T-12648

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

8. 1

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

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD
T - 12648

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): 1:6000
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):
SIMPSON 16, 1900

LAT.:	LONG.:	
60° 38' 38.51"	145° 49' 47.06"	[X] ADJUSTED [ ] UNADJUSTED

PLANE COORDINATES (IV):		STATE	ZONE
y = 2,427,366 FT.	x = 530,560 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.

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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): By Kelsh Instrument	
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree	DATE 11-23-64
PROJECTION AND GRIDS CHECKED BY (IV): P. Hawking	DATE
CONTROL PLOTTED BY (III): R. H. Meyer	DATE 12-11-64
CONTROL CHECKED BY (III): W. Masula	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 12-24-64
CONTOURS: None	DATE
MANUSCRIPT DELINEATED BY (III): Drafted for Hydro Support: C. C. Harris	DATE 12-29-64'
SCRIBING BY (III): A. Shonds	DATE Nov. 1966
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. N. Williams	DATE 1-14-65

REMARKS:
Field Edit Sept. 1965 and May 1966

USCOMM-DC 15276B-P61

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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
1:30,000 CONTACT				
64 S 6913 THRU 64 S 6914	8-25-64	1005	1:30,000	4 FT ABOVE M.L.L.W.
1:10,000 RATIO				
64 S 1913 AND 64 S 1914	"	"	1:10,000	4 FT " "

TIDE (III)

		RATIO OF RANGES	MEAN RANGE	~~SPRING~~ DIURNAL 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. Bevgnet, 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: IDENTIFIED:

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

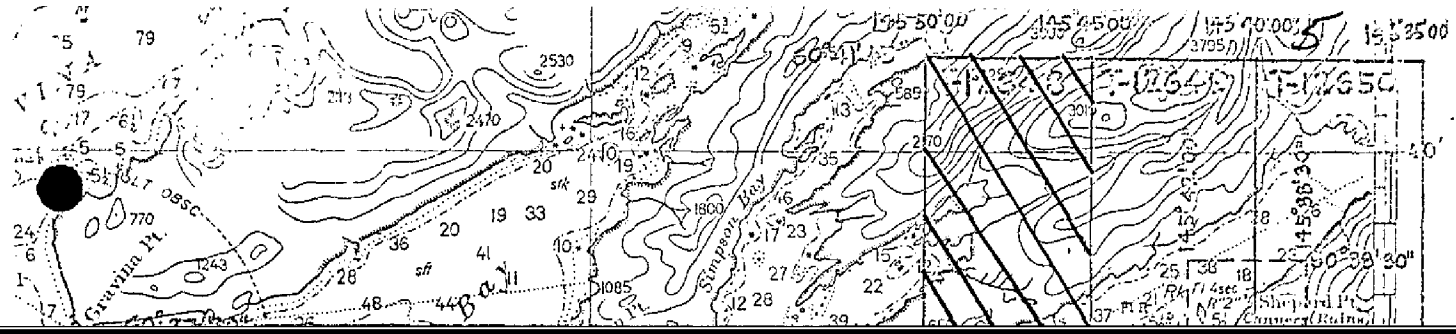
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

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

REMARKS:

T-12648

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro	December 1964	Superseded
Field edit applied subject to further verification	November 1965	Superseded
Second Field Edit applied	May 1966	
Final Review	April 1967	


Gravina Pt.
Simpson Bay
Bay
Shipyard Pt.
Conner Island
T-1265
T-1264
T-1265C
145°50'00"
145°40'00"
145°35'00"
55°40'
55°36'30"
55°30'30"

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12648

Shoreline survey T-12648 is one of fifteen similar surveys in project PH-6409. The purpose of the surveys 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 recovery of horizontal control. There was no field inspection prior to compilation.

The manuscript was compiled by Kelsh instrument at 1:10,000 scale using the panchromatic photography of August 25, 1964. A cronaflex copy was provided for preparation of the hydrographer's boat sheet along with specially prepared ratio photographs for the location of hydro 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-12648

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- 12648 PROJECT NO. 21423 (2) SCALE OF MAP 1:10,000 SCALE FACTOR None

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)
SIMPSON 16, 1900	ALASKA 60145 Pg. 14	N.A. 1927	60° 38' 38.51" 145° 49' 47.06"	

COMPUTED BY	DATE	CHECKED BY	DATE
D.N.W.	12-11-64	R.H.M.	12-11-64

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. Ferrow, Jr.

Submitted by:

W. Heinbaugh

COMPILATION REPORT

MAP MANUSCRIPT T-12648

PROJECT 21423 (2)

31. DELINEATION:

PLANIMETRY WAS COMPILED BY KELSH INSTRUMENT.

32. CONTROL:

ADEQUATE SUPPLEMENTARY CONTROL, BASED ON IDENTIFIED HORIZONTAL CONTROL, WAS ESTABLISHED BY AEROTRIANGULATION.

33. SUPPLEMENTAL DATA:

NONE.

34. CONTOURS AND DRAINAGE:

CONTOURS NOT APPLICABLE.

DRAINAGE WAS COMPILED BY KELSH OPERATOR USING 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 JUNCTION WAS MADE WITH T-12649 ON THE EAST AND T-12651 ON THE SOUTH. THERE IS NO CONTEMPORARY SURVEY ON THE NORTH AND WEST.

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 1:63360, EDITION 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. Bugnet
for P. A. STARK, CDR, C&GS
PORTLAND FIELD OFFICER

SUBMITTED:

Donnel N. Williams
DONNEL N. WILLIAMS
CARTOGRAPHER

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.

Raging Creek
Rogue Creek
Simpson Bay

49. NOTES TO THE HYDROGRAPHER:

NONE

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C&GS FORM 1002
(11-13-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

50

T-~~10368~~ 12648

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
DNW	DNW	DNW	DNW

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
DNW	DNW	None

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
None	None	DNW	DNW

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
DNW	DNW	DNW	None

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
DNW	DNW	DNW	DNW

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
DNW	DNW	None

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
None	None	None	DNW

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
DNW	DNW	None	DNW

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
None	None

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
DNW	DNW	DNW

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
DNW	DNW	DNW	DNW

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT
Donnel N. Williams	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
L. Neterer Reviewed by C. Bishop	Albert C. Rauck Jr. A. C. Rauck

43. REMARKS

USCOMM-DC 16252-P61

FORM CD-121 (11-63) (PHES. BY A.O. 206-10)

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: PACHARCEN

BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN

Sheet T-12506

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

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 RRG

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. 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.

REVIEW REPORT
SHORELINE
April 14, 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 1916. The difference in the shoreline between the two surveys, as shown on the Comparison Print, is the difference after an adjustment was made for the difference in datum between the two surveys. Survey 3649 is on the Valdez datum while T-12648 is on N. A. 1927 datum.

Shoreline survey T-12648 supersedes Registered Survey No. 3649 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS CORDOVA (C-5) ALASKA quadrangle, 1:63,360 scale, edition of 1951 with minor revisions in 1962. The comparison was favorable, there were no outstanding differences in the two surveys.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boatsheet H-8854, HO-20-1-65. This hydrographic survey did not include the area of Simpson Bay. The source of the shoreline along the northerly coast of Orca Bay of the boatsheet is unknown. It is not in agreement with the Advance Manuscript of T-12648. It was also noted that there are no alongshore rocks shown on the boatsheet.

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. The comparison of the shoreline of the two surveys has been shown on the Comparison Print. It was noted there are several alongshore rocks on the manuscript that are not shown on the chart. These have been indicated on the Comparison Print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

There are no recommendations for future surveys.

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