10881

Orig.

Diag. Cht. No. 6157 Inset.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-5807 *Office No.* T-10881

LOCALITY

State Oregon & Washington

General locality Columbia River

Locality Coyote Island

1959

CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

10881

FORM 181
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T - 10881

Project No. (II): Ph-5807 Quadrangle Name (IV):

Field Office (II): Arlington, Oregon Chief of Party: Lorne G. Taylor
Unit Chief: K. W. Jeffers
Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Lorne G. Taylor

Instructions dated (II) (III): Undated
Field and Office
Modification - Letter 73/rrj dated 9 March 1959
Letter 831/es dated 12 March 1959
Letter 732/rrj dated 21 May 1959
Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Kelsh Stereoscopic Instrument

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III): Viewing Scale 1:6000
Pantograph Scale 1:10,000

Scale Factor (III): None

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 19 June 1961

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): N.A. 1927 Vertical Datum (III): Refer to datum profile on manuscript

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~~
U. S. Engineers Columbia River Low-Water Profile.

Reference Station (III): MESSNER (USE) 1942

Lat.: 45° 50' 20.227" Long.: 119° 40' 50.987" Adjusted X
Unadjusted

Plane Coordinates (IV): State: Oregon Zone: North

Y= 793,027.25 X= 2,208,785.51

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

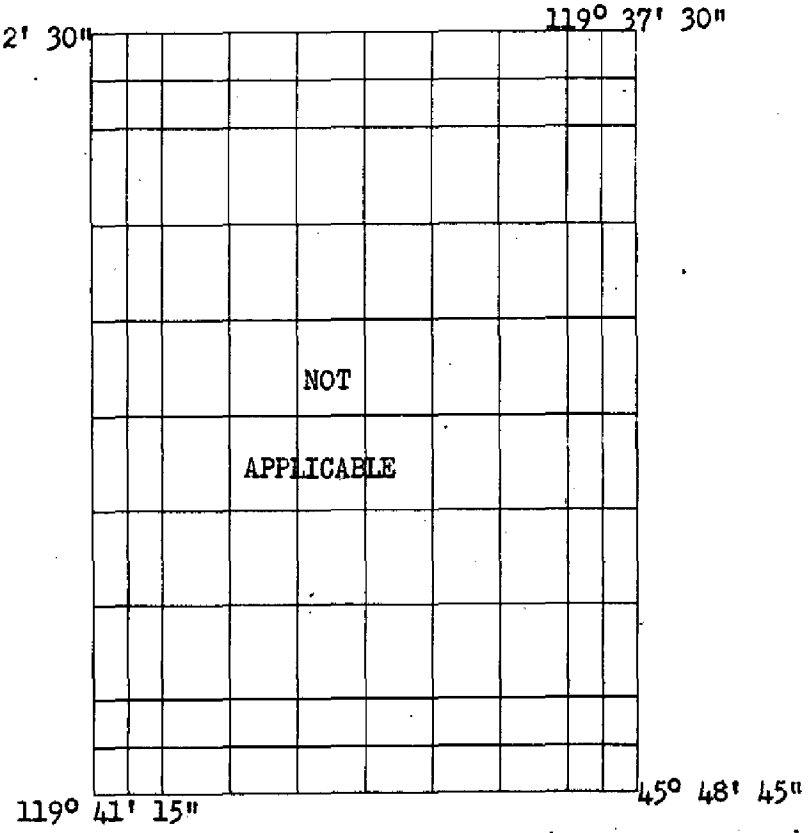
When entering names of personnel on this record give the surname and initials, not initials only.

COMM-DC-57842

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



Areas contoured by various personnel
(Show name within area)
(II) (III)

FORM 181b
(4-23-54)

4.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): C. H. Bishop, K. W. Jeffers — Date: 4-13-59, Sept. 1959

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

Shoreline
~~Mean High Water~~ Location (III) (State date and method of location): Located by field inspection on 4-13-59 on single lens ratio prints taken 8-28-58 and delineated by Kelsh Stereoscopic Instrument on this photography. The shoreline is the normal gradient of the Columbia River at 110,000 cfs.

Projection and Grids ruled by (IV): P. Dempsey — Date: 7-27-59

Projection and Grids checked by (IV): Shoup — Date: 8-3-59

Control plotted by (III): J. L. Harris — Date: 8-27-59

Control checked by (III): C. C. Harris — Date: 9-30-59

Radial Plot or Stereoscopic Control extension by (III): John D. Perrow, Jr. — Date: June 1959

Stereoscopic Instrument compilation (III):
Planimetry: D. N. Williams — Date: 10-10-59
Contours: None — Date:

Manuscript delineated by (III): D. N. Williams (Scribing) — Date: 2-11-60; C. C. Harris (Stick-up) — 2-25-60

Photogrammetric Office Review by (III): J. D. Harris (Rough Draft) — Date: 10-26-59; J. E. Deal (Advance) — 3-31-60

Elevations on Manuscript checked by (II) (III): None — Date:

COMM-DC-57842

FORM 181c
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

5.

Camera (kind or source) (III): U.S.C.& G.S. Single lens 58-S

The Dalles Dam
Lake Celilo Pool
~~Stage of Tide~~ (Forebay)

PHOTOGRAPHS (III)

Number	Date	Time	Scale
58-S-7666A thru 7668A	8-28-58	9:44	1:30,000 contact 1:10,000 ratio

159.8' above M.S.L.

Flow at Arlington Gage and Paterson Gage was 107,000 cfs.

Tide (III)

Ratio of Ranges	Mean Range	Spring Range

Reference Station:
Subordinate Station: Not applicable.
Subordinate Station:

Washington Office Review by (IV): J.A. Streifler Date: March 1961

Final Drafting by (IV): Portland Photogr. Office Date: Feb.-March 1961

Drafting verified for reproduction by (IV): J.A. Streifler Date: March 1961

Proof Edit by (IV): J.A. Streifler Date: June 1961

Land Area (Sq. Statute Miles) (III): 9
Shoreline (More than 200 meters to opposite shore) (III): 4 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 1.5 " "
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 1 Recovered: 1 Identified: 1
Number of BMs searched for (II): None Recovered: Identified:
Number of Recoverable Photo Stations established (III): 2
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

COMM-DC-57842

SUMMARY
to accompany Shoreline Map Manuscripts
T-10870 through T-10885

The sixteen (16) subject surveys represent the eastern portion of project Ph-5807. The project consists of forty-nine (49) shoreline surveys of the Columbia River (Ore.-Wash.) from Bonneville eastward to Umatilla and was designed to aid in the construction of a new series of nautical charts. T-10870 thru T-10885 extend from Arlington to Umatilla, which are covered by a stereoplanigraph bridging plot done in the Washington Office in June 1959.

The map manuscripts were compiled by Kelsh stereoscopic instruments in the Portland Photogrammetric Office from photography of August 1958 and field inspection information (shoreline - April 59, interior - September 59).

The completed compilations as submitted to the Washington Office are the result of adequately scribed sheets and suitable for the direct reproduction of registration copies.

A cronar film positive at the compilation scale of 1:10,000 and the Descriptive Report of each will be registered and filed in the Bureau Archives.

May 1961

FIELD INSPECTION REPORT

Map Manuscript T-10881

Project Ph-5807

Refer to Field Inspection Report for T-10876 thru T-10881 which is included in the Descriptive Report for T-10876 (1959).

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10881

Project Ph-5807

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) for T-10870 thru T-10885 which is included in the Descriptive Report for T-10870 (1959).

FORM 164
(4-23-54)

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

DESCRIPTIVE REPORT — CONTROL RECORD

MAP T- 10881 PROJECT NO. Ph-5807 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
MESSNER (USE) 1942	Oreg.N.	N.A.	793,027.25	3027.25	(1972.75)		922.7	(601.3)		
	Pg.74	1927	2,208,785.51	3785.51	(1214.49)		1153.8	(370.2)		
DO		"	792,602.72	2602.72	(2397.28)		793.3	(730.7)		
Sub Station "A"			2,207,626.30	2626.30	(2373.70)		800.5	(723.5)		
DO		"	792,674.60	2674.60	(2325.40)		815.2	(708.8)		
Sub Station "B"			2,207,671.60	2671.60	(2328.40)		814.3	(709.7)		

9.

Ck. Copy [initials]

1 FT. = .3048006 METER

COMPUTED BY: J.E.D. DATE 12-22-58 CHECKED BY: J.L.H. DATE 1-8-59

COMM-DC-57843

COMPILATION REPORT

Map Manuscript T-10881

Project Ph-5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry.

The C&GS photography of 8-28-58 was adequate to compile the planimetry to the detail limits indicated on the project index.

Refer to last paragraph Item 31, Delineation of the Descriptive Report for T-10837 (1959).

32. Control:

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) T-10870 thru T-10885 which is included in the Descriptive Report for T-10870 (1959).

33. Supplemental Data:

None.

34. Contours and Drainage:

Contours are not applicable.

The drainage shown on the manuscript was delineated from field inspection notes supplimented by minute examination of the Kelsh Models for drainage and by visual inspection of the U.S.G.S. topographic quadrangle, "Blalock Island", Oreg. - Wash., Scale 1:125,000, published 1906.

35. Shoreline and Alongshore Details:

The shoreline shown on this map mahuscript is at the normal river gradient of 110,000 cfs flow. A graph showing this gradient from which the elevation of the shoreline may be determined for any place along the river is shown on the manuscript.

Refer to correspondence included in the Descriptive Report for T-10837 (1959) for a detailed report on this feature.

36. Offshore Details:

Refer to remarks under this heading in the Descriptive Report for T-10865 (1959).

37. Landmarks and Aids:

Form 567 was submitted to Washington on 1 December 1959 listing the scaled geographic position of two fixed aids to navigation. There are no aeronautical aids or landmarks within the area of this manuscript.

38. Control for Future Surveys:

The two fixed aids to navigation mentioned in Item 37 are listed under 49, Notes to the Hydrographer.

39. Junctions:

A satisfactory junction was made on the west with T-10879 and on the north with T-10880. There are no contemporary surveys to the east and south.

40. Horizontal and Vertical Control:

Refer to remarks under this item in the Descriptive Report for T-10837 (1959).

46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 30 minute "Blalock Island" Oreg. - Wash. quadrangle, Scale 1:125,000, published 1906.

47. Comparison with Nautical Charts:

Refer to remarks under this heading in the Descriptive Report for T-10853 (1959).

Approved:

Lorne G. Taylor
CDR, C&GS
Officer-in-Charge

Respectfully submitted:

J. Edward Deal
Cartographer
C&GS

T-10881

48. GEOGRAPHIC NAMES LIST

Benton County
Blalock Island

*Columbia River
Columbia River Hwy.
Coyote Island

Messner
Morrow County

Oregon

Union Pacific

Washington

* B.G.N. Decision

GEOGRAPHIC NAMES SECTION
17 MAY 1960

49. Notes to the Hydrographer:

Form 567 has been submitted listing the scaled geographic position of two fixed aids to navigation which were located by Kelsh Instrument.

Messner Range Front Light, 1959
Messner Range Rear Light, 1959

FORM 182
(6-12-56)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10881

1. Projection and grids X 2. Title X 3. Manuscript numbers X 4. Manuscript size X

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy X 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) X 7. Photo hydro stations None 8. Bench marks None
9. Plotting of sextant fixes X 10. Photogrammetric plot report X 11. Detail points X

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline X 13. Low-water line None 14. Rocks, shoals, etc. X 15. Bridges None 16. Aids to navigation X 17. Landmarks None 18. Other alongshore physical features X 19. Other alongshore cultural features X

PHYSICAL FEATURES

20. Water features X 21. Natural ground cover X 22. Planetable contours None 23. Stereoscopic instrument contours None 24. Contours in general None 25. Spot elevations None 26. Other physical features X

CULTURAL FEATURES

27. Roads X 28. Buildings X 29. Railroads X 30. Other cultural features X

BOUNDARIES

31. Boundary lines X 32. Public land lines None

MISCELLANEOUS

33. Geographic names X 34. Junctions X 35. Legibility of the manuscript X 36. Discrepancy overlay None 37. Descriptive Report X 38. Field inspection photographs X 39. Forms X

40. _____ (Reviewer) J.Edward Deal (Supervisor, Review Section or Unit)

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)

43. Remarks:

COMM-DC 34529

REVIEW REPORT OF
SHORELINE MAP MANUSCRIPTS T-10870 through T-10885
May 1961

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies:

ARLINGTON, ORE.-WASH.	1:125,000,	1916,	U.S. Geological Survey
BLALOCK IS., ORE.-WASH.	1:125,000,	1906,	U.S. Geological Survey
UMATILLA, ORE.-WASH.	1:125,000,	1908,	U.S. Geological Survey

Because of scale difference a detailed comparison is impractical.

64. Comparison with Comtemporary Hydrographic Surveys:

There are no contemporary hydrographic surveys of subject area.

65. Comparison with Nautical Charts:

The first nautical charts of this portion of the Columbia River are being constructed now. Incomplete compilations are not available for comparison.

66. Adequacy of Results and Future Surveys:

T-10870 through T-10885 have been compiled according to instructions and meet the adequacy and accuracy requirements for this type of survey.

Reviewed by:
Josef J. Streifler
Josef J. Streifler

Approved by:

R. C. Landes
Chief, Review & Drafting Sec.
Photogrammetry Division

Marvin Paulson
Chief, Nautical Chart Division

J. E. Waugh 5/4/62
Chief, Photogrammetry Div.

G. C. Mast 6/19/62
Chief, Operations Division

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10881

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6/24/76	6161	D. CORDTS	Before After Verification and Review
			Superseded by T-13215, 13216, 12150
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.