

T-12806

T-12806

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
PH-6409	
Type of Survey SHORELINE (PHOTOGRAMMETRIC)	
Field No. <i>1</i>	Office No. T-12806
<i>Field Edited Map</i>	
LOCALITY	
State	ALASKA
General locality	ORCA INLET
Locality	SPIKE ISLAND
1964-1966	
CHIEF OF PARTY	
CHIEF OF PARTY	H. J. SEABORG
COMPILATION OFFICE	P. A. STARK
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD  
T - 12806

PROJECT NO. (II):

21423 (2) *PH-6409*

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):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

*May 1977*

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

*AVG 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):

TOWN, 1933

LAT.:

60° 33' 01.406"

LONG.:

145° 45' 28.633"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

Y = 2,393,178.46 Ft. x = 543,570.75 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  12-3-64
PROJECTION AND GRIDS CHECKED BY (IV):  P. HAWKINS		DATE
CONTROL PLOTTED BY (III):  D. N. WILLIAMS		DATE  12-21-64
CONTROL CHECKED BY (III):  L. L. GRAVES		DATE  12-21-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  W. HEINBAUGH		DATE  11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY  R. H. MEYER	DATE  1-8-65
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):  C. C. HARRIS		DATE  1-13-65
SCRIBING BY (III):  <i>A. Shands</i>		DATE  <i>Nov. 1966</i>
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  D. N. WILLIAMS		DATE  1-21-65
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 6892 AND 64 S 6893	8-25-64	0955	1:30,000	3.8 FT ABOVE M.L.L.W.
<del>64 S 6788 AND 64 S 6789</del>	<del>"</del>	<del>0850</del>	<del>"</del>	<del>0.5 FT " "</del>
64 S 6941 THRU 64 S 6944	"	1035	1:15,000	5.1 FT " "
66L 5617 - THRU 5619	9 July 1966	1649	1:15,000	10.0 ft. above M.L.L.W.

## TIDE (III)

## DIURNAL

	RATIO OF RANGES	MEAN RANGE	-SPRING- RANGE
REFERENCE STATION: CORDOVA		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):

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-12806

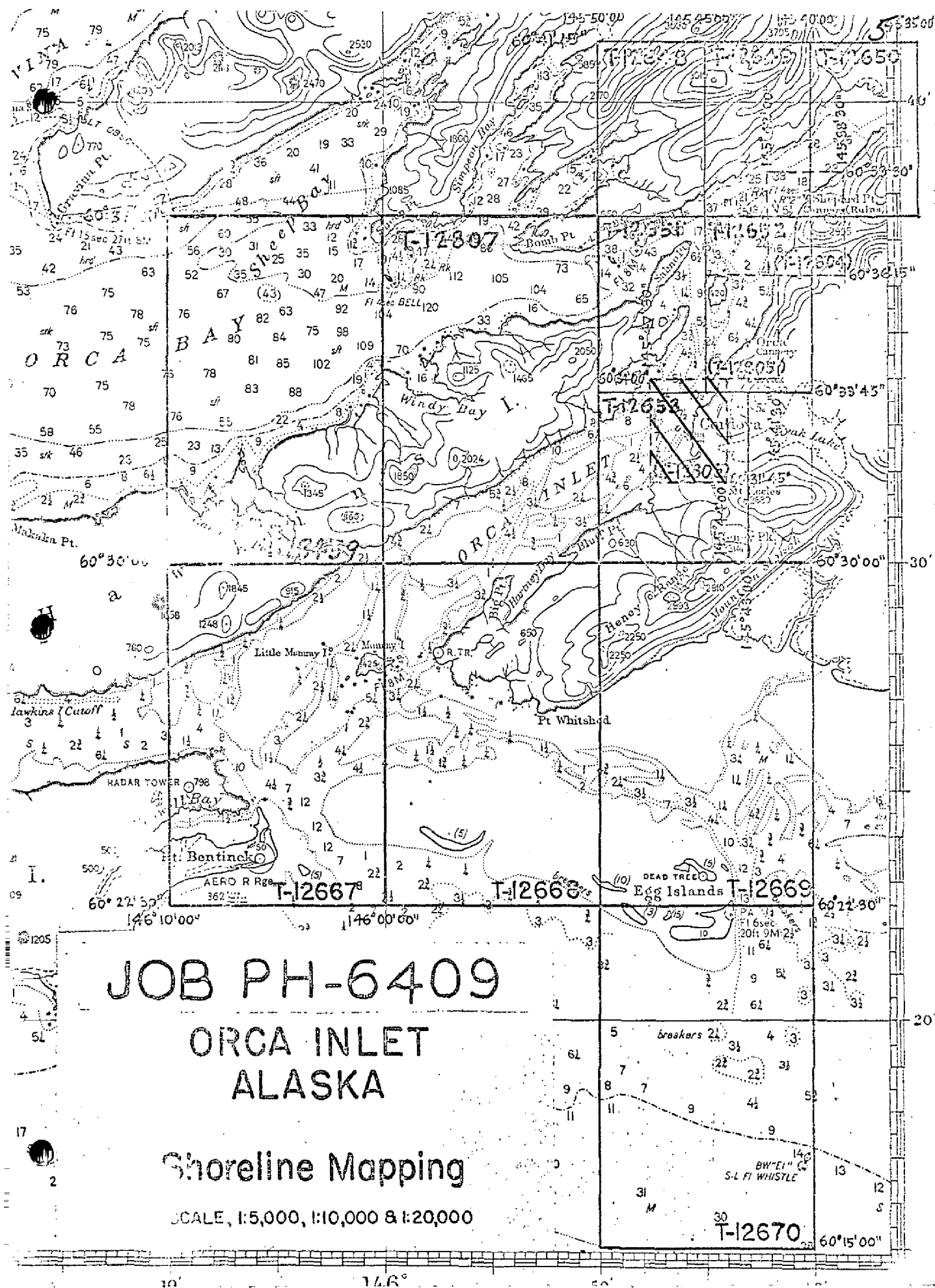
COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro	January 1965	Superseded
Field Edit applied: subject to further verification	November 1965	Superseded
Second Field Edit applied	May 1966	
Revisions from Lat. 60 32'15" to Lat. 60 84'00" made from Photos <del>66-L-5617 &amp; 66-L-5618</del>	September 1966	
Final Review	April 1967	





SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12806

Shoreline survey T-12806, is one of fifteen similar maps in project PH-6409. The primary purpose of the project 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 methods, 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 of August 25, 1964. A cronaflex copy of the manuscript along with specially prepared ratio photographs were provided for preparation of the hydrographers boatsheet, location of photo-hydro signals and 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  
T-12806

There was no field inspection prior to compilation.





# DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12806 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 ( $1 \text{ Ft.} = 3048006 \text{ meter}$ ) FORWARD (BACK)
C-15 + 13.00 (USE) 1948	ALASKA 60145 P.2	N.A. 1927	2,392,401.7	
COPPER CITY, HOUSE WEST GABLE 1899	ALASKA 60145 "	"	542,089.1 2,391,493.8 543,627.6	
CORDOVA BOAT HARBOR LIGHT 1964	UNADJUSTED FIELD POSITION	"	2,392,043.6 541,999.4	
CORDOVA RADIO MAST, 1955	ALASKA 60145 P.3	"	2,389,246.6 543,229.2	
EYAK 1933	" P.4	"	2,388,238.0 540,053.9	
NARD 1933	" P.5	"	2,393,296.4 541,567.0	
TOWN 1933	" P.15	"	2,393,178.5 543,570.8	
BUNCO 1899	" P.1	"	2,395,196.3 544,073.8	
				f
				dy

COMPUTED BY C.H.B.

CHECKED BY L.L.G;

DATE 12-18-64 DATE 12-21-64

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 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.

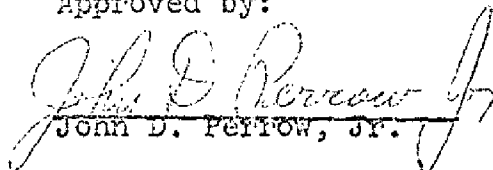
24. Supplemental Data

USGS quadrangles Cordova, Alaska (B-5, B-6, C-5 and C-6) scale 1:53,360, 1953 edition were used to provide vertical control where needed.

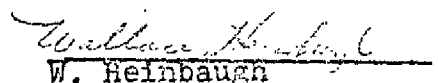
25. Photography

Photography was adequate as to coverage, overlap and definition.

Approved by:

  
John D. Perrow, Jr.

Submitted by:

  
W. Heinbaugh

Aerotriangulation Report  
Project 21423  
Orca Inlet, Alaska  
Supplemental Report

Re-identification of Station Travel 2, 1964 provided means of extending Strip #1 to the southern limits of T-12653. A straight line adjustment was run from Cordova Jetty Lt. 1964 to Travel 2, 1964 with Across 1933 plus four tie points as checks.

Residuals plus ties indicate the bridge is good. However, if future work is planned to the south of T-12653 it is recommended that bridging extend to Cordova Jetty Lt. 1964 in order to obtain proof of the tie.

John D. Perrow, Jr.

//

COMPILATION REPORT  
T-12806

31. DELINEATION:

Planimetry was compiled by Kelsh Instrument from office interpretation of the photography.

The area on this manuscript southwest of latitude  $60^{\circ} 32' 15''$  longitude  $145^{\circ} 46' 00''$  was not compiled at this time due to the bridging difficulties stated in the Aerotriangulation Report. This area will be completed at a later date.

32. CONTROL:

The supplemental control, established by aerotriangulation, was adequate for delineation of that part of the manuscript north-east of latitude  $60^{\circ} 32' 15''$  longitude  $145^{\circ} 46' 00''$ .

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours inapplicable.

The drainage was compiled by the Kelsh operators 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 photograph as no field inspection was available.

36. OFFSHORE DETAILS:

Offshore details were located during Kelsh compilation from office interpretation of the photographs.

37. LANDMARKS AND AIDS:

One landmark, HOUSE, shown on charts 8520 and 8525 at latitude  $60^{\circ} 33.5'$  longitude  $145^{\circ} 44.9'$  was not visible on the photography and was not delineated.

Two fixed aids to navigation fall with-in the limits of this survey and are listed on form 567.

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Satisfactory junction was made with 1:5,000 scale manuscript T-12805 to the north and with the surrounding 1:10,000 scale manuscripts T-12651, T-12652 and T-12653.

40. HORIZONTAL AND VERTICAL ACCURACY:

46. COMPARISON WITH EXISTING MAPS:

Comparison was made with U.S.G.S. CORDOVA (C-5) ALASKA, 15 minute quadrangle, 1:63,360 scale, 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 220, 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 L. Bugnet*  
P. A. Starks, CDR, C&GS  
Portland Field Office

Submitted:

*Donnel M. Williams*  
Donnel N. Williams  
Cartographer

ADDENDUM TO COMPILATION REPORT

The area of this map southwest of latitude  $60^{\circ} 32' 15''$  longitude  $145^{\circ} 46' 00''$  was delineated in the fall of 1965 after aerotriangulation was extended to station TRAVEL22 1964.

The area in and around Cordova Boat Harbor was revised in September 1966 from photography obtained July 9, 1966.



121

48. GEOGRAPHIC NAMES 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.

CORDOVA  
ECCLES CREEK  
FLEMING CREEK  
FLEMING SPIT  
ODIAK SLOUGH  
ORCA INLET  
SPIKE ISLAND

49. NOTES TO THE HYDROGRAPHER:

None

C&GS FORM 1002 (11-13-61)		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
<b>PHOTOGRAMMETRIC OFFICE REVIEW</b> <div style="display: flex; justify-content: space-around; align-items: center;"> <span>50</span> <div style="text-align: center;"> <del>XXXXXX</del>  <b>T-12606</b> </div> </div>			
1. PROJECTION AND GRIDS  DNW	2. TITLE  DNW	3. MANUSCRIPT NUMBERS  DNW	4. MANUSCRIPT SIZE  DNW
<b>CONTROL STATIONS</b>			
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
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE  DNW	13. LOW-WATER LINE  DNW	14. ROCKS, SHOALS, ETC.  DNW	15. BRIDGES  DNW
16. AIDS TO NAVIGATION  DNW	17. LANDMARKS  DNW	18. OTHER ALONGSHORE PHYSICAL FEATURES  DNW	19. OTHER ALONGSHORE CULTURAL FEATURES  DNW
<b>PHYSICAL FEATURES</b>			
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
<b>CULTURAL FEATURES</b>			
27. ROADS  DNW	28. BUILDINGS  DNW	29. RAILROADS  DNW	30. OTHER CULTURAL FEATURES  DNW
<b>BOUNDARIES</b>			
31. BOUNDARY LINES  NONE		32. PUBLIC LAND LINES  NONE	
<b>MISCELLANEOUS</b>			
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)			
<b>FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT</b>			
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 by: 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  
USCGC Ship HODGSON

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

Photographs, manuscripts and ozalids for the above project are returned under separate cover. The required field edit has been accomplished and appropriate notes made on the photographs and ozalids. 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: PACMARSEN

New photos  
scheduled  
at 1/10,000  
Pan-film  
5/11/66  
RPL

Sheet T-12646

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  
RPL

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. MRL 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. 6488784, 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.



18

REVIEW REPORT T-12806  
SHORELINE  
April 1, 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 1916 on Valdez Datum. The comparison of the two surveys is shown on the comparison print.

Manuscript T-12806 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 two surveys are in good general agreement except in the area of CORDOVA where changes in the shoreline and along-shore structures have been made.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

From latitude 60° 32' 30" northward to latitude 60° 33' 45" comparison was made with a copy of boatsheet HO-05-1-65.

The shoreline for the boatsheet was obtained from an Incomplete Manuscript and is not in agreement with the Advance Manuscript. The area of CORDOVA boat harbor, on the Advance Manuscript, was compiled using photography obtained on 9 July 1966 and reflects changes to that date.

In the areas to the north and south of boatsheet HO-05-1-65 comparison was made with a copy of boatsheet H-8853, PF-10-1-64. The source of the shoreline for this boatsheet is unknown and is not in agreement with the Advance manuscript.

An approximate mean lower low water line has been shown on the manuscript for any aid it may be to the chart compiler. However, it appears that there are sufficient soundings on the boatsheets to adequately delineate this line.

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 and chart 8520, 1:80,000 scale, 13th edition, March 7, 1966.

It appears that the CORDOVA Boat Harbor area on chart 8525 has been revised from photography as it is in good agreement with the Advance Manuscript. The same area on chart 8520 does not appear to have been revised.


Because of the difference in scale of the charts and manuscript only a visual comparison was made.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

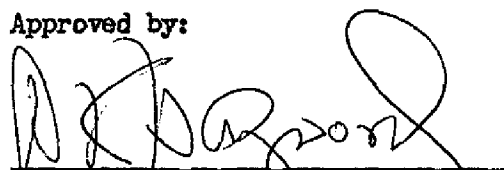
Approved by:


*Reviewed*  
~~Approved~~ by:

  
John Bull, RADM. Director,  
Atlantic Marine Center

  
Leo F. Beugnet

Approved by:

  
Chief, Photogrammetric Branch

  
Chief, Photogrammetry Division

Chief, Nautical Chart Division

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT TWO

I recommend that the following objects which have ~~(been inspected)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(charts)~~ the charts indicated.

The positions given have been checked after listing by

**C. H. Bishop**

P. A. Stark, CDR, C&GS  
Portland Field Officer

P. A. Stark, CDR, C&GS      *Chief of Party:*  
Land Field Officer

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 6-36, Fig. 79. Positions of charted landmarks and non-floating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

\* TABULATE SECONDS AND METERS

JISCOMM-DC 25412-P61