

T-12804

T-12804

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Ph-6409	
Type of Survey SHORELINE (PHOTOGRAMMETRIC)	
Field No. <i>Edition No 1</i>	Office No. T-12804
<i>Field Edited Map</i>	
LOCALITY	
State ALASKA	
General locality ORCA INLET	
Locality HUMPBAC KREEK	
1964-66	
CHIEF OF PARTY	
Chief of Party	H. J. Seaborg
Compilation Office	P. A. Stark
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T-12 804

PROJECT NO. (II):

PH-6409 (21423 (2))

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):

III December 7, 1964

METHOD OF COMPILATION (III):

Kelsh Instrument

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6,000; pantograph 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):

AUG. 1977

GEOGRAPHIC DATUM (III):

H.A. 1927

VERTICAL DATUM (III):

~~MEAN LOW WATER~~ MHW

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):

Shingle 3, 1964

LAT.:

60° 37' 54.557"

LONG.:

145° 40' 14.866"

☐ ADJUSTED☒ UNADJUSTED

PLANE COORDINATES (IV):

Y = 2,423,011.65 FT.

X = 559,110.90 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):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Kelsh Instrument using photography of August 25, 1964		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		12-2-64
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
P. Hawkins		12-2-64
CONTROL PLOTTED BY (III):		DATE
D. N. Williams		12-18-64
CONTROL CHECKED BY (III):		DATE
J. S. Place		12-18-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
W. Heinbaugh		11-18-64
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	J. S. Place	12-24-64
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
C. C. Harris		1-4-65
SCRIBING BY (III):		DATE
A. Shands		Nov. 1966
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
R. H. Meyer		1-8-65
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

"S" Camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64S6895 thru 6897	8-25-64	0955	1:30,000	3.8 ft. above MLLW
64S6948 thru 6951	8-25-64	1037	1:15,000	5.1 ft. above MLLW

TIDE (III)

DIURNAL

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

WASHINGTON OFFICE REVIEW BY (IV):

Leo F. Beugnet, 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:

1

IDENTIFIED:

1

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

None

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

None

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

None

REMARKS:

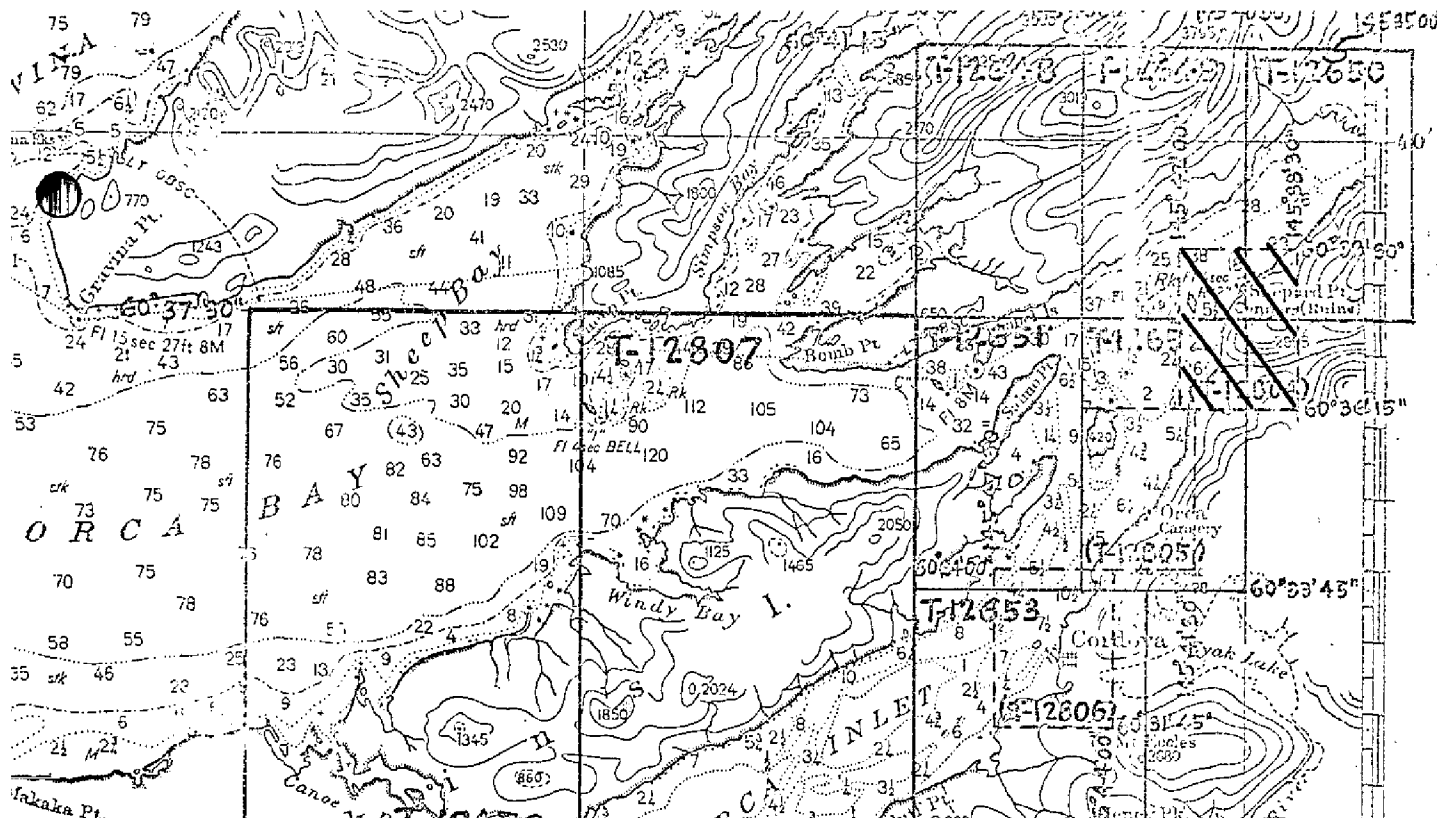
T-12804

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-12804

Shoreline survey T-12804, compiled at 1:5,000 scale, is one of fifteen similar maps in project PH-6409. The primary purpose of the project was to furnish new shoreline for nautical charts and provide photo-hydro support data for hydrographic surveys to be conducted 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 of August 25, 1964 and control established by aerotriangulation. A cronaflex copy of the manuscript along with specially prepared 1:5,000 scale ratio photographs was subsequently provided for preparation of the hydrographers boatsheet and for photo-hydro support 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
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There was no field inspection prior to compilation.

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 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.

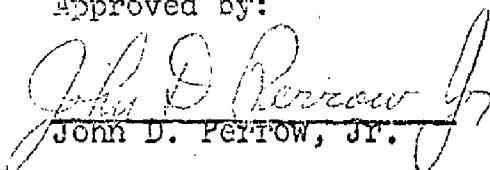
24. Supplemental Data

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.

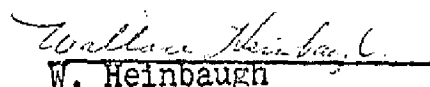
25. Photography

Photography was adequate as to coverage, overlap and definition.

Approved by:


John D. Perrow, Jr.

Submitted by:


W. Heinbaugh

COMPILATION REPORT
T-12804

31. DELINEATION:

The planimetry was compiled by Kelsh Instrument using the panchromatic photography of August 25, 1964.

32. CONTROL:

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

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours not applicable.

The drainage was delineated 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:

Two landmarks; HOUSE (S. GABLE) near latitude $60^{\circ} 38.0'$ longitude $145^{\circ} 40.0'$ and HOUSE (S. GABLE) near latitude $60^{\circ} 36.8'$ longitude $145^{\circ} 40.4'$, shown on chart 8525, were not visible on the photographs and are not shown on the manuscript. There are no fixed aids to navigation within the limits of the manuscript.

38. CONTROL FOR FUTURE SURVEYS:

No supplemental control for future surveys was established.

39. JUNCTIONS:

Satisfactory junctions were made with 1:5,000 scale manuscript T-12805 on the south and with the surrounding 1:10,000 scale manuscripts T-12649, 12650 and 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 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:

Submitted:

Leo L. Bengt
P. A. Stark, CDR, USCG

Donnel N. Williams
Donnel N. Williams

48. GEOGRAPHIC NAME LIST:

The following geographic names for this survey were furnished on U.S.G.S. CORDOVA (C-5) ALASKA quadrangle, 1:63,360 scale, edition of 1951/

HUMPBAC KREEK
SHEPARD POINT

49. NOTES TO THE HYDROGRAPHER:

Verify piling and marine railway at Shepard Point. Verify landmarks, HOUSE (S. GABLE) near Humpback Creek and HOUSE (S. GABLE) at Shepard Point.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
50		T-10263 T-12804	
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
RHM	RHM	RHM	RHM
PHYSICAL FEATURES			
20. WATER FEATURES	21. NATURAL GROUND COVER		22. PLANETABLE CONTOURS
RHM	R H M		RHM
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
NONE	NONE	NONE	RHM

[REDACTED]

[REDACTED]

New photos
scheduled
at 1/10,000
Pan. film
5/11/66
R26

Sheet T-12606

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
R26

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-12646

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 T-12804
SHORELINE
April 24, 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. The comparison between the two surveys is shown on the comparison print. The area south of latitude $60^{\circ} 36' 45''$ is not shown on either of the two older surveys, 3648 or 3649.

This survey supersedes 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 in 1962. The two surveys are in good general agreement with the exception of the area of SHEPARD POINT where shoreline changes have occurred.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

From latitude $60^{\circ} 37.6''$ northeastward to latitude $60^{\circ} 38.2''$ a comparison was made with a copy of boatsheet H0-05-1-65. The shoreline for this boatsheet was obtained from an Incomplete Manuscript and is not in perfect agreement with the Advance Manuscript.

From latitude $60^{\circ} 36' 15''$ northward to latitude $60^{\circ} 37.6'$ comparison was made with a copy of boatsheet H-8853, PF-10-1-64. The source of the shoreline for this boatsheet is believed to be from an older survey and is not in agreement with the shoreline of the Advance Manuscript.

An approximate mean lower-low water line has been shown on the manuscript in the area of HUMPBACK CREEK, latitude $60^{\circ} 36' 45''$, for any value it may be to the chart compiler. It is assumed that the sounding on the boatsheet furnished the reviewer have not been reduced to their final values.

Northward from latitude 60° 38.2' comparison was made with a copy of boatsheet H-8854, HO-20-1-65. The shoreline for this was also from an Incomplete Manuscript and is not in agreement with the Advance Manuscript.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 8525, 8th edition, March 14, 1966, Revised November 14, 1966, and with Chart 8520, 13th edition, March 7, 1966. Because of the difference in scale only a visual comparison was made.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Approved by:

J. Bull
J. Bull, RADM.

Director, Atlantic Marine Center

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

D. K. Hayson
Chief, Photogrammetric Branch

Janet

Chief, Photogrammetry Division

Chief, Nautical Chart Division

12/11/78 chg 16710 Shipard Applied Fully Throught-out
Rennan, D.J. Pt. See History # 5