

10858

Orig

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-10858

LOCALITY

State Oregon and Washington
Columbia River
General locality Lake Celilo
Locality Biggs

1959

CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

LIBRARY & ARCHIVES

DATE May 1962

USCOMM-DC 5087

10858

DESCRIPTIVE REPORT - DATA RECORD

T - 10858

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)

Modifications: 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):

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):

3 July 1961

Publication Scale (IV):

Publication date (IV):

Refer to datum pro-

Geographic Datum (III):

N.A. 1927

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 date of photography, 28 Aug. 1958.

Reference Station (III):

HALE (USE) 1942

Lat.: 45° 40' 23.675"

Long.: 120° 48' 57.130"

Adjusted X

Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone:

North

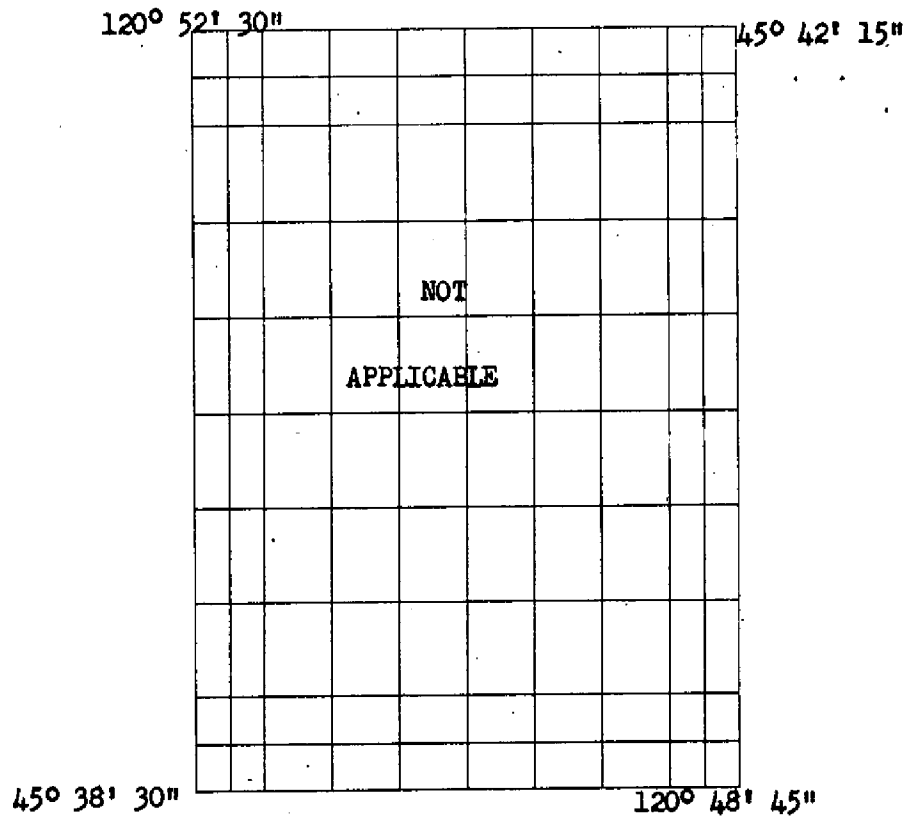
Y= 731,703.87

X= 1,919,255.56

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 Dalles Dam forebay and proceeding upstream at the pool gradient of 28 August, 1958, the date of photography.

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

Date: 4-28-59

Projection and Grids checked by (IV): Shoup

Date: 5-14-59

Control plotted by (III): J. L. Harris

Date: 6-1-59

Control checked by (III): J. E. Deal

Date: 6-1-59

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

Date: May 1959

Planimetry L. L. Graves

Date: 8-7-59

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): W. V. Hull (Scribing)
J. L. Harris (Stick-up)

Date: 12-3-59
1-27-60

Photogrammetric Office Review by (III):

J. D. Harris (Rough Draft)
J. E. Deal (Advance Complete)

Date: 9-2-59
2-24-60

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

The Dalles Dam

Forebay

Stage of Tide

Number	Date	Time	Scale	
58 S 7733A			1:30,000 contact	
thru 7735A *	8-28-58	10:53	1:10,000 ratio	159.8 ft. above MSL
58 S 7774A	"	11:07	"	"
thru 7776A	"			

* These photographs were 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): 11

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

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 6**

Recovered: 6**

Identified: 5**

Number of BMs searched for (II): None

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): 4

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

Remarks:

** 4 were aids to navigation with U.S.E. triangulation positions

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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

FIELD INSPECTION REPORT

Map Manuscript T-10858

Project Ph-5807

Refer to the Field Inspection Report for T-10856 thru T-10858 which is included in the Descriptive Report for T-10856 (1959).

PHOTOGRAMMETRIC PLOT REPORT
Columbia River, PH-5807
Stereoplanigraph Bridging
May 1959

21. Area Covered

T-10858 thru T-10869

22. Method

Three stereoplanigraph bridges were run and were designated as Strips #81, #82 and #83. All three were computed and adjusted by IBM methods. Strip #80 of a prior report covers most of the area of T-10858.

23. Adequacy of Control

All control stations within the area covered by the T-sheets numbered above held in their respective bridges and were adequate to control same. However, the bridged position of triangulation station ARLE (USE) 1942 SUB PT. B, which falls on T-10871, missed the true ground position for this station by about 100' in both X and Y, and it is recommended that this substitute station be eliminated.

24. Supplemental Data

None

25. Photography

Photographs used in the bridging described in this report are all of scale 1:30,000 and are numbered as follows:

STRIP 81: 58-S-7722A thru 7733A
STRIP 82: 58-S-7711A thru 7716A
STRIP 83: 58-S-7693A thru 7703A

Photography was adequate in quality.

26. Additional Information

There were a few instances of pass points being common to two separate strips. In these cases the two positions obtained were meaned and the meaned positions were written in on the IBM computational sheets involved. The original positions were crossed out.

Submitted

RF by MK
Robert Fuechsel

Approved

Morton Keller
Morton Keller

COLUMBIA RIVER ORE-WASH

PH-5807

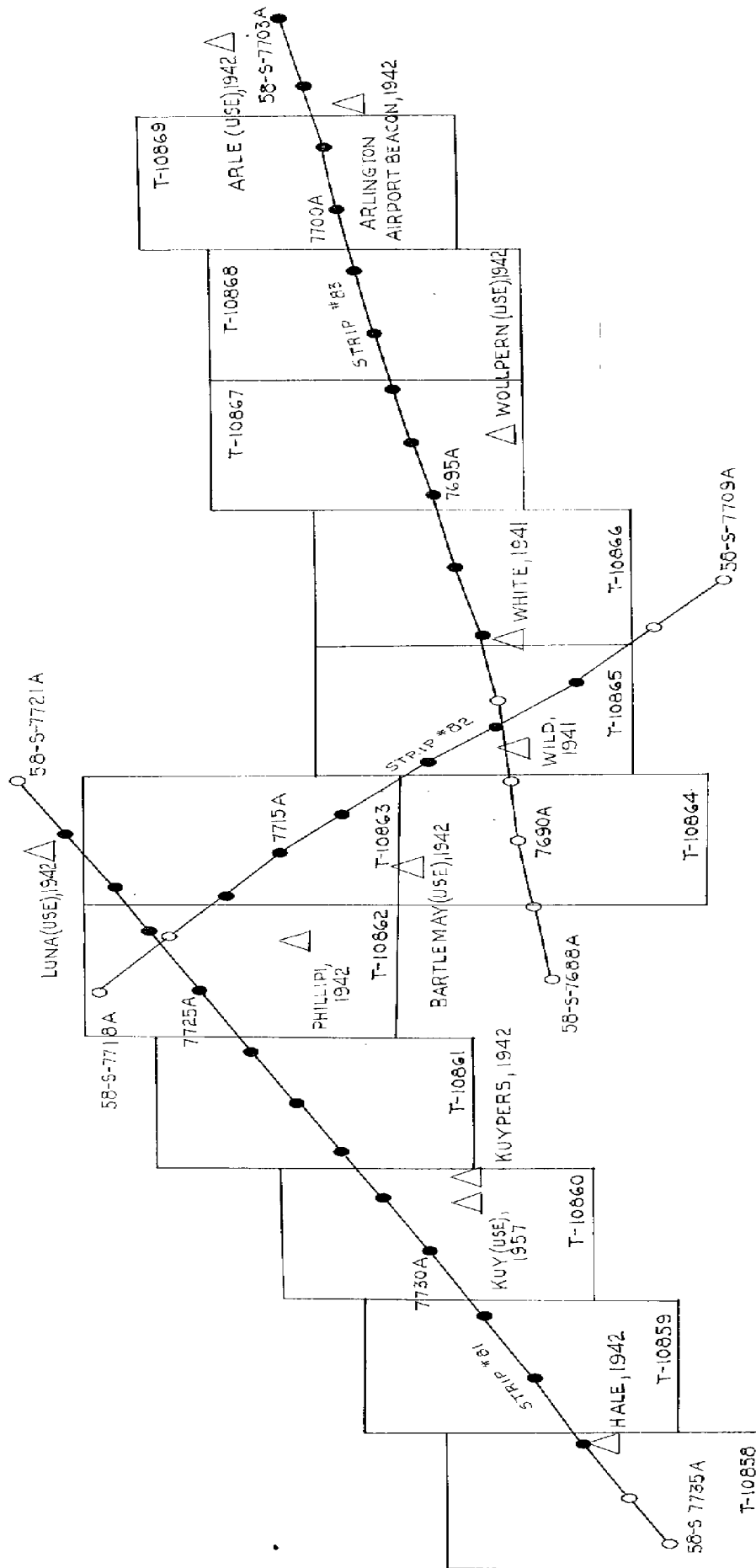
PHOTOGRAMMETRIC PLOT SKETCH

Stereoplanigraph Bridging

Scale 1:30,000

Strip No. 81, 82 and 83

Bridged —●—



ALL CONTROL FIELD IDENTIFIED (refer to plot report)

COMPILATION REPORT

Map Manuscript T-10858

Project Ph-5807

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) May 1959, T-10858 thru T-10869 which is included in this Descriptive Report.

Reference is made to this report Item 23, Adequacy of Control, relative to sub-point "B" for ARLE (USE) 1942. The original computation for the Oregon State coordinate position for this station was rechecked and found to be in error. When the new position was plotted it held along with all other control in the orientation of the Kelsh models.

33. Supplemental Data:

None.

34. Contours and Drainage:

Contours are not applicable.

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:

Forms 567 for nautical aids and landmarks were submitted to the Washington Office on 10 Sept. 1959. Refer to remarks under this heading in the Descriptive Report for T-10837 (1959).

38. Control for Future Surveys:

Four objects were located by Kelsh Instrument. They are listed under Item 49. Notes to the Hydrographer. Three of 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 with T-10857 on the West and T-10859 on the East. 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 the Descriptive Report for T-10853 (1959).

Approved:


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

Respectfully submitted:


J. Edward Deal
Cartographer
C&GS

GEOGRAPHIC NAMES LIST

Biggs
Biggs Junction

Columbia Hills
*Columbia River
Columbia River Highway

Fulton Canyon

Klickitat County

*Lake Celilo
Lewis & Clark Highway

Maryhill

*Oregon

Sherman County
Spanish Hollow
Spokane, Portland & Seattle R.R.

Union Pacific R.R.

*Washington

* B.G.N. Decision

George M. Bee
GEOGRAPHIC NAMES SECTION
10 MARCH 1960

49. Notes to the Hydrographer:

Forms 567 were submitted listing the geographic position of four fixed Aids to Navigation:

Biggs Rapids Range Front Light
Hells Gate Range 2 Front Light
Hells Gate Range 2 Rear Light
Biggs Rapids Light

These aids to navigation were located by U. S. Engineers and verified by Kelsh Instrument.

Also three floating aids to navigation located by Sextant fix:

Biggs Rapids Buoy 16
Biggs Rapids Buoy 17
Hells Gate Rapids Buoy 15

Form 567 was submitted for one landmark located by Kelsh Instrument:

Elevator, 1959

Three other objects were located by Kelsh Instrument:

South Gable Green Roofed Shack
East Gable, Biggs R. R. Depot
Scale, 1959 (center of small scale house)

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10358

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 X 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 None

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:

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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.

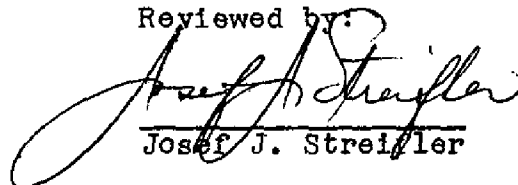
65. Comparison with Nautical Charts:

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-10858

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.