

# 10846

Diag. Cht. No. 6157.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-5807 Office No. T-10846

### LOCALITY

State Oregon and Washington

General locality Columbia River

Locality Mosier, Oregon

1958-59

### CHIEF OF PARTY

L.G. Taylor, Chief of Party

K.W. Jeffers, Portland Photo. Office

### LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

# 10846

DESCRIPTIVE REPORT - DATA RECORD

T - T-10846

Project No. (II): Ph-5807

Quadrangle Name (IV):

Field Office (II): Hood River, 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 83/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):

18 Sept 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 sounding datum

i.e., mean-low-water-or-mean-lower-low-water

From 72.0 ft. above M.S.L. at Bonneville Dam forebay and upstream at the gradient of Bonneville Pool as of the date of photography, 28 & 30 Aug. 1958.

Reference Station (III): MILEPOST (USE), 1939

Lat.: 45° 41' 57.170"

Long.: 121° 25' 23.972"

Adjusted X  
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

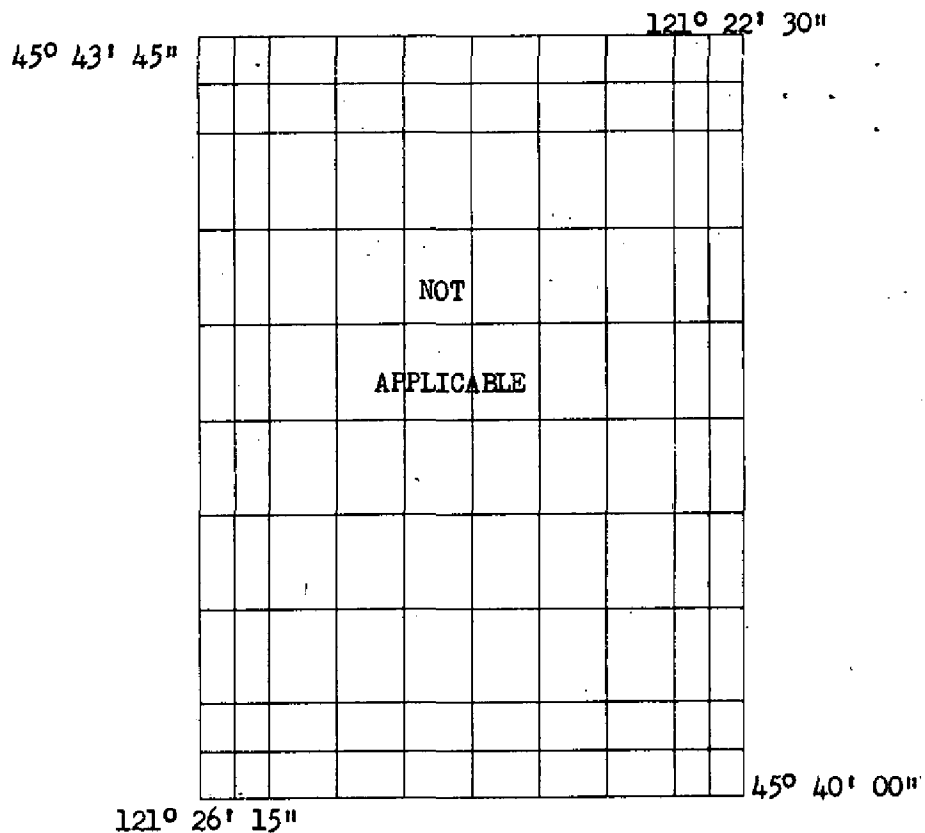
Y= 742,363.68

X= 1,764,086.76

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



NOT  
APPLICABLE

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): Robert B. Melby

Date: 3-10-59  
4-28-59

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 3-10-59 and delineated by Kelsh Stereoscopic Instrument on models of C&GS photography dated 28 & 30 Aug. 1958. The shoreline is the gradient of Bonneville Dam Pool from 72.0 ft. normal pool level at the forebay and proceeding upstream at the pool gradient of 30 Aug. 1958, the date of C&GS photography.

Projection and Grids ruled by (IV): P. Dempsey

Date: 12-22-58

Projection and Grids checked by (IV): Shoup

Date: 12-24-58

Control plotted by (III):

L. L. Graves  
J. L. Harris

Date: 3-2-59  
5-11-59

Control checked by (III):

J. E. Deal

Date: 3-4-59  
5-12-59

Radial Plot or Stereoscopic  
Control extension by (III):

George Ball

Date: 2-11-59

Stereoscopic Instrument compilation (III):

Planimetry D. N. Williams

Date: 7-24-59

Contours

Date:

Manuscript delineated by (III):

L. L. Graves (Scribing)  
C. C. Harris (Stick-up)

Date: 10-27-59  
12-15-59

Photogrammetric Office Review by (III):

J. L. Harris  
J. E. Deal

Date: 8-14-59  
1-18-60

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

Date:

DESCRIPTIVE REPORT - DATA RECORD 5.

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

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

Number	Date	PHOTOGRAPHS (III)		Scale	Bonneville Dam Pool <del>Stage of tide</del> (Forebay)
		Time			
58-S-7831A & 7832A	8-28-58	12:00		1:30,000 (contact)	73.5' above M.S.L.
58-S-7866A & 7867A	8-30-58	10:13		1:10,000 (Ratio)	73.6' " "

Tide (III)

Reference Station:

Subordinate Station:

NOT APPLICABLE

Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Ratio of Ranges	Mean Range	Spring Range

Date:

Date:

Date:

Date:

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

Shoreline (More than 200 meters to opposite shore) (III): 6

Shoreline (Less than 200 meters to opposite shore) (III): 0.5

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 23

Recovered: 18

Identified: 2

Number of BMs searched for (II): None

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): 0

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

Remarks:

6

**SUMMARY**  
**TO ACCOMPANY SHORELINE MAP MANUSCRIPTS**  
**T-10037 through T-10046**

The ten (10) subject map manuscripts represent the westernmost shoreline surveys of project 22-1007. The project covers the Columbia River and adjacent land areas of Oregon and Washington from Bonneville Dam eastward to the vicinity of Molokai Dam. It was designed to aid in the revision of existing nautical charts and in the construction of new ones from the Dalles upstream to Castalia. T-10037 through T-10046 extend from Bonneville Damward to Rowland Lake.

A stereoplotting bridging plot of subject surveys was done in the Washington Office in February 1955 (see pages 13 through 16 of Descriptive Report T-10037). The map manuscripts were compiled by stereoscopic instrument (Kahn Plotter) in the Portland Photogrammetric Office from March to July 1955 from photography of August 1954 (plus U.S. Engineers' photography of July 1957 and Bonneville Power Administration photography of July 1958) and results of field inspection of February to April 1955.

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

A crown 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.

August 1961

## FIELD INSPECTION REPORT

Map Manuscript T-10846

Project Ph-5807

The report on the field inspection for this manuscript is part of a combined field inspection report for T-10844 thru T-10846. It is included in the descriptive report for T-10844 (1959).

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10846

Project Ph-5807

Refer to the "Photogrammetric Plot Report, Columbia River, Project Ph-5807 (Stereoplanigraph Bridge)", manuscripts T-10837 thru T-10845. This report is included in the descriptive report for T-10837, pages 13 thru 16.

While the title of the above report does not include T-10846 it was a part of the stereoplanigraph bridge for strip 58 T-10837 thru T-10845.



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

MAP T-10846

PROJECT NO. Ph-5807

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\lambda$ -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)	
Straights Point	Oreg.N.	N.A.	741,657.39	1657.39	(3342.61)		505.2	(1018.8)	
Light (Wash) 1939	Pg.41	1927	1,771,376.59	1376.59	(3623.41)		419.6	(1104.4)	
MILEPOST (USE)	"	"	742,363.68	2363.68	(2636.32)		720.4	(803.6)	
(WASH) 1939	Pg.40		1,764,086.76	4086.76	(913.24)		1245.6	(278.4)	
Ditto	Office	"	742,358.20	2358.20	(2641.80)		718.8	(805.2)	
Sub Station "A"	Comp.	"	1,764,186.61	4186.61	(813.39)		1276.1	(247.9)	
Ditto	"	"	742,320.66	2320.66	(2679.34)		707.3	(816.7)	
Sub Station "B"	"	"	1,764,153.02	4153.02	(846.98)		1265.8	(258.2)	
BENCH MARK T-533	Oreg.N.	"	738,117.60	3117.60	(1882.40)		950.2	(573.8)	
(OSHD) 1957	Pg.277		1,767,647.49	2647.49	(2352.51)		807.0	(717.0)	
I GANGER (USE) 1957	"	"	738,109.96	3109.96	(1890.04)		947.9	(576.1)	
	Pg.275		1,767,570.02	2570.02	(2429.98)		783.3	(740.7)	
HIGHWAY, 1939	"	"	737,280.29	2280.71	(2719.29)		695.2	(828.8)	
	Pg.28		1,765,046.61	46.61	(4953.39)		14.2	(1509.8)	
MOSIER, 1939	"	"	736,719.75	1719.75	(3280.25)		524.2	(999.8)	
	Pg.28		1,774,242.70	4242.70	(757.30)		1293.2	(230.8)	
MOSIER DLC SOUTH WEST CORNER (USE) 1939	"	"	737,388.12	2388.12	(2611.88)		727.9	(796.1)	
	Pg.40		1,767,888.12	2888.12	(2111.88)		880.3	(643.7)	
MOSIER, RR BRIDGE OVER MOSIER CREEK E. END OF RIVER SIDE, 1939	"	"	737,281.	2281.	(2719.)		695.2	(828.8)	
	Pg.41		1,771,733.	1733.	(3267.)		528.2	(995.8)	
MOSIER, SCHOOL, TIP OF FLAGPOLE, 1939	"	"	736,488.39	1488.39	(3511.61)		453.7	(1070.3)	
	Pg.41		1,770,112.79	112.79	(4887.21)		34.4	(1489.6)	
SHOGREN, 1957	"	"	740,848.46	848.46	(4151.54)		258.6	(1265.4)	
	Pg.275		1,775,802.99	802.99	(4197.01)		244.8	(1279.2)	

1 FT. = 3048006 METER

COMPUTED BY: J.E.D.

DATE 12-1-59

CHECKED BY:

J.L.H.

DATE

12-5-59

COMM. DC-57843

SCALE OF MAP 1:10,000

SCALE FACTOR None

[illegible]

## COMPILATION REPORT

Map Manuscript T-10846

Project Ph-5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry.

The C&GS photography of 8-28-58 and 8-30-58 was adequate to compile the planimetry to the limits of the map manuscript. The stereoplanigraph bridge, however, was not adequate to compile the entire area. The photography flight 58-S 7864A thru 7885A which was selected for the bridge lies in the northern portion of T-10846 and pass points for this manuscript were located no farther south than just inshore and adjacent to the Oregon shoreline of the Columbia River. In order to compile the town of Mosier, Oregon and other important planimetry models of photographs 58-S-7830A thru 7832A were oriented to the pass points located in the stereoplanigraph bridge for 58-S-7864A thru 7885A and planimetry was extended south to Latitude  $45^{\circ} 40' 30''$ . It is believed that this will be adequate for charting needs. Refer to modified instructions letter 732/rrj dated 21 May 1959.

Refer to the last paragraph under this heading in the descriptive report for T-10837.

32. Control:

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) T-10837 thru T-10845 and to an appendix to this report submitted by the Portland Photogrammetric Office. These are included as part of the descriptive report for T-10837 (1959) pages 13 thru 17.

The remarks in this report (T-10846) under Item 31, Delineation, relative to the adequacy of the stereoplanigraph bridge are also applicable to this heading.

33. Supplemental Data:

The city limits of Mosier, Oregon were transferred to the map manuscripts from a paper tracing entitled "City Limits of Mosier, Oreg". Scale 1" = 400', Wasco County Assessors Office. Two points common to this plan were identified by the field unit, located by Kelsh Instrument and then used to supplement the paper tracing when compiling the city limits.

## Items 34 thru 37

Facts relative to the subjects of these items are identical with those described in the descriptive report for T-10837 (1959) except that under Item 34 the U.S.G.S. 15 min. topographic quadrangle, White Salmon, Oreg - Wash, Scale 1:62,500, published 1957 was available for comparison for drainage. Also under Item 37 the Forms 567 were forwarded to Washington on 31 Aug. 1959.

38. Control for Future Surveys:

None was located within the limits of this map manuscript.

39. Junctions:

A satisfactory junctions has been completed with T-10845 on the west and T-10847 on the east. There are no contemporary surveys to the north and south.

40. Horizontal and Vertical Accuracy:

Vertical accuracy is not applicable.

Refer to remarks in this report under Item 31, Delineation relative to the extension of planimetry beyond the limits of the pass points located in the stereoplanigraph bridge.

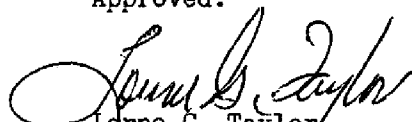
46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 15 minute, "White Salmon", Orego. - Wash. quadrangle, Scale 1:62,500, published 1957.

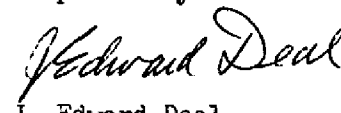
47. Comparison with Nautical Charts:

Identical with data contained in Descriptive Report for T-10837 (1959).

Approved:

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

Respectfully submitted:

  
J. Edward Deal  
Cartographer  
C&GS

## GEOGRAPHIC NAMES LIST

Campbell Creek  
\*Columbia River  
Columbia River Highway

Eighteenmile Island

Klickitat County

Lewis & Clark Highway  
Locke Lake

Mosier  
Mosier Creek

\*Oregon

Rock Creek  
Rowland Lake

Spokane, Portland & Seattle R.R.  
Straights Point

Union Pacific R.R.

Wasco County  
Wasco Light  
\*Washington

\* B.G.N. Decision

*George M. Bae*  
GEOGRAPHIC NAMES SECTION  
9 MARCH 1960

# PHOTOGRAMMETRIC OFFICE REVIEW

T- 10846

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) None 7. Photo hydro stations None 8. Bench marks None 9. Plotting of sextant fixes None 10. Photogrammetric plot report X 11. Detail points None

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline X 13. Low-water line None 14. Rocks, shoals, etc. X 15. Bridges X 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  
SOUNDLINE MAP MANUSCRIPTS  
T-10037 through T-10046  
August 1961**

**62. Comparison with Registered Topographic Surveys**

A small portion of T-10037 (1948) or adjoining project PD-17 overlaps into T-10038. There are some discrepancies in this common area, however, the different datums could account for most of them. T-10038 supersedes T-10037 for the common area for nautical charting purposes. No other previously registered topographic surveys exist of subject coverage.

*river datum  
planes could*

**63. Comparison with Maps of Other Agencies**

Bonerville Dam, Ore.-Wash., 1:62,500, 1957, U.S. Geological Survey  
Hood River, Ore.-Wash., 1:62,500, 1957, U.S. Geological Survey  
White Salmon, Ore.-Wash., 1:62,500, 1957, U.S. Geological Survey

Subject surveys at scale of 1:10,000 do not readily permit a detailed comparison with above-listed quadrangles at 1:62,500. However, shoreline differences exist throughout.

**64. Comparison with Contemporary Hydrographic Surveys**

There are no contemporary hydrographic surveys of subject area.

**65. Comparison with Nautical Charts**

4137      1:10,000      Revised to March 1961

There are considerable discrepancies between these surveys. An evaluation of these by the Nautical Chart Division for possible early consideration is recommended. Typical major discrepancies are at the following locations:

1. Lat.  $45^{\circ} 41'$ , Long.  $121^{\circ} 51'$  - in the vicinity of Government Cove
2. Lat.  $45^{\circ} 41' 45''$ , Long.  $121^{\circ} 41'$  - see long point of land and islands SW thereof
3. At the Oregon shore of Columbia River directly west of Hood River - White Salmon Bridge (lat.  $45^{\circ} 43'$  - long.  $121^{\circ} 30'$  to  $31'$ ).

- 2 -

**66. Summary of Results and Future Survey**

Subject surveys have been compiled according to instructions and no deficiencies in adequacy or accuracy are indicated.

Reviewed by:

*Jeff. Steifler*  
JOSEF J. STEIFLER

Approved by:

*L. C. Lande*  
CHIEF, REVIEW & EDITING DIVISION

*Marvin T. Ruben*  
CHIEF, NATIONAL CASE DIVISION

*J. E. Vaughn 4/7/62*  
CHIEF, PHOTOGRAPHY DIVISION

*Max G. Little*  
CHIEF, OPERATIONS DIVISION



## NAUTICAL CHARTS BRANCH

SURVEY NO. T-10846

### Record of Application to Charts

[illegible]

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.**