 to the east. The junction to the west was ticked on the manuscript for T-11465 (Ph-92) before it was forwarded to the Portland Photogrammetric office.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report.

41 - 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

None were available at this office.

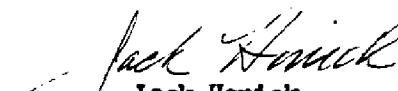
47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart No. 8833, scale 1:79,798, published Feb. 1917, corrected to June 11 1954; Chart No. 8859, scale 1:300,000; published May 1954 (2nd Edition), corrected to October 9, 1954; Chart No. 8802, scale 1:1,023,188, published December 1952 (18th edition), corrected to November 27, 1954.

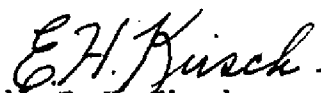
Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
25 February 1955


Jack Honick,
Carto. Photo. Aid

Approved and Forwarded


Comdr. E. H. Kirsch,
Chief of Party,
Baltimore Photo. Office

49. NOTES TO HYDROGRAPHER

The following hydrographic stations were established:

No. 217 - N. E. gable of lone cabin.

No. 226 - N. E. gable and radio mast of most northerly building on point.

No. 227 - S. gable of house

No. 228 - N. gable of most northerly building on cannery pier.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11091

1. Projection and grids ✓ 2. Title ✓ 3. Manuscript numbers ✓ 4. Manuscript size ✓

4a. Classification label ✓

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ✓ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) none 7. Photo hydro stations ✓ 8. Bench marks none 9. Plotting of sextant fixes none 10. Photogrammetric plot report ✓ 11. Detail points ✓

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 14. Rocks, shoals, etc. ✓ 15. Bridges none 16. Aids to navigation none 17. Landmarks ✓ 18. Other alongshore physical features ✓ 19. Other along-shore cultural features none

PHYSICAL FEATURES

20. Water features ✓ 21. Natural ground cover ✓ 22. Planetable contours none 23. Stereoscopic Instrument contours none 24. Contours in general none 25. Spot elevations none 26. Other physical features none

CULTURAL FEATURES

27. Roads none 28. Buildings ✓ 29. Railroads none 30. Other cultural features none

BOUNDARIES

31. Boundary lines none 32. Public land lines none

MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay none 37. Descriptive Report ✓ 38. Field inspection photographs ✓ 39. Forms ✓

40. P. Glaser Joseph Steinberg
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

STRIKE OUT ONE

25 February 1955

NONFLOTTING/AFDS/OR LANDMARKS FOR CHARTS

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

The positions given have been checked after listing by R. Claser

(Signed) E. H. Kirsch
E. H. Kirsch

Chief of Party.

[illegible]

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 individual field survey sheets. Information under each column heading should be given.

Review Report of Shoreline Surveys
T-11091, 11092, 11094, 11095, 11096, 9573, 11563, 11571
(see accompanying Index)
May 1957

62. Comparison with Registered Topographic Surveys

T-3089	1:20000	1910
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Shoreline and foreshore features have changed considerably since this survey of 1910 and is superceded by T-~~973~~ ⁹⁵⁷³ of common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

PORT MOLLER, ALASKA 1:250000 1953 U.S. Geological Survey, Agreement is as good as scale differences permit.

64. Comparison with Contemporary Hydrographic Surveys:

H-8224	1:20000	1955
H-8225	1:20000	1955
H-8226	1:20000	1955
H-8227	1:20000	1955
H-8228	1:20000	1955

Subject Shoreline Surveys furnished shoreline, foreshore and off-shore detailing for afore-mentioned hydrographic surveys prior to review. Only limits of shallow and shoal limits were altered in some instances to fit the hydrographic information. A few additions and ~~changes~~ ^{changes} were applied to the shoreline manuscripts during review; however, these did not interfere with corresponding hydrographic surveys or were resolved.

65. Comparison with Nautical Charts:

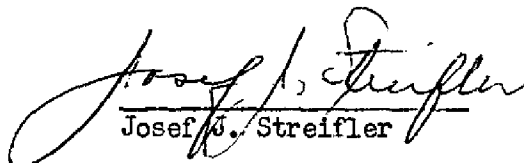
8833	1:80000	1956	(30 April)
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For the fifth Edition of this nautical chart subject shoreline manuscripts were used in it's recompilation and there is complete agreement except for scale.

66. Adequacy of Results and Future Surveys:

Control and Field Inspection for these shoreline surveys are adequate also for nautical chart purposes. No inaccuracies were indicated.

Reviewed by:


Josef A. Streifler

~~Reviewed by: (cont)~~

APPROVED:

Max L. Keltz
Chief, Nautical Chart Branch

R. C. Lande
Chief, Review and Drafting
Section, Photogrammetry Division

W. J. Smith
Chief, Coastal Surveys

Art J. Buehl
Chief, Photogrammetry Division

Summary to accompany Shoreline Surveys
T-11091, 11092, 11094, 11095, 11096, 9573, 11563, 11571

These eight shoreline surveys are in the vicinity of Port Moller, Bristol Bay, Alaska, and represent the southernmost portion of Project 25020--Ph 40--(below 56° of latitude). The accompanying index shows the subject shoreline surveys also in relation to adjoining Project 27160. Limits of T-11096 and T-11571 were changed with effected sheets of Project 27160 to form common junctions. A small portion of shoreline and adjacent marsh area in the northeast corner of T-11093 represented all detailing on that manuscript. This information was transferred to T-11094 and T-11093 has been dropped.

Final "Cronar" film positives of these manuscripts as well as the descriptive report will be filed in the Bureau Archives.

PLANIMETRIC MAPPING PROJECT 6040 25020

ALASKA, Port Moller to Egegik Bay

To accompany Review Report with T-11091

