T-12650

T-12650

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-12650

Field Edited Map

LOCALITY

State ALASKA

General locality ORCA INLET

Locality CORDOVA CREEK

1964-1966

CHIEF OF PARTY

CHIEF OF PARTY H. J. SEABORG

COMPILATION OFFICE P. A. STARK

LIBRARY & ARCHIVES

DATE

USCOMM-DC 5087

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T - 12650

PROJECT NO. (II):
21423 (2) PH-6409

FIELD OFFICE (II):	CHIEF OF PARTY
SHIP PATHFINDER	H. J. SEABORG
PHOTOGRAMMETRIC OFFICE (III):	OFFICER-IN-CHARGE
PORTLAND, OREGON	P. A. STARK

INSTRUCTIONS DATED (II) (III):
DECEMBER 7, 1964 III

METHOD OF COMPILATION (III):
KELSH INSTRUMENT

MANUSCRIPT SCALE (III):	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:6,000
1:10,000	PANTOGRAPH SCALE: 1:10,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
May 1977	

APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
		AUG. 1977

GEOGRAPHIC DATUM (III):	VERTICAL DATUM (III): MHW
N.A. 1927	~~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):
SLIDE, 1964

LAT.:	LONG.:	☐ ADJUSTED ☒ UNADJUSTED
60° 39' 29.010"	145° 36' 35.374"	

PLANE COORDINATES (IV):		STATE	ZONE
Y = 2,432,661.9 FT.	X = 570,001.5 FT.	ALASKA	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.

USCOMM-DC 16276A-P61

FORM C&GS-181b
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): None	DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): 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. Masula	DATE 12-14-64
CONTROL CHECKED BY (III): R. H. Meyer	DATE 12-14-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): W. Heinbaugh	DATE 11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III): PLANIMETRY D. N. Williams	DATE 12-22-64
CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): Drafted for Hydro Support: D. N. Williams	DATE 12-24-64
SCRIBING BY (III): J. Place	DATE Nov. 1966
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): R. H. Meyer	DATE 1-10-65

REMARKS:

Field Edit Sept. 1965 and May 1966

USCOMM-DC 16276B-P61

FORM C&GS-181c
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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 6909 AND 64 S 6910	8-25-64	1005	1:30,000	4 FT ABOVE M.L.L.W.
64 S 6897 AND 64 S 6898	"	0955	"	4 FT " "
64 S 6951 THRU 64 S 6954	"	1035	1:15,000	5.4 FT " "

TIDE (III)

DIURNAL

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

WASHINGTON OFFICE REVIEW BY (IV): Leo F. Bevgard, 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:	IDENTIFIED:
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED:	IDENTIFIED

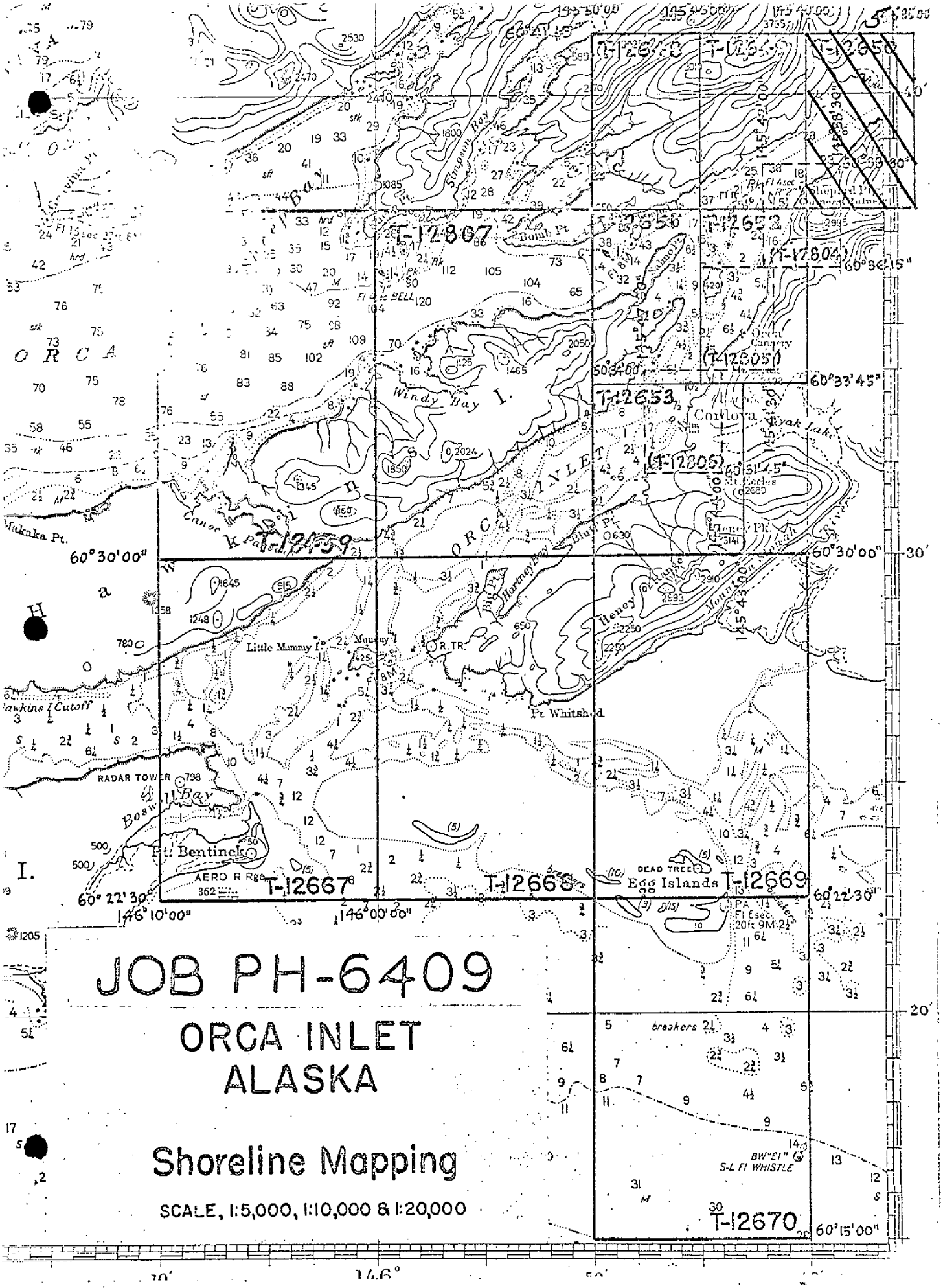
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

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

REMARKS:

T-12650

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	May 1967	



JOB PH-6409

ORCA INLET
ALASKA

Shoreline Mapping

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

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12650

Shoreline survey T-12650 is one of fifteen similar surveys in project PH-6409. It covers a part of the shoreline of the upper reaches of Nelson Bay. 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 methods, consisted of 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 ratio 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-12650

PROJECT 21423 (2)

NONE SUBMITTED. THERE WAS NO FIELD INSPECTION BEFORE COMPILATION.

FORM C&GS-164
(3-64)
USCOMM-DC
6659-P64

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12650 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)
ORCA BAY, EAST BASE, 1909	ALASKA 60145 P. 6	N.A. 1927	2,435,791.3 571,456.8	
ORCA BAY, WEST BASE, 1909	"	"	2,439,578.7 568,576.5	
TENT, 1909	ALASKA 60145 P. 15	"	2,429,712.6 567,109.6	
SLIDE, 1964	UNADJUSTED FIELD POSITION (IBM PRINT OUT)	"	2,432,661.9 570,001.5	

COMPUTED BY	DATE	CHECKED BY	DATE
C.H.B.	12-14-64	W.M.	12-14-64

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 1:63,360, 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-12650
Project PH-6409

31. DELINEATION:

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

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.

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 photographs as no field inspection was available.

36. OFFSHORE DETAILS:

None

37. LANDMARKS AND AIDS:

None

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Satisfactory junctions were made with T-12649 on the west and with 1:5,000 scale overlapping survey T-12804. There are no contemporary surveys to the north, east or south.

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:

Leo F. Bengnet
for P. A. Stark, CDR, 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.

ROBINSON FALLS CREEK
SNYDER FALLS CREEK

NELSON BAY *

* From Nautical Chart 8525

49. NOTES TO THE HYDROGRAPHER:

NONE.

FORM C&GS-1002
(9-66)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

50 T-12650

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

43. REMARKS

FORM CD-121 (11-63) (FMRS. BY A.O. 208-10)

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

TO : Chief, Photogrammetry Division

DATE: May 7, 1966

In reply refer to:

FROM : Commanding Officer
USC&GS 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.

cc: PACNARCEN

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

Sheet T-12806

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 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. 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 KPH

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.

REVIEW REPORT
SHORELINE
May 16, 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 made in June-August 1916 on Valdez datum. The comparison of the two surveys has been shown on the comparison print in blue.

Survey T-12650 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, 15 minute quadrangle, 1:63,360 scale edition of 1951 with minor revisions made in 1962. Because of the difference in scale of the two surveys only a visual comparison was made. The two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boatsheet H-8854, HO-20-1-65. The mean-high-water line of the boatsheet and the Advance Manuscript are not in agreement, particularly along the southeast shore.

A rock at approximate latitude 60° 39' 30" longitude 145° 39' 45" is not shown on the boatsheet.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 8520, 1:80,000 scale, 13th edition, March 7, 1966. There are no outstanding differences between the chart and this survey.

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
J. Bull, RADM,
Director, Atlantic Marine Center

Approved by:

Chief, Photogrammetric Branch

Chief, Photogrammetry Division

Chief, Nautical Chart Division