

# 10851

*Qing*

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-10851

### LOCALITY

State Oregon & Washington

General locality Columbia River

Locality Fivemile Creek

19 ~~58~~ 58-59

### CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

K.W. Jeffers, Portland Photo. Office

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

# 10851

DESCRIPTIVE REPORT - DATA RECORD

T - 10851

Project No. (II): Ph-5807

Quadrangle Name (IV):

Field Office (II): The Dalles, Oregon

Chief of Party: Lorne G. Taylor

Photogrammetric Office (III): Portland, Oregon

Unit Chief: K. W. Jeffers

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):

Viewing Scale

1:6000

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):

22 Aug 1961

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): There is no river  
Mean sea level except as follows: area within limit.  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum of this  
i.e., mean low water or mean lower low water manuscript

Reference Station (III): UTHE, 1939

Lat.: 45° 39' 48.305"

Long.: 121° 09' 53.167"

Adjusted X  
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

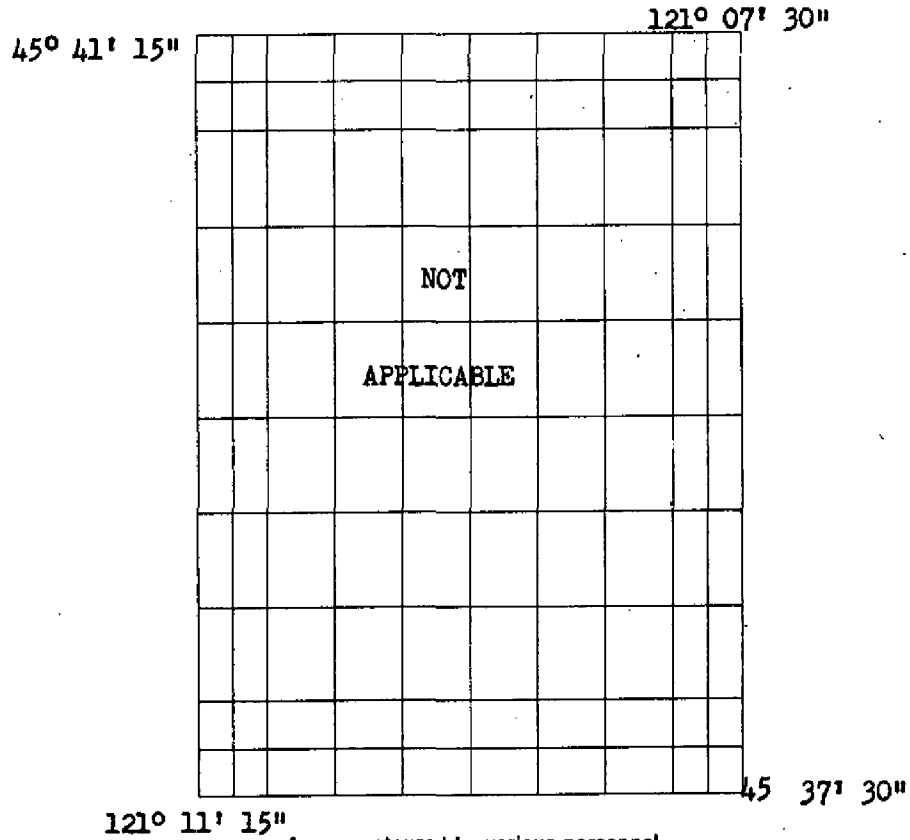
Y= 728,662.87

X= 1,830,039.88

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): **K. W. Jeffers**

Date: **June 1959**

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): **There is no shoreline within the limits of this manuscript.**

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

Date: **4-1-59**

Projection and Grids checked by (IV): **Shoup**

Date: **4-10-59**

Control plotted by (III): **L. L. Graves**

Date: **5-6-59**

Control checked by (III): **J. L. Harris**

Date: **5-7-59**

Radial Plot or Stereoscopic  
Control extension by (III): **Robert Feuschel**

Date: **May 1959**

Planimetry **D. N. Williams**  
Stereoscopic Instrument compilation (III):  
Contours

Date: **7-7-59**

Date:

Manuscript delineated by (III): **J. L. Harris (Scribing)**  
**L. L. Graves (Stick-up)**

Date: **11-23-59**  
**1-21-60**

Photogrammetric Office Review by (III): **J. L. Harris (Rough Draft)**  
**J. E. Deal (Advance)**

Date: **7-9-59**  
**1-25-60**

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 (Forebay) <del>Stage of Tide</del>
		Time			
58-S-7792A,	8-28-58	11:20		1:30,000 (contact)	Not applicable on this manuscript
7816A & 7817A	8-28-58	11:40		1:10,000 (ratio)	

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): None

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 4

Recovered: 1

Identified: None

Number of BMs searched for (II): None

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): None

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

Remarks:

6

**SUMMARY**  
**TO ACCOMPANY SHORELINE MAP MANUSCRIPTS**  
**T-10847 through T-10857**

These eleven (11) shoreline surveys are a part of PH-5807. The project covers the Columbia River and adjacent land areas of Oregon and Washington from Bonneville eastward to Seattle. It was designed to aid in the revision of present nautical charts and in the construction of new charts from the Dalles Dam upstream to the McNary Dam. Subject T-10847 extends from the vicinity of Bonneville Island eastward to Miller Island.

A stereogramograph bridging plot of T-10847 through T-10857 was done in the Washington Office in February 1959 (see separate report). They were compiled by stereoscopic instruments (Kaiser Plotter) in the Portland Photogrammetric Office in the latter part of 1959 from photography of August 1958 and field inspection information of March and May 1959.

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

A master 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.

July 1961

## FIELD INSPECTION REPORT

Sheets 10851, 10853 &amp; 10855

Project Ph-5807

2. Areal Field Inspection:

The area covered by this report includes a portion of the Columbia River from just east of The Dalles Dam to just west of the railroad bridge at Celilo, Oregon. Both shores of the Columbia River are in the area, but most of the interior coverage is on the Washington side.

Woodland cover is almost entirely lacking throughout the area. Some of the more gentle slopes are under cultivation, but most of the area is grazing land.

The major transportation routes are the Spokane, Portland and Seattle Railway, U. S. Highway 830, and U. S. Highway 197 on the Washington side, and the Union Pacific Railroad and U. S. Highway 30 on the Oregon side.

There are no incorporated towns within the area. Two unincorporated communities in the area are Murdock and Smithville in Washington.

Photo coverage was complete and adequate for the entire area.

3. Horizontal Control:

(a) Five supplemental third order control stations were established at this time:

<u>Sheet</u>	<u>Station</u>
10853	Big Eddy Light
10853	Five Mile Rapids Light
10853	Five Mile Locks Light
10853	Memaloose Island Light
10855	Mile 7 Light

(b) No datum adjustments were made in the field.

(c) Stations of other agencies were not recovered. The recovery done in 1958 met the minimum requirements in project instructions for the control of compilation.

(d) A search was made for all triangulation stations shown on the control diagram, with the exception of the following two stations which were recovered and occupied by an airport survey party in the area:

UTHE, 1939  
T2N, R13E, SECTIONS 27 AND 34 QUARTER CORNER (U.S.E.)

(e) The following stations have been reported as destroyed:

<u>Sheet</u>	<u>Station</u>
10851	Dalles Radio Range, Center Antenna Pole, 1939
10851	Flagpole on Small Butte, 1939
10851	Portland-Spokane Airway Beacon No. 7-B, 1939
10853	White Tank with Green Roof, 1939, Apex

4. Vertical Control:

Not applicable.

5. Contours and Drainage:

Contours are not applicable.

Drainage has been delineated on the photographs wherever it is obscure in interior regions that were accessible by truck, and along the Columbia River where visible from a skiff.

6. Woodland Cover:

Woodland cover is almost entirely lacking. Some trees are found along streams and have been noted on the photographs.

7. Shoreline and Alongshore Features:

(a) through (c) Water Levels and Shoreline

The river level and shoreline depend on the volume of runoff and the rate of flow controlled at The Dalles Dam.

The photographs were taken on 28 and 30 August 1958. Listed below are actual river levels at two locations in or near the area at the time of photographs.

<u>Location</u>	<u>Normal River Level on</u> <u>28 &amp; 30 Aug. 1958</u>	<u>Actual River Level on</u> <u>28 &amp; 30 Aug. 1958</u>
The Dalles Forebay Gage	160.0 feet	159.8 feet
Celilo Gage	160.4 feet	160.2 feet



Because of the steep gradient of the shore in most of the area, a 0.2 foot change in the river level causes negligible displacement of the shoreline so the shoreline at the time of photography may be considered the same as that of normal river level.

Low gradient features such as mud flats, sand bars, and shoals have been noted on the photographs. Foul areas have been sketched on the photographs.

(d) Bluffs and cliffs along both shores of the Columbia River have been noted on the photographs and estimated heights given.

(e) There are no docks, wharves, or piers in the area. There is one small boat launching site on the Columbia River at the south end of Horse Thief Lake as indicated on photograph 58-S-7802A.

(f) There are no submarine cables in the area.

(g) There are no other shoreline structures in the area.

#### 8. Offshore Features:

Estimated heights along with time and date of inspection are noted on the photographs for all offshore rocks. The limits of offshore foul areas have also been sketched on the photographs.

#### 9. Landmarks and Aids:

(a) No landmarks for nautical charts were selected.

(b)

(b) No interior landmarks were selected.

(c) There are no aeronautical aids in the area.

(d) There are five fixed aids to navigation in the area.

<u>Aid</u>	<u>Photographs</u>	<u>Sheet</u>
Big Eddy Light (triangl 1959)	58-S-7801A	10853
Five Mile Lock Light (triang., 1959)	58-S-7802A	10853
Five Mile Rapids Light (triang., 1959)	58-S-7801A	10853
Memaloose Island Light (triang., 1959)	58-S-7783A	10853
Mile 7 Light (triang., 1959)	58-S-7782A	10855

(e) There are six floating aids to navigation in the area.

<u>Aid</u>	<u>Photographs</u>	<u>Sheet</u>
Memaloose Island Buoy 2	58-S-7802A	10853
Memaloose Island Buoy 4	58-S-7783A	10853
Avery Buoy 5	58-S-7782A	10855
Brown's Island Buoy 6	58-S-7782A	10855
Avery Lighted Buoy 7	58-S-7781A	10855
Dillon Buoy 8	58-S-7781A	10855

10. Boundaries, Monuments, and Lines:

The area falls entirely within Klickitat County on the Washington side and Wasco County on the Oregon side.

There are no incorporated towns within the area. Two unincorporated communities are Murdock and Smithville, Washington.

11. Other Control:

Five objects were pricked on the photographs as photo-topo stations for use in locating buoys by sextant fixes:

<u>Station</u>	<u>Photographs</u>	<u>Sheet</u>
S. P. & S. Railway Signal Control Box	58-S-7802A	10853
S. P. & S. Railway Signal Control Box	58-S-7782A	10855
Top of Concrete Drainage Flume	58-S-7782A	10855
U. P. R. R. Signal 916 Control Box	58-S-7782A	10855
U. P. R. R. Signal 941 Control Box	58-S-7781A	10855

12. Other Interior Features:

There are no other interior features in the area.

13. Geographic Names:


Geographic names are the subject of two special reports: Geographic Names Report, Part 1, Columbia River, Bonneville to The Dalles; Geographic Names Report, Part 2, Columbia River, The Dalles to Umatilla.

14. Special Reports and Supplemental Data:


(a) Geographic Names Report, Part 1, Columbia River, Bonneville To The Dalles, forwarded in March, 1959.

(b) Geographic Names Report, Part 2, Columbia River,  
The Dalles to Umatilla, forwarded in June, 1959.

Approved:

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

Respectfully submitted:

 K. William Jeffers  
LTJG, C&GS

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10851

Project Ph-5807

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) for T-10847 thru T-10857 which is included in the Descriptive Report for T-10847 (1959).



## COMPILATION REPORT

Map Manuscript T-10851

Project Ph-5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry.

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

Refer to the last paragraph under 31. Delineation on page 19 in the Descriptive Report for T-10837 (1959).

32. Control:

Refer to remarks in the Photogrammetric Plot Report (Stereoplanigraph Bridge) T-10847 thru T-10857 which is included in the Descriptive Report for T-10847 (1959).

33. Supplemental Data:

None.

34. Contours and Drainage:

The drainage shown on the manuscript was delineated from field inspection notes supplemented by minute examination of the Kelsh model for drainage and by visual inspection of the U.S.G.S. 15 minute topographic quadrangle "The Dalles, Oreg. - Wash." Scale 1:62,500, published 1957.

35. Shoreline and Alongshore Details:

Not applicable.

36. Offshore Details:

Not applicable.

37. Landmarks and Aids:

None.

38. Control for Future Surveys:

None.

39. Junctions:

Satisfactory junctions were made on the east with T-10853, on the south with T-10852 and on the west with T-10849 and a portion of T-10850. There is no contemporary survey to the north.

40. Horizontal and Vertical Accuracy:

Refer to remarks under this heading in the Descriptive Report for T-10837 (1959) page 22.

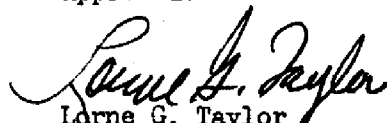
46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 15 minute "The Dalles" Wash - Oreg. quadrangle, Scale 1:62,500, published 1957.


47. Comparison with Nautical Charts:

Not applicable.

Approved:

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

Respectfully submitted:

  
J. Edward Deal  
Cartographer  
C&GS

GEOGRAPHIC NAMES LIST

Fivemile Creek

Lewis & Clark Highway

Murdock

Smithville

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



PHOTOGRAMMETRIC OFFICE REVIEW

T- 10851

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 X

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

20. Water features None 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 None 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-10047 through T-10057  
July 1961

52. Comparison with Registered Topographic Surveys

There are no registered topographic surveys of this area.

53. Comparison with Maps of Other Agencies

WHITE SALMON, ORG.-WASH., 1:62,500, 1957, U.S. Geological Survey  
THE DALLES, ORG.-WASH., 1:62,500, 1957, U.S. Geological Survey  
WIDEMAN, ORG.-WASH., 1:62,500, 1957, U.S. Geological Survey

A detailed comparison is impractical because of scale difference. However, several disagreements in shoreline delineation are apparent.

54. Comparison with Contemporary Hydrographic Surveys

There are no contemporary hydrographic surveys of subject area.

55. Comparison with Nautical Charts

6157                      1:40,000                      Revised to March 1961

There are shoreline differences between these surveys, which should be considered in the future revision of chart 6157. Additional navigation aids have been installed since the field inspection of the T-sheets in 1959 and that are shown on the nautical chart. The surveys, however, are in agreement with their corresponding light lists.

The eastern portion of this group of T-sheets is not covered by existing nautical charts. A new series of nautical charts of the upper Columbia River is being constructed now and at the time of the Washington Office Review, not available for comparison.

56. Accuracy of Results and Future Review

T-10047 through T-10057 have been compiled according to instructions and meet the accuracy and accuracy requirements for this type of survey.

Reviewed by:

*Joseph J. Streifer*  
Joseph J. Streifer

Approved by:

*Le Lande*  
Chief, Review & Editing Section  
Photography Division

*Martin T. Lubben*  
Chief, Medical Chart  
Division

*Joe Waugh 4-26-62*  
Chief, Photography Division

*Max Skellett*  
Chief, Statistics Division

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-10851

### 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.