

T-12649

T-12649

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT <i>PH-6709</i>	
Type of Survey <u>SHORELINE (PHOTOGRAMMETRIC)</u>	
Field No. <i>Edition No. 1</i> Office No. <u>T-12649</u> <i>Field Edited Map</i>	
LOCALITY	
State	<u>ALASKA</u>
General locality	<u>ORCA INLET</u>
Locality	<u>SHEPARD POINT</u>
<u>1964-1966</u>	
CHIEF OF PARTY	
CHIEF OF PARTY	<u>H. J. SEABORG</u>
COMPILATION OFFICE	<u>P. A. STARK</u>
LIBRARY & ARCHIVES	
DATE	_____

DESCRIPTIVE REPORT - DATA RECORD

T- 12649

PROJECT NO. (II):

21423 (2) PH-6409

FIELD OFFICE (III):

SHIP PATHFINDER

CHIEF OF PARTY

H. J. SEABORG

PHOTOGRAMMETRIC OFFICE (III):

PORTLAND, OREGON

OFFICER-IN-CHARGE

P. A. STARK

INSTRUCTIONS DATED (II) (III):

DECEMBER 7, 1964 III

METHOD OF COMPILATION (III):

KELSH INSTRUMENT

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:6,000

PANTOGRAPH SCALE: 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

May 1977

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

AUG. 1977

GEOGRAPHIC DATUM (III):

N.A. 1927

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):

ROOT, 2, 1964

LAT.:

60° 38' 24.37"

LONG.:

145° 43' 07.50"

ADJUSTED

UNADJUSTED

PLANE COORDINATES (IV):

y = 2,425,999.2 FT.

x = 550,487.7 FT.

STATE

ALASKA

ZONE

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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.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): NONE		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): BY KELSH INSTRUMENT		
PROJECTION AND GRIDS RULED BY (IV): A. E. ROUNDTREE		DATE 11-24-64
PROJECTION AND GRIDS CHECKED BY (IV): P. HAWKINS		DATE
CONTROL PLOTTED BY (III): W. MAGULA		DATE 12-11-64
CONTROL CHECKED BY (III): R. H. MEYER		DATE 12-11-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): W. HEINBAUGH		DATE 11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY R. H. MEYER	DATE 12-22-64
	CONTOURS NONE	DATE
MANUSCRIPT DELINEATED BY (III): DRAFTED FOR HYDRO SUPPORT: G. C. HARRIS		DATE 12-24-64
SCRIBING BY (III): <i>J. Place</i>		DATE <i>Nov. 1966</i>
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. N. WILLIAMS		DATE 1-7-65

REMARKS:

Field Edit

Sept. 1965 and May 1966

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&GS SINGLE LENS "S"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64 S 6910 THRU 64 S 6912	8-25-64	1005	1:30,000	4 FT. ABOVE M.L.L.W.
RATIO PRINTS 64 S 6910 THRU 64 S 6912	"	"	1:10,000	4 FT. " "

TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: CORDOVA, ALASKA		10.0 FT	12.4 FT
SUBORDINATE STATION:			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): *Leo F. Beugnot, Atlantic Marine Center*

DATE: *April 1967*

PROOF EDIT BY (IV): *J. B. Phillips, Rockville, Md.*

DATE: *June 1977*

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): *3*

RECOVERED: *3*

IDENTIFIED: *3*

NUMBER OF BM(S) SEARCHED FOR (II): *0*

RECOVERED: *0*

IDENTIFIED: *0*

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): NONE

REMARKS:

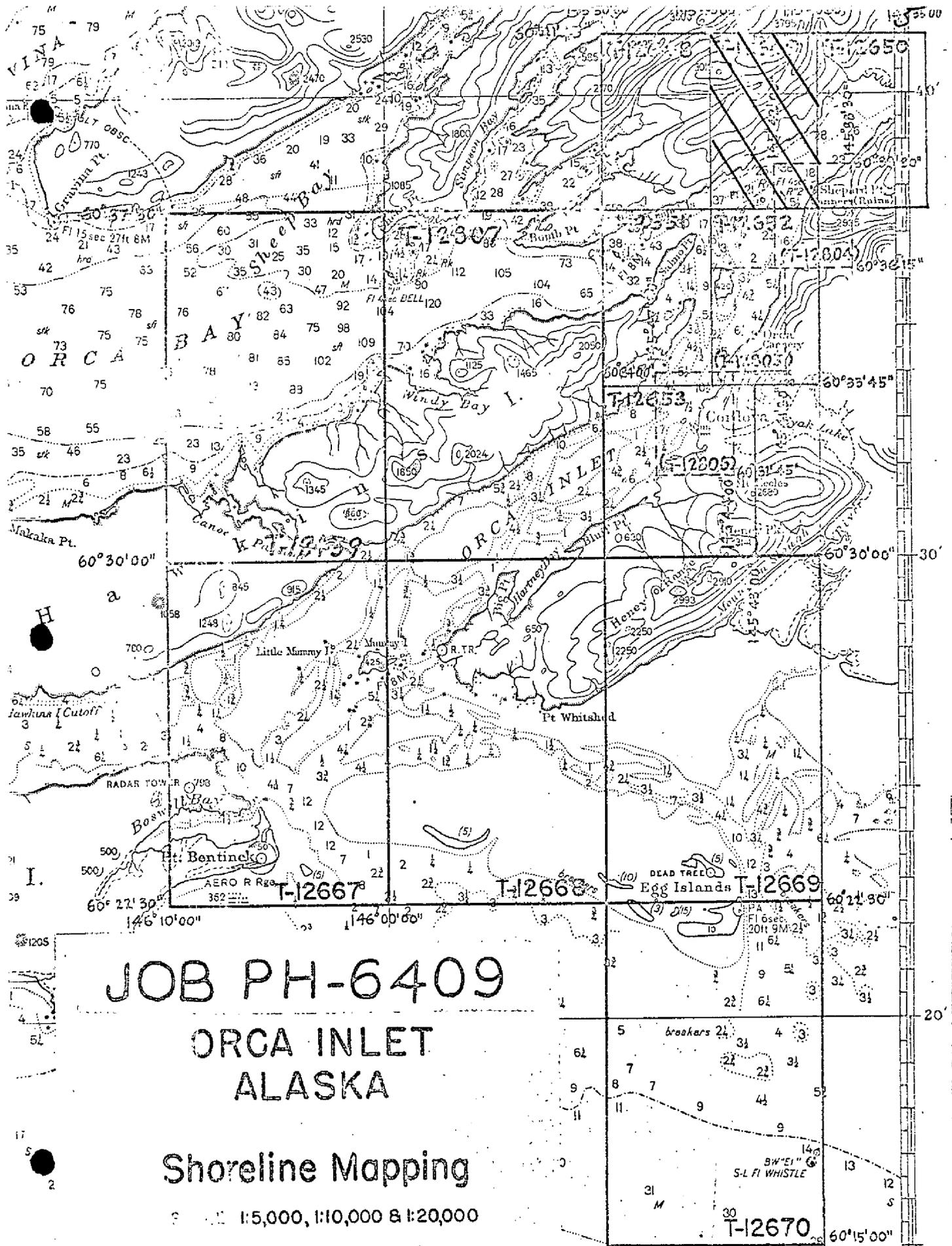
T-12649

COMPILATION RECORD

COMPLETION DATE

REMARKS

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro	Dec. 1964	Superseded
Field Edit applied: subject to further verification	Nov. 1965	Superseded
Second Field Edit applied	May 1966	
Final Review	April 1967	

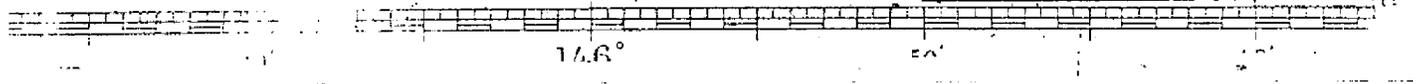


JOB PH-6409

ORCA INLET
ALASKA

Shoreline Mapping

Scales: 1:5,000, 1:10,000 & 1:20,000



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12649

Shoreline survey T-12649 is one of fifteen similar maps in project 6409. The maps were compiled to provide new shoreline for nautical charts and provide photo-hydro support data for hydrographic surveys to be made in the same area.

Field work preceding compilation consisted of recovery and/or establishment and the identification of horizontal for aerotriangulation purposes. There was no field inspection prior to compilation.

Compilation was by Kelsh Instrument at 1:10,000 scale using the panchromatic photography obtained August 25, 1964. Cronaflex copies of the Incomplete Manuscript were furnished for preparation of the hydrographer's boatsheet along with specially prepared ratio photographs for the location of hydrographic signals and field edit purposes.

The manuscript is a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes 00 seconds in longitude which was scribed and reproduced on cronaflex. One cronar positive and one cronar negative are provided for record and registry.

FIELD INSPECTION REPORT

MAP MANUSCRIPT T-12649

PROJECT 21423 (2)

NONE SUBMITTED. THERE WAS NO FIELD INSPECTION BEFORE
COMPILATION.

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Aerotriangulation Report
Project 21423
Orca Inlet, Alaska

21. Area Covered

The area covered by this report on aerotriangulation bridging encompasses the shoreline of Orca Inlet, Alaska (T-12648 through T-12652 and the northeast portion of T-12653).

22. Method

Three strips of photography (64S 6892-98), (64S 6787-92) and (64S 6909-15) were bridged on the stereoplanigraph and were adjusted by IEM 1620 methods.

Plotting coordinates are furnished at 1:5,000 scale for T-12804, T-12805 and T-12806 and at 1:10,000 scale for T-12648 through T-12653.

Positions of tie points were meaned when necessary.

23. Adequacy of Control

Horizontal control provided was adequate as to location and quality to control the bridges within the limits of accuracy required by National Map Accuracy Standards. However, a portion of the shoreline of T-12653 cannot be compiled since control station, Travel 2, could not be held. Each attempt to use Travel 2 as the terminal point (Strip 3) resulted in large residuals for other control stations in that bridge. An adjustment of the bridge, with Orca Bay, South Bldg., West Gable (1955) as the terminal station, was made and the resulting foreshortened bridge held satisfactorily. No explanation of the failure of station Travel 2 to hold is apparent. The station should be re-identified to provide control for that portion of the shoreline.

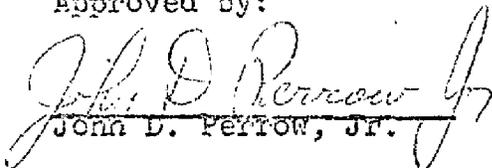
24. Supplemental Data

USGS quadrangles Cordova, Alaska (B-5, B-6, C-5 and C-6) scale 1:63,360, 1953 edition were used to provide vertical control where needed.

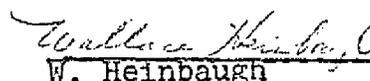
25. Photography

Photography was adequate as to coverage, overlap and definition.

Approved by:


John D. Perrow, Jr.

Submitted by:


W. Heinbaugh

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COMPILATION REPORT
T-12649

31. DELINEATION:

The manuscript was delineated by Kelsh Instrument methods.

32. CONTROL:

Adequate horizontal control was established by aerotriangulation for control of the Kelsh models. The aerotriangulation was based on field identified horizontal control which was pre-marked.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours inapplicable.

The drainage was delineated by the Kelsh operator using the U.S.G.S. quadrangle as a guide.

35. SHORELINE:AND ALONGSHORE DETAILS:

The mean high water line and alongshore details were delineated by the Kelsh operator from office interpretation of the photographs.

36. OFFSHORE DETAILS:

All offshore details visible on the photographs were delineated by the Kelsh operator. No details were purposely left for the hydrographer.

37. LANDMARKS AND AIDS:

There are no landmarks.

One fixed aid to navigation has been listed on form 567.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Satisfactory junctions were made with 1:10,000 scale manuscripts T-12648 on the west, T-12650 on the east, T-12652 on the south and with overlapping 1:5,000 scale manuscript T-12804. There is no contemporary survey to the north.

40. HORIZONTAL AND VERTICAL ACCURACY:

46. COMPARISON WITH EXISTING MAPS:

Comparison was made with U.S.G.S. CORDOVA (C-5), ALASKA Quadrangle, 1:63,360 scale, edition of 1951.

47. COMPARISON WITH NAUTICAL CHARTS:

8520, 1:80,000 scale, July 20, 1964
8525, 1:30,000 scale, July 27, 1964
8551, 1:200,000 scale, April 15, 1963

Items to be applied to Charts immediately:

None

Items to be carried forward:

None

Approved:

for Leo I. Beugnot
P. A. Stark, ODR, C&GS
Portland Field Officer

Submitted:

Donnel N. Williams
Donnel N. Williams
Cartographer

48. GEOGRAPHIC NAME LIST:

THE APPROVED GEOGRAPHIC NAMES LISTED BELOW WERE FURNISHED BY THE WASHINGTON OFFICE ON U.S.G.S. CORDOVA (C-5) ALASKA 15 MINUTE QUADRANGLE, SCALE 1:63,360, EDITION 1951.

NORTH ISLAND
SHEPARD POINT
*NELSON Bay **

** From Chart 8525*

49. NOTES TO THE HYDROGRAPHER:

VERIFY PILING AND MARINE RAILWAY AT SHEPARD POINT.

PHOTOGRAMMETRIC OFFICE REVIEW

~~1000303~~ T-12649

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1. PROJECTION AND GRIDS DNW		2. TITLE DNW		3. MANUSCRIPT NUMBERS DNW		4. MANUSCRIPT SIZE DNW	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY DNW				6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) DNW		7. PHOTO HYDRO STATIONS NONE	
8. BENCH MARKS NONE		9. PLOTTING OF SEXTANT FIXES NONE		10. PHOTOGRAMMETRIC PLOT REPORT DNW		11. DETAIL POINTS DNW	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE DNW		13. LOW-WATER LINE DNW		14. ROCKS, SHOALS, ETC. DNW		15. BRIDGES NONE	
16. AIDS TO NAVIGATION DNW		17. LANDMARKS DNW		18. OTHER ALONGSHORE PHYSICAL FEATURES DNW		19. OTHER ALONGSHORE CULTURAL FEATURES DNW	
PHYSICAL FEATURES							
20. WATER FEATURES DNW				21. NATURAL GROUND COVER DNW		22. PLANETABLE CONTOURS NONE	
23. STEREOSCOPIC INSTRUMENT CONTOURS NONE		24. CONTOURS IN GENERAL NONE		25. SPOT ELEVATIONS NONE		26. OTHER PHYSICAL FEATURES DNW	
CULTURAL FEATURES							
27. ROADS DNW		28. BUILDINGS DNW		29. RAILROADS DNW		30. OTHER CULTURAL FEATURES DNW	
BOUNDARIES							
31. BOUNDARY LINES NONE				32. PUBLIC LAND LINES NONE			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES DNW				34. JUNCTIONS DNW		35. LEGIBILITY OF THE MANUSCRIPT DNW	
36. DISCREPANCY OVERLAY DNW		37. DESCRIPTIVE REPORT DNW		38. FIELD INSPECTION PHOTOGRAPHS DNW		39. FORMS DNW	
40. REVIEWER Donnel N. Williams				SUPERVISOR, REVIEW SECTION OR UNIT Leo F. Beugnet			
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 L. Neterer Reviewed: C. Bishop				SUPERVISOR <i>Albert C. Rauck Jr.</i> A. C. Rauck			
43. REMARKS							

UNITED STATES GOVERNMENT

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

Memorandum

TO : Chief, Photogrammetry Division

DATE: May 7, 1966

In reply refer to:

FROM : Commanding Officer
USCGS Ship HODGSON

SUBJECT: Field Edit - Orca Inlet
Project 21423 (2) Job PH-6409

Photographs, manuscripts and originals for the above project are returned under separate cover. The required field edit has been accomplished and appropriate notes made on the photographs and originals. Upon re-compilation the advance manuscripts and photos should be returned to Seattle processing office for application of shoreline to smooth sheets and final signal location.

John B. Watkins, Jr.
John B. Watkins, Jr.

cc: PACMARCEN

Sheet T-12606

New photos
scheduled
at 1/10,000
Pan. film
5/11/66
RZ/

Discrepancies as noted were verified in the field. See photo no. 64S6942, 1/5000. Please note the changes to the area about the small boat basin. To scale sketch has been made of the area as found in May 1966. Other changes are contemplated and it is recommended that a stereo triplet be obtained in mid-summer for updating. The MHW line is shown in purple about the fill area as requested.

Sheet T-12649

Discrepancies as noted were verified in the field and appropriate notes made in purple on photo no. 64S6786 1/10,000.

Sheet T-12652

Discrepancies as noted were verified in the field and appropriate notes made in purple on photo no. 64S6786, 64S6787, 64S6949, 1/10,000. Please note new MHWL for western side of observation island.

Sheet 12604

Discrepancies as noted were verified in the field. Applicable notes were made on the ozalid.

Sheet 12805

Discrepancies as noted were checked in the field. See also sheet T-12652.

Sheet T-12653

All discrepancies as noted were verified on photo nos. 64S7353, 64S6891, 64S7350, 1/10,000 and 64S6943, 1/5000. All shoreline verified is shown in purple on the photos.

New
photos
scheduled
at 1/10,000
Pan.
5/11/66
RZ/

In the area SW of station MAUD 2, 1964, photo no. 64S6891 considerable activity by the Corps of Engineers makes MHW verification impracticable at this time. More recent photography is required. It is recommended that a stereo triplet be made of the area in mid-summer for final shoreline detail of this area.

On photo no. 64S6943 changes were made to shoreline from that shown in 1965 in red. These changes (1966) are shown in purple on the photo.

Sheet T-12648

All discrepancies as noted by the compiler were checked and appropriate notes made on the ozalid with the exception of Simpson Bay. This area was not within the project limits.

Sheet T-12650

Discrepancies as noted were verified in the field. MHWL was inked in purple on photo no. 6486952 and 6486953, 1/10,000.

Sheet T-12651

Discrepancies as noted were verified in the field. All references are made to photo no. 6486784, 1/10,000. Notes with "LL" indicate a lead line sounding at the applicable time. Shoreline verification is shown in purple on the photo. Several rocks not noted on the discrepancy sheet were added and applicable notes made.

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REVIEW REPORT
T-12647
April 21, 1967

61. GENERAL STATEMENT:

See summary accompanying descriptive report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with Registered Survey No. 3649, 1:20,000 scale, dated June-August 1916. This survey was based on Valdez datum. The comparison between the old survey and T-12649 is shown on the comparison print.

Survey T-12647 supersedes the older survey for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with U.S.G.S. CORDOVA (C-5), ALASKA quadrangle, 1:63,360 scale, edition of 1951 with minor revisions made in 1962.

The comparison was generally favorable with exception of the area of Shepard Point where some changes in the shoreline have taken place.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

In the area of Shepard Point from approximate latitude $60^{\circ} 37' 30''$ northeastward to latitude $60^{\circ} 38' 15''$ comparison was made with a copy of boatsheet HO-05-1-65. The source of the shoreline on the boatsheet is probably Incomplete Manuscript T-12804 and is not in complete agreement with the Advance Manuscript as some changes were made by application of field edit.

Comparison was also made with a copy of boatsheet H-8854, HO-20-1-65 along the north shore of Nelson Bay. The source of the shoreline for this boatsheet was also an Incomplete Manuscript and is not in complete agreement with the Advance Manuscript.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with chart 8525, 1:30,000 scale, 8th edition, March 14, 1966, Revised November 14th, 1966 in the area south of latitude $60^{\circ} 38'$. North of this latitude comparison was made with chart 8520, 1:80,000 scale, 13th edition, March 7th, 1966.

The comparison with chart 8525 has been shown on the comparison print. In the area of chart 8520 only a visual comparison was made.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

J. Bull, RADM.
J. Bull, RADM.
Director, Atlantic Marine Center

Approved by:

[Signature]
Chief, Photogrammetric Branch

[Signature]
Chief, Photogrammetry Division

[Signature]
Chief, Nautical Chart Division

