

10866

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.	Office No. T-10866
LOCALITY	
State	Oregon & Washington
General locality	Columbia River
Locality	Four O'clock Rapids
1959	
CHIEF OF PARTY	
Lorne G. Taylor, Photogrammetric Office	
LIBRARY & ARCHIVES	
DATE	May 1962

USCOMM-DC 5087

10866

DESCRIPTIVE REPORT - DATA RECORD

T - 10866

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 Copy filed in Division of
Field and Office Photogrammetry (IV)
Modification: Letter 73/rrj dated 9 March 1959
Letter 831/ea dated 12 March 1959
Letter 732/rrj dated 21 May 1959

Method of Compilation (III): Kelsh Stereoscopic Instrument

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III): 1:6000
Scale Factor (III): None Pantograph Scale 1:10,000

JUL 11 1961

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

Applied to Chart No. Date: Date registered (IV): 7 June 1961

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

Geographic Datum (III): N.A. 1927 Vertical Datum (III) file on manuscript
Refer to datum pro-
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): WHITE, 1941

Lat.: 45° 41' 16.684" Long.: 120° 26' 09.827" Adjusted X
Unadjusted

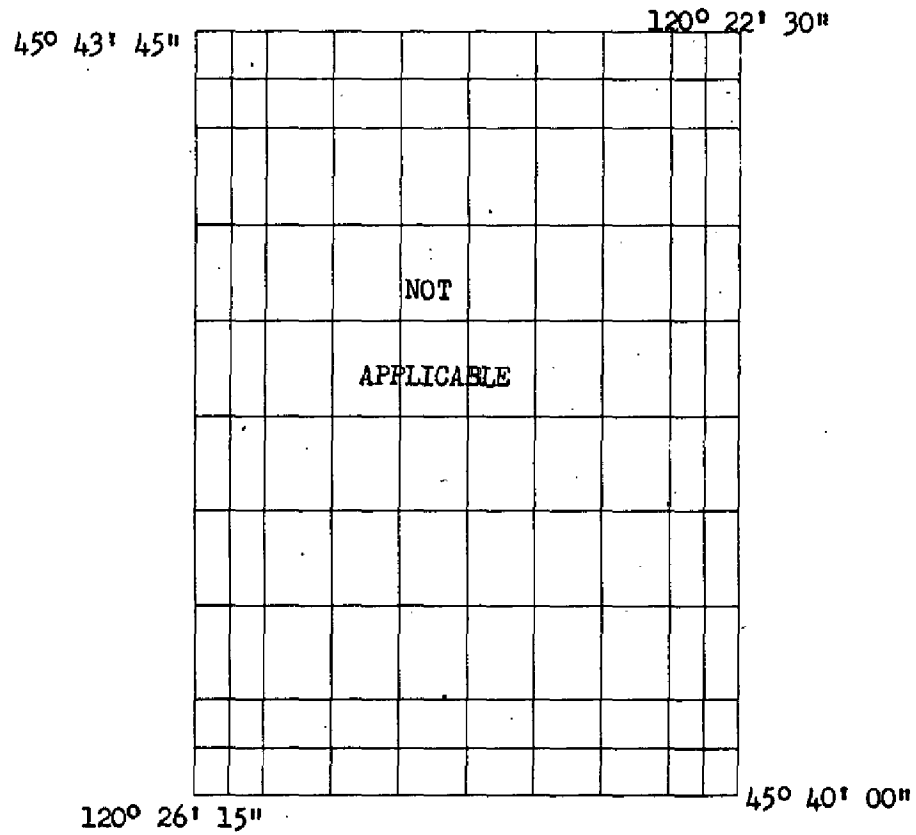
Plane Coordinates (IV): State: Oregon Zone: North

Y= 736,921.46 X= 2,016,339.73

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



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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): C. H. Bishop, (Shoreline) Date: 4-7-59
E. W. Jeffers, (Interior) August 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 4-7-59 on single lens ratio prints taken 8-28-58 and delineated by Kelsh Stereoscopic Instrument on models of same photography. The shoreline is the normal gradient of the Columbia River at 110,000 cfs.

Projection and Grids ruled by (IV): P. Dempsey Date: 5-14-59

Projection and Grids checked by (IV): Shoup Date: 5-14-59

Control plotted by (III): J. L. Harris (Pass Points & U.S.E.) Date: 7-24-59

Control checked by (III): J. E. Deal Date: 7-30-59

Radial Plot or Stereoscopic Control extension by (III): Robt. Fueschel Date: May 1959

Planimetry D. N. Williams Date: 9-16-59

Stereoscopic instrument compilation (III): Contours Date:

Manuscript delineated by (III): J. L. Harris (Scribing) Date: 12-14-59
C. C. Harris (Stick-up) 1-27-60

Photogrammetric Office Review by (III): J. L. Harris (Rough Draft) Date: 9-21-59
J. E. Deal (Advance) 3-30-60

Elevations on Manuscript checked by (II) (III): Date:

DESCRIPTIVE REPORT - DATA RECORD

5.

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

Number	Date	PHOTOGRAPHS (III)		Scale	The Dalles Dam Pool Level (Forebay) Stage-of-Tide-
		Time			
58 S 7693A & 7694A	8-28-58	10:19		1:30,000 contact 1:10,000 ratio	159.76' above MSL Flow at Arlington Gage was 107,000 cfs

Tide (III)

Reference Station:
Subordinate Station: **Not applicable**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): *W. Streifer*

Date: *May 1961*

Final Drafting by (IV): *Portland Photogrammetric Office*

Date: *Dec. 59 - March 60*

Drafting verified for reproduction by (IV): *W. Streifer*

Date: *May 1961*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **12**
 Shoreline (More than 200 meters to opposite shore) (III): **6 statute miles**
 Shoreline (Less than 200 meters to opposite shore) (III): **2 " "**
 Control Leveling - Miles (II):
 Number of Triangulation Stations searched for (II): **4** Recovered: **4** Identified: **1**
 Number of BMs searched for (II): **None** Recovered: Identified:
 Number of Recoverable Photo Stations established (III): **4***
 Number of Temporary Photo Hydro Stations established (III): **None**

Remarks:

*** All fixed aids to navigation located by Kelsh Instrument.**

SUMMARY
TO ACCOMPANY SHORELINE MAP MANUSCRIPTS
T-10858 through T-10869

The twelve (12) subject surveys, extending from MILLER ISLAND eastward to the town of ARLINGTON, Oregon are part of project Ph-5807. The entire project consists of forty-nine (49) shoreline surveys which cover the Columbia River and adjacent land areas of Oregon and Washington from Bonneville eastward to Umatilla. It was designed to aid in the construction of a new series of nautical charts.

A stereoplanigraph bridging plot of the twelve subject surveys was done in the Washington Office in May 1959 (see separate report). They were compiled by Kelsh stereoscopic instruments in the Portland Photogrammetric Office during the latter part of 1959 from photography of August 1958 and field inspection information (shoreline, March-April 1959; interior, July-August 1959).

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 crownar film positive at the compilation scale of 1:20,000 and the Descriptive Report of each will be registered and filed in the Bureau Archives.

June 1961

FIELD INSPECTION REPORT

Map Manuscript T-10866

Project Ph-5807

Refer to the Field Inspection Report for T-10865 thru T-10869
which is included in the Descriptive Report for T-10865 (1959).

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10866

Project Ph-5807

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) for T-10858 thru T-10869 which is included in the Descriptive Report for T-10858 (1959).

U.S. DEPARTMENT OF COMMERCE
NAUTICAL AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 10866

PROJECT NO. Ph-5807

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
WHITE, 1941	Ore.G.N. Pg. 72	N.A. 1927	736,921.46	1921.46	(3078.54)		585.7	(938.3)	
DO		"	2,016,339.73	1339.73	(3660.27)		408.3	(1115.7)	
Sub Station "A"			736,930.59	1930.59	(3069.41)		588.4	(935.6)	
			2,016,409.03	1409.03	(3590.97)		429.5	(1094.5)	
DO			736,945.58	1945.58	(3054.42)		593.0	(931.0)	
Sub Station "B"			2,016,236.41	1236.41	(3763.59)		376.9	(1147.1)	
									9.
									copy

COMPILATION REPORT

Map Manuscript T-10866

Project Php5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry.

The C&GS 1958 photography was adequate to compile the planimetry to the detail limits indicated on the project index.

Refer to last paragraph under this heading in the Descriptive Report for T-10837 (1959), page 19.

32. Control:

Refer to remarks in the Descriptive Report for T-10858 (1959) and to the Photogrammetric Plot Report for T-10858 thru T-10869 which is included in the Descriptive Report for T-10858 (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 supplemented by minute examination of the Kelsh models for drainage and by visual inspection of the U.S.G.S. Topographic quadrangle, "Arlington", Oreg. - Wash., Scale 1:125,000 published 1947, reprinted 1948.

35. Shoreline and Alongshore Details:

The shoreline shown on this map manuscript 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 contained in the Descriptive Report for T-10865 (1959).

37. Landmarks and Aids:

Forms 567 were submitted to Washington on 28 Sept. 1959 for 4 fixed aids to navigation.

There are no aeronautical aids or landmarks for charts.

38. Control for Future Surveys:

Four fixed aids to navigation were located by Kelsh Instrument. These are listed under Item 49, Notes to the Hydrographer.

39. Junctions:

A satisfactory junction was made on the west with T-10865 and on the east with T-10867. There are no contemporary surveys to the north and south.

40. Horizontal and Vertical Accuracy:

Refer to the Descriptive Report for T-10837 (1959).


46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 30 minute "Arlington", Wash. - Oreg. quadrangle, Scale 1:125,000, Edited 1916, reprinted 1948. The double dash roads shown on the quadrangle on the Oregon side of the river do not appear on the photographs and the field inspection did not indicate roads in this area.

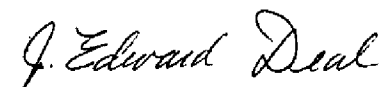
47. Comparison with Nautical Charts:

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

Approved:


Lorne G. Taylor
CDR, C&GS

Respectfully submitted:


J. Edward Deal
Cartographer, C&GS

T-10866

48. GEOGRAPHIC NAMES LIST

*Columbia River
Columbia RiverHwy.

Four O'Clock Rapids

Gilliam County

Klickitat County

Oregon

Spokane, Portland & Seattle R.R.

Union Pacific R.R.

Washington

* B.G.N.Decision

George S. Baker
GEOGRAPHIC NAMES SECTION
16 MAY 1960

49. Notes to the Hydrographer:

Forms 567 were submitted listing the scaled geographic positions of four fixed aids to navigation which were located by Kelsh Instrument:

Mile 28-29 Range 1 Front Daybeacon
Mile 28-29 Range 1 Rear Daybeacon
Four O'clock Rapids Range 2 Front Light
Four O'clock Rapids Range 2 Rear Light

PHOTOGRAMMETRIC OFFICE REVIEW

T-10866

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 None 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 along-shore 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. _____ J. Edward Deal _____
Reviewer 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:

REVIEW REPORT OF
SHORELINE MAP MANUSCRIPTS T-10858 THROUGH T-10869
June 1961

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies:

WISHRAM, ORE.-WASH.	1:62,500	1959	U.S.G.S.
WASCO, ORE.-WASH.	1:62,500	1957	U.S.G.S.
ARLINGTON, ORE.-WASH.	1:125,000	Ed. of 1916	U.S.G.S.

There is good agreement between effected subject surveys and the later Geological Survey Quads of 1:62,500. Arlington quadrangle of 1916 at 1:125,000 does not permit a detailed comparison because of scale difference.

64. Comparison with Contemporary 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 and incomplete compilations are not available for comparison at this time.

66. Adequacy of Results and Future Surveys:

T-10858 through T-10869 were compiled according to instructions. No deficiencies in accuracy or adequacy are indicated.

Reviewed by:

Josef J. Streifler
Josef J. Streifler

Approved by:

L. C. Lande
Chief, Review & Drafting Sec.
Photogrammetry Division

Warren Paulsen
Chief, Nautical Chart
Division

J. E. Waugh 5/9/62
Chief, Photogrammetry Division

Max B. Keltz
Chief, Operations Division

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10866

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			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
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			Before After Verification and Review

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.