

T-12652

T-12652

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
PH-6409	
Type of Survey	SHORELINE (PHOTOGRAMMETRIC)
Field No. Edition No. 1	Office No. T-12652
Field Edited Map	
LOCALITY	
State	ALASKA
General locality	ORCA INLET
Locality	OBSERVATION ISLAND
1964-1966	
CHIEF OF PARTY	
H. J. SEABORG,	CHIEF OF PARTY
P. A. STARK	COMPILATION OFFICE
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T- 12652

PROJECT NO. (II): 21423 (2) <i>PH-6409</i>		
FIELD OFFICE (II): 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): <i>May 1977</i>		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV): <i>AUG. 1977</i>
GEOGRAPHIC DATUM (III): N.A. 1927		VERTICAL DATUM (III): <i>MHW</i> 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): NIBSY 1899		
LAT.: 60° 35' 44.442"	LONG.: 145° 43' 59.274"	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = <i>2,409,749.60 FT.</i> X = <i>547,971.77 FT.</i>		STATE ALASKA ZONE 3
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): KELSH INSTRUMENT - AUGUST 25, 1964		
PROJECTION AND GRIDS RULED BY (IV): A. E. ROUNDTREE		DATE 2-3-65
PROJECTION AND GRIDS CHECKED BY (IV): R. GLASER		DATE 2-9-65
CONTROL PLOTTED BY (III): D. N. WILLIAMS		DATE 2-12-65
CONTROL CHECKED BY (III): W. MASULA		DATE 2-12-65
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): W. HEINBAUGH		DATE 11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY R. H. MEYER	DATE 2-15-65
	CONTOURS None	DATE
MANUSCRIPT DELINEATED BY (III): R. H. MEYER		DATE 2-16-65
SCRIBING BY (III): <i>A. Shands</i>		DATE <i>Nov. 1966</i>
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. N. WILLIAMS		DATE 2-17-65
REMARKS:		

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 6893 THRU 64 S 6896	8-25-64	0955	1:30,000	4.0' FT ABOVE M.L.L.W.
64 S 6912 AND 64 S 6913	"	1005	"	3.8 FT " "
64 S 6786 AND 64 S 6787	"	0850	"	0.5 FT " "
64 S 6943 THRU 64 S 6949	"	1035	1:15,000	5.1 FT " "

TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: CORDOVA		10.0 FT	12.4 FT
SUBORDINATE STATION: ORCA		9.9 FT	12.4 FT
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Leo F. Beugnot, Atlantic Marine Center

DATE:

May 1967

PROOF EDIT BY (IV):

J. B. Phillips Rockville, Md.

DATE:

June 1977

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

2

IDENTIFIED:

2

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

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NONE

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

NONE

REMARKS:

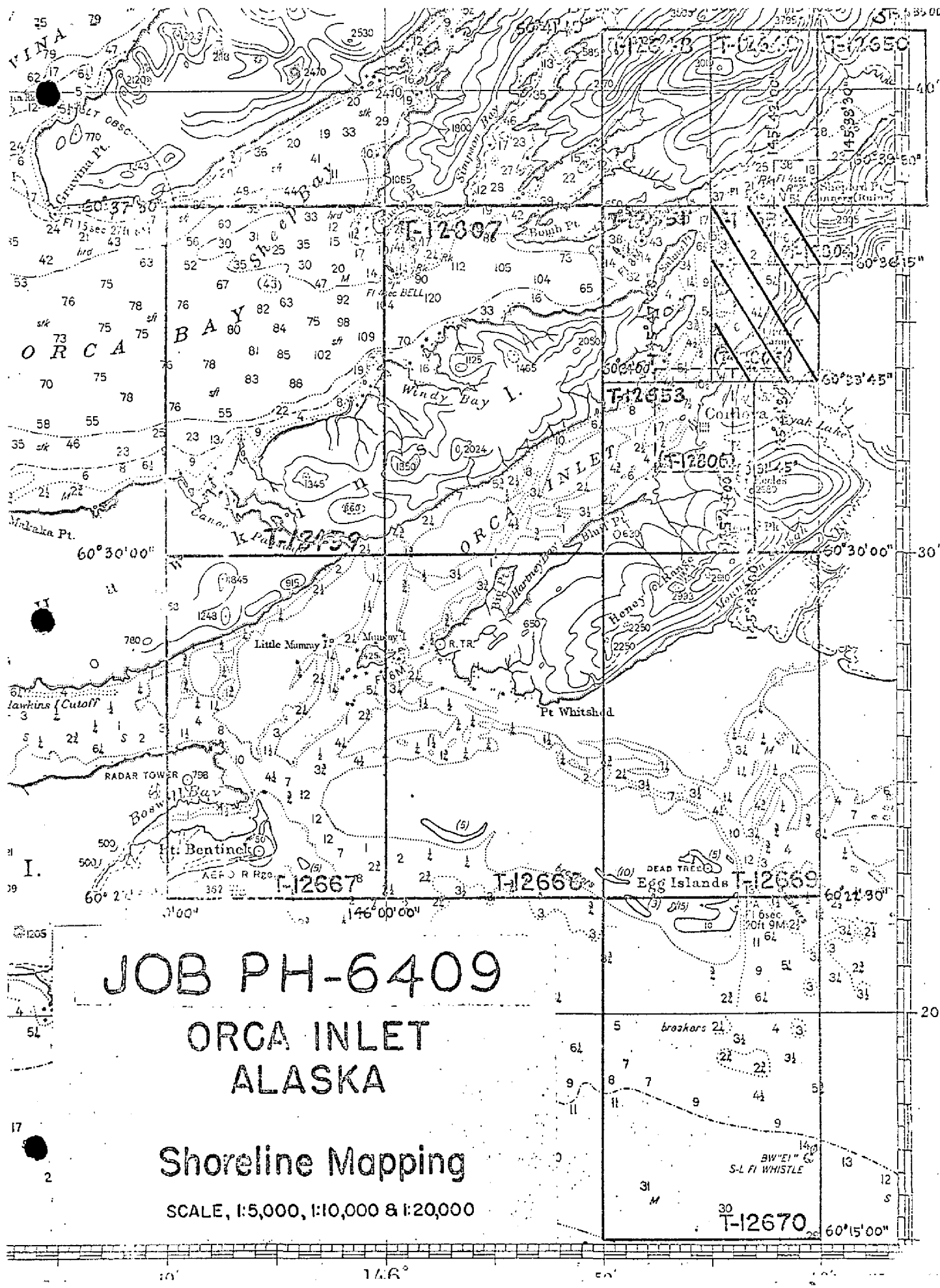
T-12652

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro.	February 1965	Superseded
Field edit, applied: subject to further verification	November 1965	Superseded
Second Field Edit applied	May 1966	
Final Review	May 1967	



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12652

Shoreline survey T-12652 is one of fifteen similar surveys in project PH-6409. The primary purpose of the survey was to provide new shoreline for nautical charts and photo-hydro support data for hydrographic surveys to be made in the same area.

Field work preceding compilation, by Kelsh Instrument, consisted of the recovery and identification of horizontal control. There was no field inspection prior to compilation.

Compilation was at 1:10,000 scale using the panchromatic photography of August 25, 1964. A cronaflex copy of the manuscript along with specially prepared photographs were furnished for preparation of the hydrographers boatsheet, location of hydrographic signals and for 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-12652

PROJECT 21423 (2)

NONE SUBMITTED. THERE WAS NO FIELD INSPECTION BEFORE
COMPILATION.

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12652 PROJECT NO. 21423 (2) SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
CORD 1933	ALASKA 60145 P.3	N.A. 1927	2,399,629.0	
NIBSY 1899	" P.5	"	546,340.1	
			2,409,749.6	
			547,971.8	
OBSERVATION ISLAND 1900	" P.6	"	2,410,892.6	
			546,417.0	
ORCA CANNERY, S. BLDG. W. GABLE 1955	" "	"	2,404,035.5	
			550,864.5	
POINT 1900	" P.11	"	2,413,747.8	
			555,117.4	
POINT 2, 1964	UNADJUSTED FIELD POSITION	"	2,413,747.2	
			555,118.3	
SAW 1909	ALASKA 60145 P.12	"	2,412,807.6	
			547,110.4	
SAW 2,1964	UNADJUSTED FIELD POSITION	"	2,412,840.5	
			546,992.2	
SAWMILL GABLE 1909	ALASKA 60145 P.12	"	2,415,894	
			557,221	
SAWMILL STACK 1909	" "	"	2,416,196	
			557,307	
WHITE 1930	" P.15	"	2,399,631	
			546,337	
ORCA ASTRONOMICAL STATION 1898	" P.6	"	2,404,288.4	
			551,111.6	

COMPUTED BY

C.H.B.

DATE

12-14-64

CHECKED BY

L.F.B.

DATE

12-14-64

DESCRIPTIVE REPORT CONTROL RECORD

[illegible]

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 IBM 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 Elég., 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.

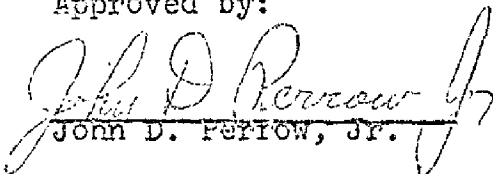
24. Supplemental Data

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. Ferrow, Jr.

Submitted by:


W. Heinbaugh

COMPILATION REPORT

T-12652

31. DELINEATION:

Planimetry was compiled by Kelsh Instrument.

32. CONTROL:

Adequate supplemental control, based on field identified horizontal control, was established by aerotriangulation.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours not applicable.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore details were delineated from office interpretation of the photographs as no field inspection was available.

36. OFFSHORE DETAILS:

None

37. LANDMARKS AND AIDS:

A landmark, HOUSE (S. GABLE), shown on Chart 8525 at latitude $60^{\circ} 36.7'$ longitude $145^{\circ} 40.9'$ was not visible on the photographs and is not shown on this survey.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Satisfactory junctions were made with 1:10,000 scale manuscripts T-12649 on the north; T-12651 on the west, and T-12653 on the south. Satisfactory junctions were also made with the 1:5,000 scale overlapping surveys T-12804, T-12805 and T-12806. There is no contemporary survey to the east.

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:

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

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Approved:

for *Leo J. Bugnet*
P. A. Stark, CDR, C&GS
Portland Field Office

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.

FLEMING CREEK
FLEMING SPIT
HUMPBACK CREEK
NORTH ISLAND
NORTH ROCK
OBSERVATION ISLAND
ORCA
ORCA CHANNEL
ORCA INLET
SOUTH ROCK

49. NOTES TO THE HYDROGRAPHER:

VERIFY FOUL AREA OFF FLEMING SPIT AND PILING NEAR ORCA CANNERY.

PHOTOGRAMMETRIC OFFICE REVIEW

50				X-18363X T-12652			
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) NONE		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 NONE		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 K. Boyle Reviewed by C. Bishop				SUPERVISOR A. C. Rauck <i>Albert C. Rauck Jr.</i>			
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: PACMIRCEN

Sheet T-12806

New photos
scheduled
at 1/10,000
Pan. film
5/11/66
R226

Discrepancies as noted were verified in the field. See photo no. 6486942 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-12849

Discrepancies as noted were verified in the field and appropriate notes made in purple on photo no. 6486786 1/10,000.

Sheet T-12652

Discrepancies as noted were verified in the field and appropriate notes made in purple on photo nos. 6486786, 6486787, 6486949, 1/10,000. Please note new MHWL for western side of observation island.

Sheet 12804

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. 6487353, 6486891, 6487350, 1/10,000 and 6486943, 1/5000. All shoreline verified is shown in purple on the photos.

New
photos
scheduled
at 1/10,000
Pan.
5/11/66
R226

In the area SW of station MAUD 2, 1964, photo no. 6486891 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. 6486943 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. 64S6952 and 64S6953, 1/10,000.

Sheet T-12651

Discrepancies as noted were verified in the field. All references are made to photo no. 64S6784, 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
SHORELINE
MAY 18, 1967

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with Registered Surveys No. 3648 and 3649. These are 1:20,000 scale surveys made in 1916 and are on Valdez datum. There is a hiatus between these two surveys along the easterly coast of Orca Inlet between latitudes $60^{\circ} 36' 30''$ and $60^{\circ} 36' 45''$.

The comparison between the Registered surveys and T-12652 has been shown on the comparison print. Survey T-12652 supercedes the older surveys for nautical chart construction.

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 two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with copies of boatsheets HO-05-1-65 and H-8853, PF-10-1-64. The shoreline for HO-05-1-65 was probably obtained from an Incomplete Manuscript. It is not in agreement with the Advance Manuscript as some changes were made by application of field edit and at the time of final review.

The source of the shoreline for PF-10-1-64 is not known. It is not in 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 14, 1966. The comparison with the chart has been shown on the Comparison Print.


66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

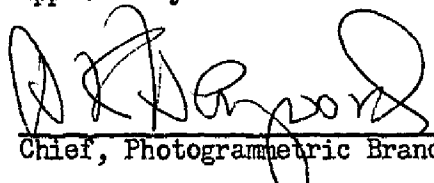
Reviewed by:



Leo F. Beugnet

Approved by:


J. Bull, RADM
Director, Atlantic Marine Center

Approved by:


Chief, Photogrammetric Branch


Chief, Photogrammetry Division

Chief, Nautical Chart Division