

10859

Ans.

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-10859

LOCALITY

State Oregon and Washington
Columbia River
General locality Lake Celilo

Locality Maryhill

1959

CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

10859

DESCRIPTIVE REPORT - DATA RECORD

T - 10859

Project No. (II): Ph-5807

Quadrangle Name (IV):

Field Office (II): The Dalles, 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/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

Scale Factor (III): None

Viewing Scale
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):

3 July 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 160.0 ft. above M.S.L. at The Dalles Dam forebay and upstream at the gradient of Lake Celilo Pool as of the date of photography, 28 Aug. 1958.

Reference Station (III): * See note below

Lat.:

Long.:

Adjusted X
Unadjusted

Plane Coordinates (IV):

State:

Zone:

Y=

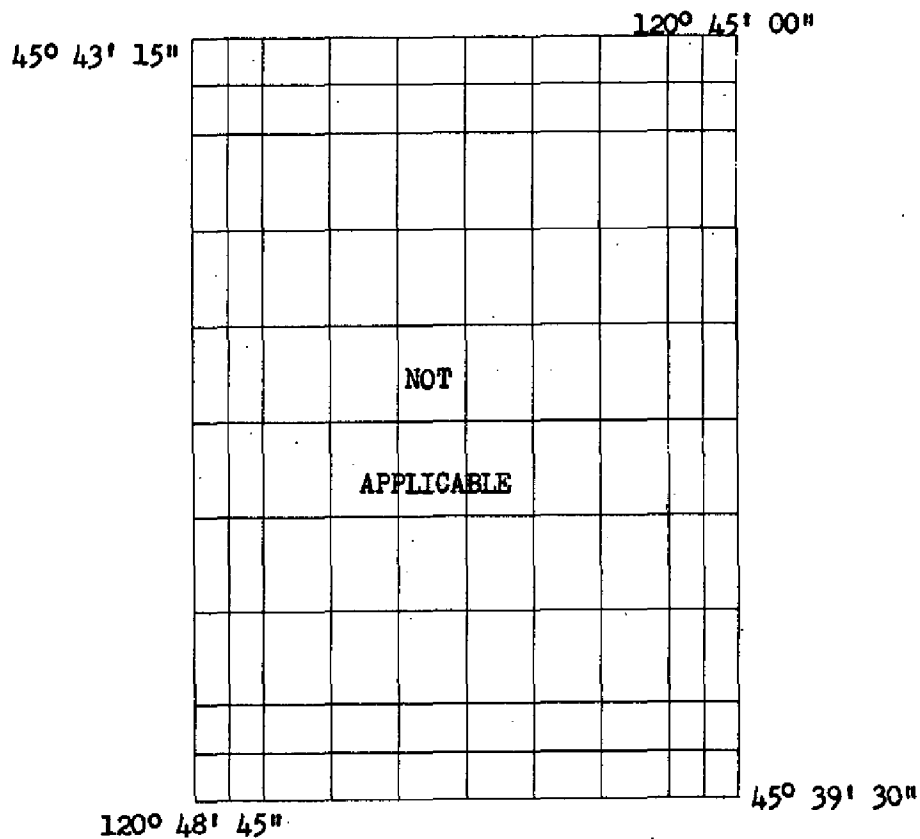
X=

* No C&GS triangulation stations were recovered in area of this manuscript.
Refer to the reference stations for either manuscript T-10858 or T-10860.
There is one aid to navigation with U.S.E. triangulation position.

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)
K. W. Jeffers (Interior)

Date: 3-27-59
July 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 3-27-59 on single lens ratio prints taken 8-28-58 and delineated by Kelsh Stereoscopic Instrument on models of same photography. The shoreline is the gradient of Lake Celilo Pool from 160.0 Ft. normal pool level at the forebay of The Dalles Dam and proceeding upstream at the pool gradient of 8-28-58, the date of photography.

Projection and Grids ruled by (IV):

P. Dempsey

Date: 4-28-59

Projection and Grids checked by (IV):

Shoup

Date: 5-14-59

Control plotted by (III):

J. L. Harris (Pass Points
& U.S.E.)

Date: 6-4-59

Control checked by (III):

J. E. Deal

Date: 6-4-59

Radial Plot or Stereoscopic
Control extension by (III):

Robert Fuechsel

Date: May 1959

Stereoscopic Instrument compilation (III):

Planimetry D. N. Williams

Date: 8-17-59

Contours

Date:

Manuscript delineated by (III):

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

Date: 12-4-59
2-3-60

Photogrammetric Office Review by (III):

J. L. Harris (Rough Draft)
J. E. Deal (Advance)

Date: 8-26-59
3-28-60

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	Time	Scale	The Dalles Dam Pool Level (Forebay) Stage of Tide
58 S 7731A thru 7733A	8-28-58	10:51	1:30,000 contact 1:10,000 ratio	159.76' above MSL
58 S 7772A and 7773A *	"	11:07	"	"

* Used for Field Inspection only.

Tide (III)

Reference Station:

Subordinate Station:

Subordinate Station:

Not Applicable

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): 21

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

Shoreline (Less than 200 meters to opposite shore) (III): 1 " "

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 2 ** Recovered: 1 ** Identified: 1 **

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:

** Aid to navigation with U.S.E. triangulation position

Two floating aids to Navigation were located by sextant fix.

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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 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.

June 1961

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FIELD INSPECTION REPORT

Sheets 10859, 10860, 10861,
10862, 10863 & 10864

Project Ph-5807

2. Areal Field Inspection:

The area covered by this report includes a portion of the Columbia River from Maryhill, Washington to Quinton, Oregon. Interior coverage is about equally divided between the Oregon and Washington sides of the river.

There is no woodland cover in the area, with the exception of a few trees growing along drainage features. The high plateaus and some of the more gentle slopes are under cultivation, and the remainder of the area is grazing land.

The major transportation routes are the Spokane, Portland and Seattle Railway on the Washington side, and U. S. Highway 30, and the Union Pacific Railroad on the Oregon side. U. S. Highway 97 crosses the Columbia River at the Maryhill Ferry at the west end of the area. There is a paved road on the Washington side from Maryhill to the region of Towal, but from Towal only a gravel road continues east to join Washington State Highway 8 about four miles north of the Columbia River.

There is no road along the Washington shore of the Columbia River from Towal to Sundale.

There are no incorporated towns within the area. Seven unincorporated communities in the area are as follows: Maryhill, Cliffs, Towal and Goodnoe in Washington; Rufus, Hook and Quinton in Oregon.

Photo coverage was complete and adequate for the entire area.

3. Horizontal Control: .

(a) No supplemental control was established at this time.

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

(c) Stations of other agencies were not recovered.

(d) The recovery met the requirements in project instructions which were indicated on the project index.

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 the skiff.

6. Woodland Cover:

There is no woodland cover in the area. Some trees are found along streams and have been noted on the photographs.

7. Shoreline and Alongshore Features:

(a) thru (c) Water levels and shoreline.

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

The photographs were taken on 28 August 1958 at which time the Rufus Gage read 160.6 feet. At normal river level the Rufus Gage reads 160.8 feet. 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. The Maryhill Ferry lands directly on the gravel beach, as indicated on photograph 58 S 7732A.

There are no ramps for small boat launching, but small boats may be launched at natural graded beaches near the Maryhill Ferry landing on the Oregon shore and at the west side of the mouth of the John Day River.

There is a fixed railroad bridge and a fixed highway bridge crossing the John Day River about 70 meters upstream from its mouth. The small boat launching site is located on the west shore of the John Day River between these two bridges.

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

(g) One shoreline structure in the area is the coffer-dam on the Washington shore used for the construction of the John Day Dam.

(h) In T-10860 there is an overhead four-line cable crossing the Columbia River just downstream from the John Day Dam Site. Observations made on the low point on wire are entered on the reverse side of photograph 58 S 7729A. The low point was computed to be 267.65 ft. above M.S.L. or 107 ft. above the shoreline gradient for this point of the river of 160.8 ft.

8. Offshore Features:

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

9. Landmarks and Aids:

(a) One landmark for charts was selected at this time. Elevation and height determinations are given on the back of the photograph:

<u>Landmark</u>	<u>Photograph</u>	<u>Sheet</u>
Elevator, 1959	58 S 7730A	10860

(b) No interior landmarks were selected. Buildings have been circled and classified on the photographs in accordance with Photogrammetric Instructions 54, dated 2 January 1958.

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

(d) There are forty-four fixed aids to navigation in the area:

<u>Aid</u>	<u>Photograph</u>	<u>Sheet</u>
Maryhill Light 1959 (U.S.C.E. Triang., 1957)	58 S 7732A	10859
Preachers Eddy Light 1959 (U.S.C.E. Triang., 1957)	58 S 7730A	10860
Schofield Rapids Range Front Light 1959 (U.S.C.E. Triang., 1957)	58 S 7730A	10860
Schofield Rapids Range Rear Light 1959 (U.S.C.E. Triang., 1957)	58 S 7730A	10860

Preachers Eddy Range Front Light 1959	58 S 7728A	10861
(U.S.C.E. Triang., 1957)		
Preachers Eddy Range Rear Light 1959	58 S 7728A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 2 Front Light 1959	58S 7728A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 2 Rear Light 1959	58 S 7728A	10861
(U.S.C.E. Triang., 1957)		
John Day Highwater Range 2		
Front Daybeacon 1959	58 S 7728A	10861
(Temporary Structure)		
John Day Highwater Range 2		
Rear Daybeacon 1959	58 S 7728A	10861
(Temporary Structure)		
John Day Highwater Range 1		
Front Daybeacon 1959	58 S 7727A	10861
(Temporary Structure)		
John Day Highwater Range 1		
Rear Daybeacon 1959	58 S 7727A	10861
(Temporary Structure)		
John Day Rapids Range 1 Front Light 1959	58S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 1 Rear Light 1959	58 S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 4 Front Light 1959	58S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 4 Rear Light 1959	58 S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 3 Front Light 1959	58S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 3 Rear Light 1959	58 S 7727A	10861
(U.S.C.E. Triang., 1957)		
John Day Highwater Range 3		
Front Daybeacon 1959	58 S 7727A	10861
(Temporary Structure)		
John Day Highwater Range 3		
Rear Daybeacon 1959	58 S 7727A	10861
(Temporary Structure)		
John Day Highwater Range 4		
Front Daybeacon 1959	58 S 7726A	10861
(Temporary Structure)		
John Day Highwater Range 4		
Rear Daybeacon 1959	58 S 7726A	10861
(Temporary Structure)		
John Day Rapids Range 5 Front Light 1959	58S 7726A	10861
(U.S.C.E. Triang., 1957)		
John Day Rapids Range 5 Rear Light 1959	58 S 7726A	10861
(U.S.C.E. Triang., 1957)		
Indian Rapids Range 1 Front Light 1959	58 S 7726A	10861
(U.S.C.E. Triang., 1957)		

Indian Rapids Range 1 Rear Light 1959 (U.S.C.E. Triang., 1957)	58 S 7726A	10861
Indian Rapids Range 2 Front Light 1959 (U.S.C.E. Triang., 1957)	58 S 7725A	10862
Indian Rapids Range 2 Rear Light 1959 (U.S.C.E. Triang., 1957)	58 S 7725A	10862
Indian Rapids Range 3 Front Light 1959 (U.S.C.E. Triang., 1957)	58 S 7725A	10862
Indian Rapids Range 3 Rear Light 1959 (U.S.C.E. Triang., 1957)	58 S 7725A	10862
Squally Hook Rapids Range 1 Front Light 1959 (Temporary Structure)	58 S 7725A	10862
Squally Hook Rapids Range 1 Rear Light 1959 (Temporary Structure)	58 S 7725A	10862
Mile 20-21 Range Front Light 1959 (Temporary Structure)	58 S 7715A	10863
Mile 20-21 Range Rear Light 1959 (Permanent Structure)	58 S 7715A	10863
Squally Hook Rapids Range 4 Front Light 1959 (Temporary Structure)	58 S 7715A	10863
Squally Hook Rapids Range 4 Rear Light 1959 (Temporary Structure)	58 S 7715A	10863
Squally Hook Rapids Range 2 Front Light 1959 (Temporary Structure)	58 S 7715A	10863
Squally Hook Rapids Range 2 Rear Light 1959 (Permanent Structure)	58 S 7715A	10863
Squally Hook Rapids Range 3 Front Light 1959 (Permanent Structure)	58 S 7715A	10863
Squally Hook Rapids Range 3 Rear Light 1959 (Permanent Structure)	58 S 7715A	10863
Squally Hook Rapids Range 5 Front Light 1959 (Permanent Structure)	58 S 7715A	10863
Squally Hook Rapids Range 5 Rear Light 1959 (Permanent Structure)	58 S 7715A	10863
Mile 24 Range Front Light 1959 (Temporary Structure)	58 S 7713A	10864
Mile 24 Range Rear Light 1959 (Permanent Structure)	58 S 7713A	10864

(e) There are twenty-one floating aids to navigation in the area;

<u>Aid</u>	<u>Photograph</u>	<u>Sheet</u>
Ferry Landing Buoy 18	58 S 7732A	10859
Rufus Buoy 20	58 S 7731A	10859
Preachers Eddy Buoy 21	58 S 7776A	10860
Preachers Eddy Buoy 23	58 S 7730A	10860
Schofield Rapids Buoy 25	58 S 7728A	10860
Schofield Rapids Buoy 26	58 S 7728A	10860
Lower John Day Rapids Buoy 28	58 S 7728A	10861
Lower John Day Rapids Buoy 29	58 S 7727A	10861
Lower John Day Rapids Buoy 29A	58 S 7727A	10861
Middle John Day Rapids Buoy 30	58 S 7727A	10861
Middle John Day Rapids Buoy 31	58 S 7727A	10861
Middle John Day Rapids Buoy 33	58 S 7727A	10861
Upper John Day Rapids Buoy 35	58 S 7726A	10861
John Day Rapids Buoy 37	58 S 7726A	10861
Indian Rapids Buoy 39	58 S 7725A	10862
Indian Rapids Buoy 40	58 S 7725A	10862
Indian Rapids Buoy 41	58 S 7725A	10862
Indian Rapids Buoy 42	58 S 7725A	10862
Squally Hook Rapids Buoy 44	58 S 7715A	10863
Squally Hook Rapids Buoy 19	58 S 7715A	10863
Goodnoe Reef Buoy 21	58 S 7715A	10863

10. Boundaries, Monuments and Lines:

The area falls entirely within Klickitat County on the Washington Side, and Sherman and Gilliam Counties on the Oregon side. The Sherman-Gilliam County line follows the center of the John Day River.

11. Other Control:

Seven Photo-topo stations were selected and pricked on the photographs:

<u>Station</u>	<u>Photograph</u>	<u>Sheet</u>
Tank 1959	58 S 7732A	10859
Southwest Gable, Cream Colored House 1959	58 S 7731A	10859
Rufus Gage 1959	58 S 7730A	10860
Tank No. 2 1959	58 S 7730A	10860
Northwest Corner Highway Bridge Abutment, 1959	58 S 7728A	10860
Union Pacific Railroad Signal Control Box, 1959	58 S 7725A	10862
North Gable, Buff Colored Shack 1959	58 S 7715A	10862

Azimuth points for all ranges were located by sextant fix. The fix for each azimuth point is recorded on the back of the photograph on which the corresponding range has been pricked.

12. Other Interior Features:

In the region of the John Day Dam site on the Washington shore, roads and railroads are being relocated. Maps showing these relocations may be obtained from the Walla Walla District Office of the Corps of Engineers.

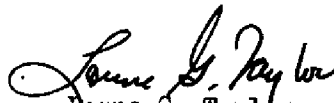
13. Geographic Names:

Geographic names are the subject of a special report: Geographic Names Report, Part 2, Columbia River, The Dalles to Umatilla, forwarded in June 1959.

14. Special Reports and Supplemental Data:

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
Unit Chief

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10859

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).

None

COMM-DC-57843

COMPILATION REPORT

Map Manuscript T-10859

Project Ph-5807

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, "Wishram" Oreg.-Wash., Scale 1:62,500, published 1957.

35. Shoreline and Alongshore Details:

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

36. Offshore Details:

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

37. Landmarks and Aids:

Form 567 was submitted to the Washington Office on 10 September 1959 for nautical aids.

There are no aeronautical aids or landmarks within the limits of this manuscript.

38. Control for Future Surveys:

Two objects were located by Kelsh Instrument. These were listed under Item 49. Notes to the Hydrographer. These were selected principally for the use of the U. S. Coast Guard when locating floating aids to navigation in this area.

39. Junctions:

A satisfactory junction was made on the west with T-10858 and on the east with T-10860. There are no contemporary surveys to the north and south.

40. Horizontal and Vertical Accuracy:

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

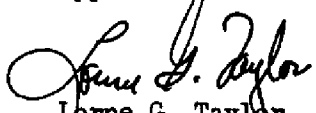
46. Comparison with Existing Maps:

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

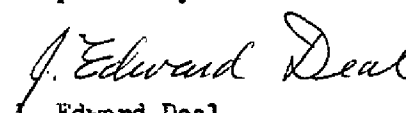
47. Comparison with Nautical Charts:

Refer to remarks under this heading in 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

Columbia Hills
*Columbia River
Columbia River Hwy.

Klickitat County

*Lake Celilo

Maryhill

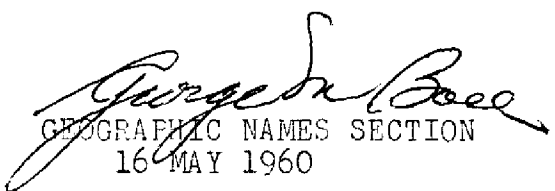
Oregon

Sherman County
Spokane, Portland & Seattle R.R.
Stonehenge Memorial

Union Pacific R.R.

Washington

* B.G.N. Decision


GEOGRAPHIC NAMES SECTION
16 MAY 1960

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49. Notes to the Hydrographer:

Forms 567 were submitted listing the geographic position of one fixed aid to navigation which was located by triangulation by U.S.E. and verified by Kelsh Instrument:

Maryhill Light (USE)

Also two floating aids to navigation located by sextant fix:

Ferry Landing Buoy 18
Rufus Buoy 20

Two other objects were located by Kelsh Instrument:

Tank 1959
S.W. Gable Cream Colored House, 1959

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10859

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 None 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:

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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	1957	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:

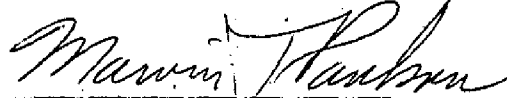
T-10858 through T-10869 were compiled according to instructions. No deficiencies in accuracy or adequacy are indicated.

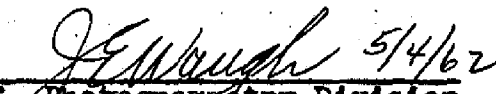
Reviewed by:


Josef J. Streifler

Approved by:


Chief, Review & Drafting Sec.
Photogrammetry Division


Chief, Nautical Chart
Division


Chief, Photogrammetry Division


Chief, Operations Division

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10859

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.