

10874

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-10874

LOCALITY

State Oregon & Washington

General locality Columbia River

Locality Thanksgiving Island

1959

CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

10874
10801

DESCRIPTIVE REPORT - DATA RECORD

T - 10874

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

Copy filed in Division of
Photogrammetry (IV)

Modification: Letter 73/rrj dated 9 March 1959
Letter 831/es 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

Viewing Scale

Scale Factor (III): None

Pantograph Scale

1:10,000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

23 June 1961

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Refer to datum pro-
Vertical Datum (III): file on manuscript

Mean sea level except as follows:
Elevations shown as (25) refer to ~~mean high water~~
Elevations shown as (5) refer to ~~seounding datum~~
i.e., ~~mean low water or mean lower low water~~

U. S. Engineers Columbia River
Low-Water Profile

Reference Station (III): ALDER (USGS) 1916

Lat.: 45° 50' 59.419"

Long.: 119° 56' 21.080"

Adjusted X
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

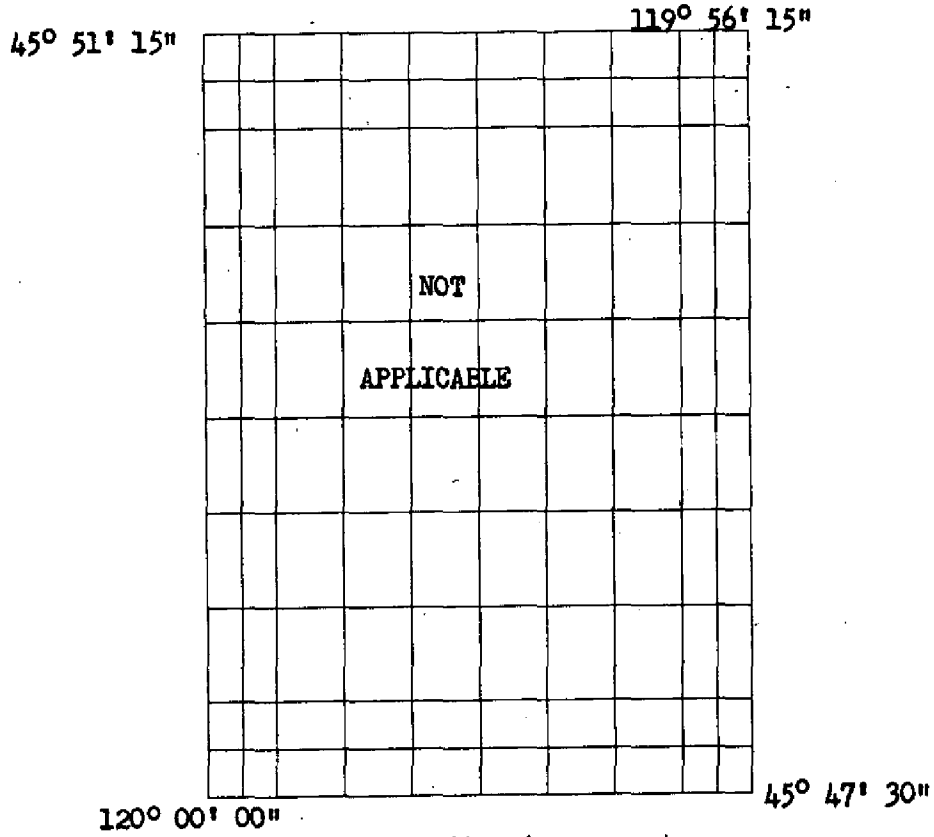
Y= 796,434.52

X= 2,142,910.13

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): **R. B. Melby (Shoreline)**
W. V. Hull (Interior)

Date: **4-10-59**
Sept. 1959

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

~~Mean High Water~~
Shoreline Location (III) (State date and method of location): **Located by field inspection on 4-10-59 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: **6-30-59**

Projection and Grids checked by (IV):

Shoup

Date: **8-3-59**

Control plotted by (III):

J. L. Harris

Date: **8-24-59**

Control checked by (III):

C. C. Harris

Date: **9-28-59**

Radial Plot or Stereoscopic
Control extension by (III):

John D. Perrow, Jr.

Date: **June 1959**

Stereoscopic Instrument compilation (III):

Planimetry **D. N. Williams**

Date: **10-2-59**

Contours

Date:

Manuscript delineated by (III):

J. L. Harris (Scribing)
D. N. Williams (Stick-up)

Date: **12-22-59**
1-26-60

Photogrammetric Office Review by (III):

J. L. Harris
J. E. Deal

Date: **10-7-59**
3-30-60

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

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

Number	Date	PHOTOGRAPHS (III)		Scale	The Dalles Dam Stage of Tide - (Forebay)
		Time			
58-S-7634A thru 7636A	8-28-58	9:28		1:30,000 contact 1:10,000 ratio	158.8' above M.S.L. Flow at Arlington Gage was 107,000 cfs
* 58-S-7655A thru 7656A	8-28-58	9:42		DO	DO

* Used for field inspection only.

Tide (III)

Reference Station: Not applicable
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

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

Date: *March 1961*

Final Drafting by (IV): *Portland Photogram. Office*

Date: *Dec. 59 - March 60*

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

Date: *March 1961*

Proof Edit by (IV): *J. Streifer*

Date: *June 1961*

Land Area (Sq. Statute Miles) (III): 12

Shoreline (More than 200 meters to opposite shore) (III): 8 Statute miles

Shoreline (Less than 200 meters to opposite shore) (III): None

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 2 Recovered: 2 Identified: 0

Number of BMs searched for (II): None Recovered: Identified:

Number of Recoverable Photo Stations established (III): 9**

Number of Temporary Photo Hydro Stations established (III): None

Remarks:

** All were fixed aids to navigation.

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 helsh 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 1:40,000 and the Descriptive Report of each will be registered and filed in the Bureau Archives.

May 1961

FIELD INSPECTION REPORT

Map Manuscript T-10874

Project Ph-5807

Refer to Field Inspection Report for T-10870 thru T-10875
which is included in the Descriptive Report for T-10870 (1959).

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10874

Project Ph-5807

Refer to the Photogrammetric Plot Report, Columbia River
Ph-5807 (Stereoplanigraph Bridge) T-10870 thru T-10885 which is
included in the Descriptive Report for T-10870 (1959).

MAP T-10874 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 λ -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)		FORWARD	(BACK)	
THANKS (USE) 1942	WALLA WALLA DIST. U.S.E. Fig. N. Tech.	N.A. 1927	780,946.93	2,135,247.80	946.93	(4053.07)		288.6	(1235.4)	
AIDER (USGS) 1916		"	796,434.52		247.80	(4752.20)		75.5	(1448.5)	
	Pg. X144		2,142,910.13		1434.52	(3565.48)		437.2	(1086.8)	
					2910.13	(2089.87)		887.0	(637.0)	

11.
copy photo.

COMPILATION REPORT

Map Manuscript T-10874

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-10875 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 supplemented 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 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 under this heading in the Descriptive Report for T-10865 (1959).

37. Landmarks and Aids:

From 567 was submitted to Washington on 12 October 1959 for ten nautical aids. There are no aeronautical aids or landmarks within area of this manuscript.

38. Control for Future Surveys:

None.

39. Junctions:

A satisfactory junction was made on the west with T-10873 and on the east with T-10875. There are no contemporary surveys to the north and south.

/ 40. Horizontal and Vertical Accuracy:

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

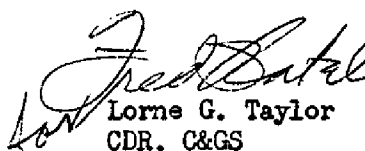
/ 46. Comparison with Existing Maps:

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

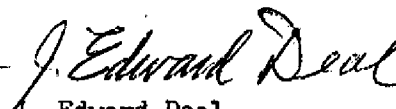
47. Comparison with Nautical Charts:

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

48. GEOGRAPHIC NAMES LIST

Alder Ridge

*Columbia River
Columbia River Hwy.

Gilliam County

Klickitat County

Morrow County

Oregon

Spokane, Portland & Seattle R.R.

Thanksgiving Island
Threemile Canyon

Union Pacific R.R.

Washington

* E.G.N. Decision

George M. Bae
GEOGRAPHIC NAMES SECTION
17 MAY 1960

49. Notes to the Hydrographer:

Form 567 was submitted listing the scaled positions of ten fixed aids to navigation located by Kelsh Instrument.

- Heppner Junction Range Front Light
- Heppner Junction Range Rear Light
- Island No. 27 Range Front Daybeacon
- Island No.27 Range Rear Daybeacon
- Thanksgiving Island Range 1 Front Light
- Thanksgiving Island Range 1 Rear Light
- Thanksgiving Island Range 2 Front Light
- Thanksgiving Island Range 2 Rear Light
- Thanksgiving Island Range 3 Front Light
- Thanksgiving Island Range 3 Rear Light

PHOTOGRAMMETRIC OFFICE REVIEW

T-10874

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 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. _____
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:

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 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. 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. Streffler
Josef J. Streffler

Approved by:

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

Marvin Paulson
Chief, Nautical Chart Division

J. E. Naugh 4/26/62
Chief, Photogrammetry Div.

J. P. Mast 6/19/62
Chief, Operations Division

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10874

Record of Application to Charts

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