

# 10843

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-10843

### LOCALITY

State Oregon and Washington

General locality Columbia River

Locality Mitchell Point

1951-59

### CHIEF OF PARTY

L.G.Taylor, Chief of Field Party

C.H.Bishop, Portland Photo. Office.

### LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

# 10843

DESCRIPTIVE REPORT - DATA RECORD

T - 10843

Project No. (II): Ph-5807

Quadrangle Name (IV):

Field Office (II): Hood River, Oregon

Chief of Party: Lorne G. Taylor  
Unit Chief: Charles H. Bishop  
Officer-in-Charge: Lorne G. Taylor

Photogrammetric Office (III): Portland, Oregon

Instructions dated (II) (III): Undated  
Field & 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~~

~~to 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, 30 August 1958.

Reference Station (III): ORCHARD, 1957

Lat.: 45° 42' 17.710"

Long.: 121° 35' 57.031"

Adjusted X

Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

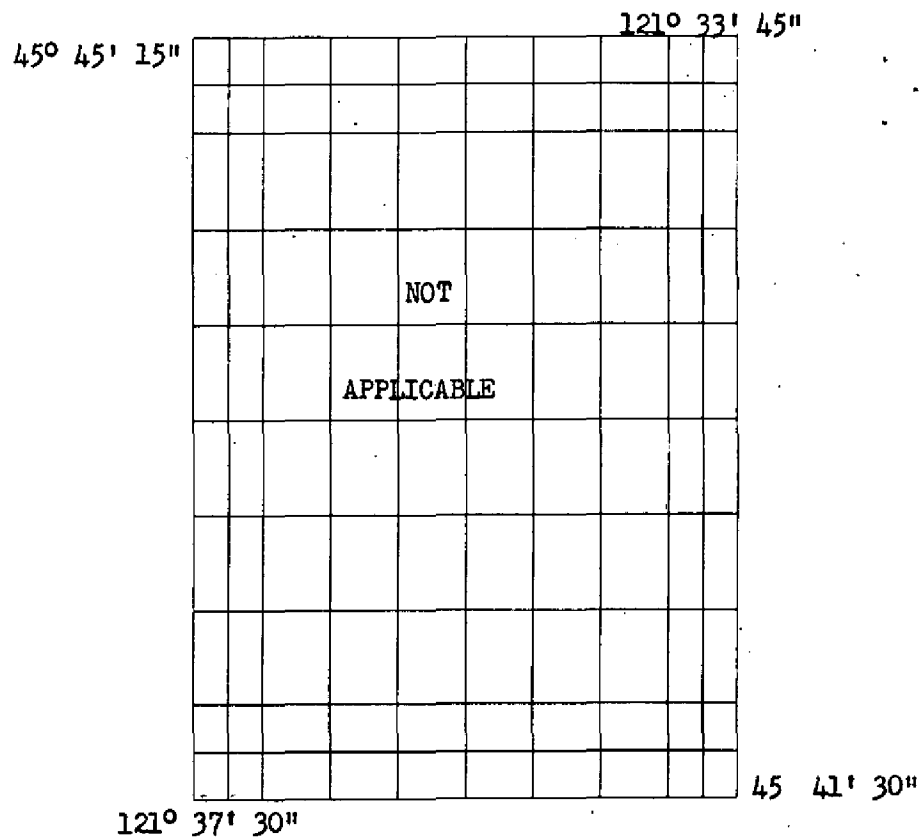
Y= 745,006.26

X= 1,719,187.33

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.

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY



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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): Robert B. Melby

Date: March & April  
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 3-4-59 on single lens ratio prints taken 30 August 1958 and delineated by Kelsh Stereoscopic Instrument from models of the same photography. The shoreline is the gradient of the Bonneville Dam Pool from 72.0 ft. normal pool level at the forebay and proceeding upstream at the pool gradient of 30 August 1958, the date of C&GS photography.

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

Date: 12-20-58

Projection and Grids checked by (IV): Shoup

Date: 12-24-58

Control plotted by (III):

L. L. Graves

Date: 2-26-59

Control checked by (III):

J. E. Deal

Date: 2-27-59

Radial Plot or Stereoscopic

George Ball

Date: 2-11-59

Control extension by (III):

Planimetry

D. N. Williams

Date: 5-7-59

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III):

J. L. Harris (Scribing)

Date: 5-26-59

C. C. Harris (Stick-up)

8-4-59

Photogrammetric Office Review by (III):

J. E. Deal

Date: 8-21-59

Elevations on Manuscript

checked by (II) (III):

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): USC&GS - Single lens 58-S

5.

Bonneville Dam Pool  
level - Forebay  
~~Stage of Tide~~

Number	Date	Time	Scale	PHOTOGRAPHS (III)
58-S-7873A thru 7875A	8-30-58	10:18	1:30,000 (contact) 1:10,000 (ratio)	74.0 ft. above M.S.L.

Tide (III)

Reference Station:

Subordinate Station:

Subordinate Station:

Not Applicable

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Date:

Date:

Date:

Date:

Land Area (Sq. Statute Miles) (III): 11

Shoreline (More than 200 meters to opposite shore) (III): 6.0

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 17

Recovered: 12

Identified: 2

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:

6

**SUMMARY**  
**TO ACCOMPANY SHORELINE MAP MANUSCRIPTS**  
**T-10837 through T-10846**

The ten (10) subject map manuscripts represent the westernmost shoreline surveys of project PL-5807. The project covers the Columbia River and adjacent land areas of Oregon and Washington from Bonneville Dam eastward to the vicinity of McNary 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 Umatilla. T-10837 through T-10846 extend from Bonneville eastward to Rowland Lake.

A stereoplanigraph bridging plot of subject surveys was done in the Washington Office in February 1959 (see pages 13 through 16 of Descriptive Report T-10837). The map manuscripts were compiled by stereoscopic instrument (Kalah Plotter) in the Portland Photogrammetric Office from March to July 1959 from photography of August 1958 (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 1959.

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

A master file 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-10843

Project Ph-5807

Refer to the Field Inspection Report for T-10842 and T-10843  
which is included in the Descriptive Report for T-10842 (1959).

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10843

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.



MAP T-10843		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 $x$ -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)
ORCHARD, 1957	Ore. No. Pg. 275	N.A. 1927	745,006.26 1,719,187.33	6.26 (4993.74) 4187.33 (812.67)		1.9 (1522.1) 1276.3 (247.7)	
Ditto		"	745,175.49	175.49 (4824.51)		53.5 (1470.5)	
Sub Station "A"			1,719,234.57	4234.57 (765.43)		1290.7 (233.3)	
Ditto		"	744,888.79	4888.79 (111.21)		1490.1 (33.9)	
Sub Station "B"		"	1,719,181.75	4181.75 (818.25)		1274.6 (249.4)	
T3N, R10E, Sections 28 & 29, Iron Pipe (Wash), 1939	" Pg. 39	"	751,432.87 1,727,267.78	1432.89 (3567.13) 2267.78 (2732.22)		436.7 (1087.3) 691.2 (832.8)	
Ditto		"	751,385.55	1385.55 (3614.45)		422.3 (1101.7)	
Sub Station "A"		"	1,727,375.88	2375.88 (2624.12)		724.2 (799.8)	
Ditto		"	751,206.10	1206.10 (3793.90)		367.6 (1156.4)	
Sub Station "B"		"	1,727,206.12	2206.12 (2793.88)		672.4 (851.6)	
MITCHELL POINT FRONT RANGE LIGHT 1939	"	"	745,514	514 (4486)		156.7 (1367.3)	
			1,717,644	2644 (2356)		805.9 (718.1)	
FLUME, 1939	"	"	754,664.78	4664.78 (335.22)		1421.8 (102.2)	
	Pg. 28	"	1,715,550.99	550.99 (4449.01)		167.9 (1356.1)	
SIDEHILL, 1939	"	"	758,095.55	3095.55 (1904.45)		943.5 (580.5)	
	Pg. 26	"	1,724,719.28	4719.28 (280.72)		1438.4 (85.6)	
DRANO, 1957	"	"	748,278.17	3278.17 (1721.83)		999.2 (524.8)	
	Pg. 277	"	1,713,264.62	3264.62 (1735.38)		995.1 (528.9)	
MITCHELL POINT 1939	"	"	743,473.82	3473.82 (1526.18)		1058.8 (465.2)	
	Pg. 28	"	1,715,574.56	574.56 (4425.44)		175.1 (1348.9)	
PHELPS, 1957	"	"	746,264.58	1264.58 (3735.42)		385.4 (1138.6)	
	Pg. 275	"	1,728,486.55	3486.55 (1513.45)		1062.7 (461.3)	

1 FT. = .3048006 METER

COMPUTED BY: J.E.D.

DATE 4-28-59  
12-4-58

CHECKED BY: J.L.H.

DATE 4-29-59  
12-5-58

COMM. DC-5784



## COMPILATION REPORT

Map Manuscript T-10843

Project Ph-5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry. The C&GS photography of 8-30-58 was adequate to compile planimetric details to the limits indicated on the project index.

In accordance with modified instructions planimetry was detailed only to Latitude  $45^{\circ} 44'$  because the stereoplanigraph control extension did not locate sufficient pass points to orient models of photographs 58-S-7837A thru 7839A. Neither were Kelsh plates furnished for these photographs. The area not detailed is for the most part wooded.

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.

33. Supplemental Data:

Seneca Fouts Memorial State Park was delineated from a plan furnished by the Oregon State Highway Commission showing state owned land along U. S. Highway 30. This plan is inadequate for accurate delineation and the limit lines shown on the manuscripts merely represent the area.

34 to 37

Facts relative to the subjects of Items 34 thru 37 are identical with those described under these paragraphs in the descriptive report for T-10837.

One exception is that under Item 34 the U.S.G.S. 15 minute quadrangle, Hood River, Washington-Oregon, Scale 1:62,500 published in 1957 was also available for comparison for drainage.

38. Control for Future Surveys:

There are sufficient triangulation stations situated along the shorelines of the Columbia River for use in future surveys.

Triangulation station BARN WEST GABLE, 1939 which did not hold in the stereoplanigraph control extension was located by Kelsh Instrument methods as BARN WEST GABLE, 1959, a recoverable topographic station, in accordance with reference letter 73/rrj dated 25 May 1959.

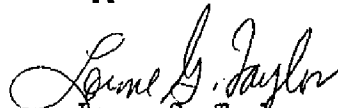
39. Junctions:

Satisfactory junctions were made on the east with T-10844 and on the west with T-10842. There are no contemporary surveys to the north and south.

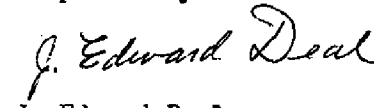
40 - 46 and 47:

Facts relative to the subjects of Items 40 - 46 and 47 are identical with those described under these paragraphs in the descriptive report for T-10837 (1959). An exception is that under Item 46, comparison was made with U.S.G.S. 15 minute Hood River, Washington-Oregon quadrangle, Scale 1:62,500 published in 1957.

Approved:

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

Respectfully Submitted:

  
J. Edward Deal  
Cartographer  
C&GS

48. Geographic Names:

Columbia River  
Columbia River Highway  
Hood River County  
Lewis & Clark Highway  
Meno Siding  
Mitchell Point  
Oregon  
Phelps Creek  
Post Canyon  
Ruthton  
Seneca Fouts Memorial State Park  
Skamania County  
Spokane, Portland & Seattle RR  
Union Pacific RR  
Washington

  
Geographic Names Section  
6 July 1961

49. Notes to the Hydrographer:

No additional horizontal control for future surveys was located. BARN, WEST GABLE, 1959, was destroyed as a triangulation station and located again as a 1959 recoverable topographic station. Mitchell Point Range Rear Light, 1959 was located by the field unit by azimuth and stadia distance from triangulation station Mitchell Point Range Front Light 20, 1939. The angles and distance were plotted on the manuscript from the field notes.

# PHOTOGRAMMETRIC OFFICE REVIEW

T- 10843

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 None

## 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 X 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:

Geographic Name List

\*Columbia River  
Columbia River Highway

Hood River County  
Hood River Saddle Club

Lewis & Clark Highway

Meno Siding  
Mitchell Creek  
Mitchell Point

\*Oregon

Phelps Creek  
Post Canyon  
Post Canyon Road

Ruthton

Seneca Falls Memorial State Park  
Skamania County  
Spokane Portland & Seattle R.R.

Union Pacific

\*Washington

\*B.C.N. Decision

*George J. Bace*  
GEOGRAPHIC NAMES SECTION  
23 September 1959

RR  
Revised 2/24/60



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REVIEW REPORT  
of  
SHORELINE MAP MANUSCRIPTS  
T-10837 through T-10846  
August 1961

**62. Comparison with Registered Topographic Surveys**

A small portion of T-8607 (1948) of adjoining project PH-17 overlaps into T-10838. There are some discrepancies in this common area, however, the different datums could account for most of these. T-10838 supersedes T-8607 for the common area for nautical charting purposes. No other previously registered topographic surveys exist of subject coverage.

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

Bonerville Dam, Ore.-Wash., 1:62,500, 1937, U.S. Geological Survey  
Hood River, Ore.-Wash., 1:62,500, 1937, U.S. Geological Survey  
White Salmon, Ore.-Wash., 1:62,500, 1937, 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**

6137      1:40,000      Revised to March 1961

There are considerable disagreements 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 NW 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. Adequacy of Details and Picture Surveys

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

Reviewed by:

*Jeff Streifler*  
JOSEPH J. STREIFLER

Approved by:

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

*Mervin Paulson*  
CHIEF, NAUTICAL CHART DIVISION

*J. E. Vaughn 4/17/62*  
CHIEF, PHOTOGRAPHY DIVISION

*Wesley R. Letts*  
CHIEF, OPERATIONS DIVISION

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-10843

### 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.