

T-12805

T-12805

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
PH+6409	
Type of Survey SHORELINE (PHOTOGRAMMETRIC)	
<del>Field No.</del> Edition No. 1 Office No. T-12805	
Field Edited Map	
LOCALITY	
State	ALASKA
General locality	ORCA INLET
Locality	ORCA
1964-1966	
CHIEF OF PARTY	
CHIEF OF PARTY	H. J. SEABORG
COMPILATION OFFICE	P. A. STARK
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD  
T - 12805

PROJECT NO. (II): 21423 (2) <i>PH-6409</i>		
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): KELBH INSTRUMENT		
MANUSCRIPT SCALE (III): 1:5,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:5,000	
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> <del>MEAN SEA LEVEL EXCEPT AS FOLLOWS:</del> 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): SAW 2, 1964		
LAT.: 60° 36' 14.922"	LONG.: 145° 44' 18.646"	<input type="checkbox"/> ADJUSTED <input checked="" type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): Y = 2,412,840.51 Ft.    X = 546,992.17 Ft.		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 12-2-64
PROJECTION AND GRIDS CHECKED BY (IV):  P. HAWKINS		DATE
CONTROL PLOTTED BY (III):  C. H. BISHOP		DATE 12-29-64
CONTROL CHECKED BY (III):  J. C. LAJOYE		DATE 12-29-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  W. HEINBAUGH		DATE 11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY  J. S. PLACE	DATE 1-5-65
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):  J. S. PLACE		DATE 1-8-65
SCRIBING BY (III):  <i>A. Shands</i>		DATE <i>Nov 1966</i>
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  R. H. MEYER		DATE 1-14-65
REMARKS:  <i>Field Edit</i>  <i>Sept. 1965 and May 1966</i>		

## DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

C&amp;GS SINGLE LENS "S"

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64 S 6893 THRU 64 S 6895	8-25-64	0955	1:30,000	3.8 FT ABOVE M.L.L.W.
64 S 6786 AND 64 S 6787	"	0850	"	0.5 FT " "
64 S 6943 THRU 64 S 6947	"	1035	1:15,000	5.1 FT " "

## TIDE (III)

## DIURNAL

	RATIO OF RANGES	MEAN RANGE	<del>SPRING</del> 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. Beagnot, 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):

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:

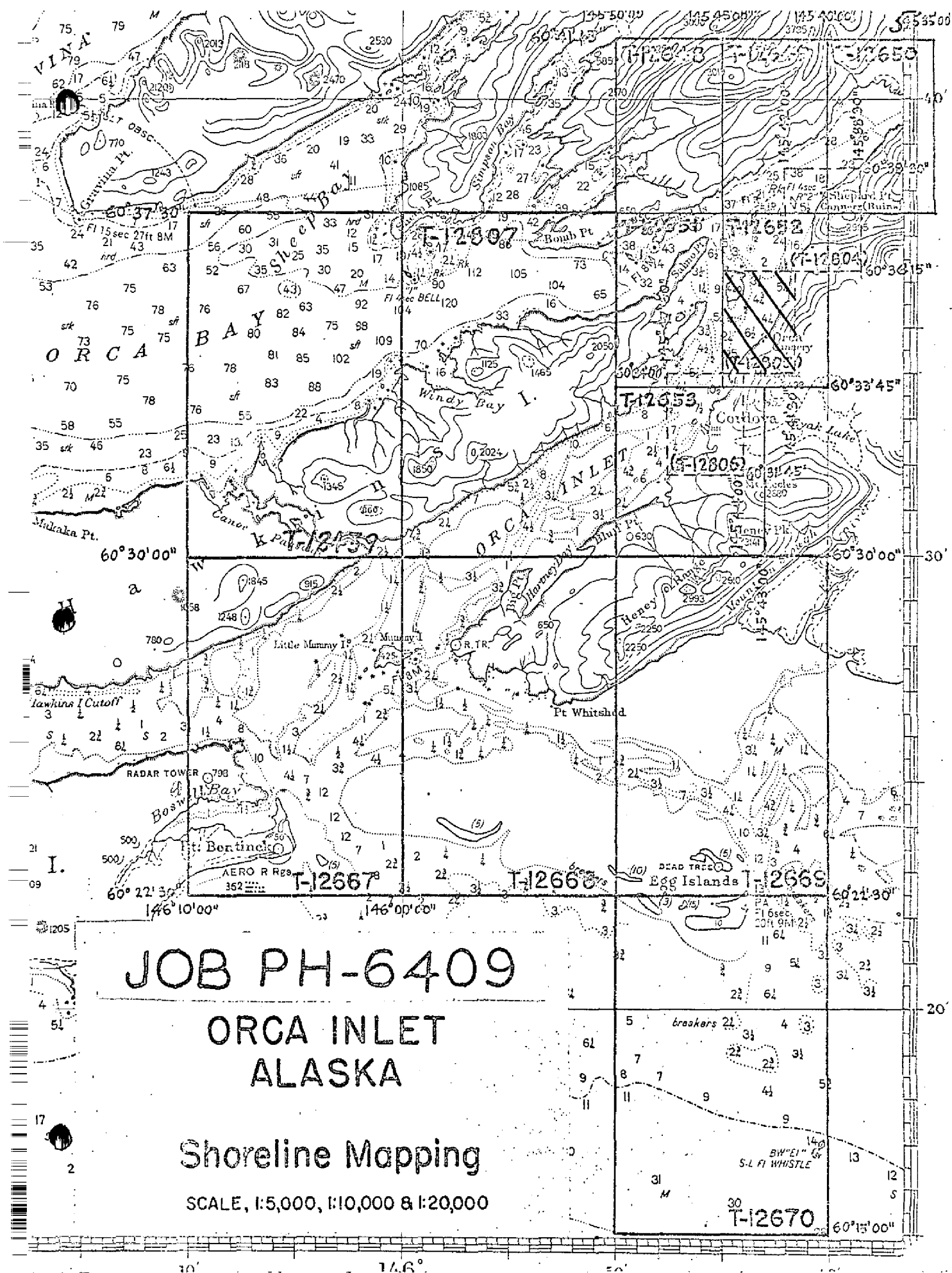
T-12805

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro	Jan. 1965	Superseded
Field Edit applied: subject to further verification	Nov. 1965	Superseded
Second Field Edit applied	May 1966	
Final Review	April 1967	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12805

Shoreline survey T-12805, compiled at 1:5,000 scale, is one of fifteen similar surveys in project PH-6409. The primary purpose of the project was to provide new shoreline for nautical charts and to 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 identification of horizontal control. There was no field inspection prior to compilation.

Compilation was at 1:5,000 scale using the panchromatic photography obtained August 25, 1964. A cronaflex copy of the manuscript along with specially prepared ratio photographs was provided for preparation of the hydrographer's boatsheet, location of hydro signals and for field edit purposes.

The manuscript is a vinylite sheet 2 minutes 15 seconds in latitude by 3 minutes 30 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-12805

PROJECT 21423 (2)

NONE SUBMITTED. THERE WAS NO FIELD INSPECTION BEFORE  
COMPILATION.



# DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12005 PROJECT NO. 21423 (2) SCALE OF MAP 1:5,000 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)
NIBSY 1899	ALASKA 60145 P.5	N.A. 1927	2,409,749.6	
OBSERVATION ISLAND 1900	" P.6	"	547,971.8	
ORCA CANNERY S. BLDG. W GABLE 1955	" " P.6	"	2,410,892.6	
ORCA ASTRONOMICAL STATION 1898	" " P.6	"	546,417.0	
CORD 1933	" " P.3	"	2,404,035.5	
WHITE 1930	" " P.15	"	550,864.5	
ORC 1930	" " P.6	"	2,404,288.4	
SAW 1909	" " P.12	"	551,111.6	
SAW 2, 1964	UNADJUSTED FIELD POSITION	"	2,399,629.0	
			546,340.1	
			2,399,631	
			546,337	
			2,404,036	
			550,865	
			2,412,807.58	
			547,110.37	
			2,412,840.51	
			546,992.17	

COMPUTED BY J.S.P. DATE 12-17-64 CHECKED BY C.H.B. DATE 12-18-64

8. 9

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 Blg., 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.

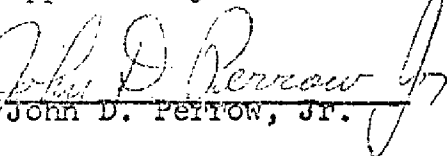
24. Supplemental Data

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.

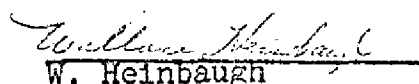
25. Photography

Photography was adequate as to coverage, overlap and definition.

Approved by:

  
John D. Perrow, Jr.

Submitted by:

  
W. Heinbaugh

COMPILATION REPORT  
T-12805

31. DELINEATION:

Delineation of the manuscript was by Kelsh Instrument using the panchromatic photography of August 25, 1964.

32. CONTROL:

Adequate supplemental control, based on field identified horizontal control, was established by aerotriangulation for the Kelsh Instrument.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours inapplicable.

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

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline and alongshore details were delineated from office interpretation of the photography as no field inspection was available.

36. OFFSHORE DETAILS:

None

37. LANDMARKS AND AIDS:

There are no landmarks or fixed aids to navigation within the limits of this survey.

38. CONTROL FOR FUTURE SURVEYS:

No control for future surveys was established.

39. JUNCTIONS:

Satisfactory junctions were made with 1:5,000 scale manuscript T-12804 on the north and T-12806 on the south. Satisfactory junctions were also made with the surrounding 1:10,000 scale manuscripts T-12651 and T-12652.

40. HORIZONTAL AND VERTICAL ACCURACY:46. COMPARISON WITH EXISTING MAPS:

Comparison was made with U.S.G.S. 15 minute, CORDOVA (C-5) ALASKA quadrangle, scale 1:63,360, edition of 1951.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with the following Nautical Charts:

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

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Approved:

*for* *Leo F. Beugnot*  
P. A. Stark, OBR, C&GS  
Portland Field Officer

Submitted:

*Donnel M. Williams*  
Donnel N. Williams  
Cartographer

48. GEOGRAPHIC NAMES LIST:

The following geographic names were furnished by the Washington office on U.S.G.S. CORDOVA (C-5) ALASKA quadrangle, 1:63,360 scale, edition of 1951:

OBSERVATION ISLAND

ORCA

ORCA CHANNEL

ORCA INLET

49. NOTES TO THE HYDROGRAPHER:

VERIFY PILING OFFSHORE FROM ORCA CANNERY.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-12805

50

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

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: PACMARCON



Sheet T-12606

New photos  
scheduled  
at 1/10,000  
Pan. 5.1m  
5/11/66  
1966

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 12605

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  
1966

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. MML 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.

REVIEW REPORT T-12805  
SHORELINE  
April 27, 1967

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with Registered Survey No. 3648, 1:20,000 scale, made in 1916 on Valdez Datum. A comparison of the two surveys has been shown on the comparison print.

Survey T-12805 supersedes the older survey 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 except in the area of Orca where changes in the shoreline and alongshore structures have occurred.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

From approximate latitude 60° 34' 30" northeastward to approximate latitude 60° 35' 15" comparison was made with a copy of boatsheet HO-05-1-65. The shoreline for this boatsheet was probably obtained from an Incomplete Manuscript and is not in agreement with the Advance Manuscript.

In the area northward of latitude 60° 35' 15" and the area south of latitude 60° 34' 30" comparison was made with a copy of H-8853, PF-10-1-64. The source of the shoreline for this boatsheet is not known. It is not in agreement with the Advance Manuscript.

65. COMPARISON WITH NAUTICAL CHARTS


Comparison was made with Nautical Chart 8525, 1:30,000 scale, 8th edition, March 14, 1966 Revised November 14, 1966. Because of the difference in scales of the two surveys, only a visual comparison was made. It was noted that the shoreline in the area of Orca is not in agreement on the two surveys.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

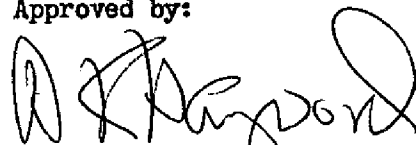
Approved by:


Reviewed by:

  
J. Bull, RADM, Director  
Atlantic Marine Center

  
Leo F. Beugnet

Approved by:

  
Chief, Photogrammetric Branch

  
Chief, Photogrammetry Division

Chief, Nautical Chart Division

12/5/78 Pennu, D.J.

Applied Fully + chart  
16710 (8525). see History.