**DESCRIPTIVE REPORT**

<table>
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<tr>
<th>Type of Survey</th>
<th>Shoreline</th>
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<tbody>
<tr>
<td>Field No.</td>
<td>Ph-5807</td>
</tr>
<tr>
<td>Office No.</td>
<td>T-10873</td>
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</table>

**LOCALITY**

<table>
<thead>
<tr>
<th>State</th>
<th>Oregon and Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>Columbia River</td>
</tr>
<tr>
<td>Locality</td>
<td>Heppner Junction</td>
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</tbody>
</table>

**1959**

**CHIEF OF PARTY**

Lorne G. Taylor, Photogrammetric Office

**LIBRARY & ARCHIVES**

**DATE**

May 1962
DESCRIPTIVE REPORT - DATA RECORD

T - 10873

Project No. (II): Ph-5807

Quadrangle Name (IV):

Field Office (II): Arlington, Oregon

Chief of Party: Lorne G. Taylor

Unit Chief: K. W. Jeffers

Officer-in-Charge: Lorne G. Taylor

Photogrammetric Office (III): Portland, Oregon

Instructions dated (II) (III): Undated

Field and Office

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

Viewing Scale

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6000

Pantograph Scale

1:10,000

Scale Factor (III): None

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Date registered (IV): 29 June 1961

Applied to Chart No. Date:

Publication Scale (IV):

Refer to datum pro-

Publication date (IV):

Vertical Datum (III): Vertical file on manuscript

Mean sea level except as follows:

Elevations shown as (2) refer to mean high water
Elevations shown as (2) refer to mean low water
I. e., mean low water = mean low water

U.S. Engineers Columbia River
Low-Water Profile

Geographic Datum (III): N.A. 1927

Reference Station (III): LOWS (USE) 1942

Lat.: 45° 46' 57.425"

Long.: 120° 02' 49.248"

Plane Coordinates (IV):

Y = 771,751.22

X = 2,115,571.24

State: Oregon

Zone: North

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.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): R. B. Melby
W. V. Hull
Date: 4-10-59
Sept. 1959

Planetary contouring by (II):

Completion Surveys by (II):

Shoreline

Estimating Water 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. Harrié (Pass Points)
Date: 8-24-59

Control checked by (III):
C. C. Harris
Date: 9-25-59

Radial Plot or Stereoscopic
Control extension by (III):
John D. Perrow, Jr.
Date: June 1959

Stereoscopic Instrument compilation (III):
Planimetry D. N. Williams
Date: 9-29-59
Contours None

Manuscript delineated by (III):
W. V. Hull (Scribing)
Date: 12-21-69
D. Nl Williams (Stick-up)
1-25-69

Photogrammetric Office Review by (III):
C. C. Harris (Rough Draft)
Date: 10-6-59
J. E. Deal (Advance)
3-31-60

Elevations on Manuscript
checked by (II) (III):
None
Date:
DESCRPTIVE REPORT - DATA RECORD

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

PHOTOGRAPHS (III)

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<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
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<tbody>
<tr>
<td>58-S-7637A</td>
<td>8-28-58</td>
<td>9:30</td>
<td>1:30,000 Contact</td>
</tr>
<tr>
<td>&amp; 7638A</td>
<td></td>
<td></td>
<td>1:10,000 Ratio</td>
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</tbody>
</table>

*58-S-7653A
& 7654A
8-28-58
9:30
DO

*Used for field inspection only.

TIDE (III)

Ratio of Ranges | Mean Range | Spring Range
---|-------------|-------------
Not Applicable

Reference Station:
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV):
Final Drafting by (IV):
Drafting verified for reproduction by (IV):
Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 11
Shoreline (More than 200 meters to opposite shore) (III): 6 Statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 0.5
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 3
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): 2
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

The Dalles Dam (Forebay)
159.8' above M.S.L.
Flow at Arlington
Gage was 107,000 cfs.
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 Kelsh 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-10873

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-10873
Project Ph-5807

Refer to the Photogrammetric Plot Report (Stereoplanigraph Bridge) for T-10870 thru T-10885 which is included in the Descriptive Report for T-10870 (1959).
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>DATUM</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<tr>
<td>LOWS (USE) 1942</td>
<td>Oreg.N1</td>
<td>N.A.</td>
<td>771.751.22</td>
<td>1751.22 (3248.78)</td>
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<td>533.8 (990.2)</td>
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<td>Pg.73</td>
<td>1927</td>
<td>2.115.573.24</td>
<td>571.24 (4428.76)</td>
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<td>174.1 (1349.9)</td>
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<td>771.843.71</td>
<td>1843.71 (3156.29)</td>
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<td>2.115.459.57</td>
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<td>771.734.05</td>
<td>1734.05 (3265.95)</td>
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<td>2.115.589.41</td>
<td>589.41 (4410.59)</td>
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<td>WILLOWS (USE) 1942</td>
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<td>N.A.</td>
<td>764.497.36</td>
<td>4497.36 (502.64)</td>
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<td></td>
<td></td>
<td>2.121.221.74</td>
<td>1221.74 (3778.26)</td>
<td></td>
<td>372.4 (1151.6)</td>
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</table>

1 ft. = 0.3048006 meter

COMPUTED BY: J.E.D.  DATE: 12-17-58
CHECKED BY: J.L.H.  DATE: 1-7-59
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-10885 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, "Arlington", Oreg. - Wash., Scale 1:125,000, published 1948.

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:**

   Form 567 was submitted to Washington on 12 October 1959 listing the scaled geographic position of one fixed aid to navigation. There are no aeronautical aids or landmarks within the area of this manuscript.

38. **Control for Future Surveys:**

   One object was located by Kelsh Instrument as a recoverable topographic station. The aid to navigation mentioned in Item 37 and this object are listed in Item 49: Notes to the Hydrographer.

39. **Junctions:**

   A satisfactory junction was made on the west with T-10872 and on the east with T-10874. There are no contemporary surveys to the north and south.

40. **Horizontal and Vertical Control:**

   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 "Arlington", Oreg. - Wash. quadrangle, Scale 1:125,000, edited 1916, reprinted 1948.

47. **Comparison with Nautical Charts:**

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

---

Approved:  

Respectfully submitted:

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

J. Edward Deal  
Cartographer  
C&GS
48. GEOGRAPHIC NAMES LIST

Alder Ridge
*Columbia River
Columbia River Hwy.
Gilliam County
Hippner Junction
Klickitat County
Oregon
Spokane, Portland & Seattle R.R.
Union Pacific R.R.
Washington
Willows
Willow Creek

* B.G.N. Decision

GEORAPHIC NAMES SECTION
17 May 1960
49. Notes to the Hydrographer:

Form 567 has been submitted listing the scaled geographic position of one fixed aid to navigation which was located by Kelsh Instrument:

Pine Creek Range 1 Rear Light, 1959

One other object was located by Kelsh Instrument:

West Gable; maroon roofed shack, 1959
PHOTOGRAMMETRIC OFFICE REVIEW

T-10975


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

ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines  X  32. Public land lines  None

MISCELLANEOUS


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.

43. Remarks:

Compiler

Supervisor
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. Streifler

Approved by:

L. L. Lunde
Chief, Review & Drafting/Sec. Photogrammetry Division

Maurice Daniel
Chief, Nautical Chart Division

Fred Haus 4/24/62
Chief, Photogrammetry Div.

Chief, Operations Division

E. L. Mast 6/19/62
# NAUTICAL CHARTS BRANCH

**SURVEY NO.** T-10873

## Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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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.