

orig

10840

6157

Diag. Cht. No. 6157.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. _____ Office No. T-10840

LOCALITY

State Oregon & Washington

Columbia River

General locality Bonneville Dam Pool

Locality Wind River

1959

CHIEF OF PARTY

Lorne G. Taylor, Photogrammetric Office

LIBRARY & ARCHIVES

DATE _____

USCOMM-DC 5087

10840

DESCRIPTIVE REPORT - DATA RECORD

T - 10840

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

Photogrammetric Office (III): Portland, Oregon

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

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): 10/5/61

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 ~~existing datum~~

i.e., ~~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 Aug. 1958.

Reference Station (III): VALLEY, 1957

Lat.: 45° 43' 00.564" 17.4m

Long.: 121° 47' 32.029" 692.7m

Adjusted X
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

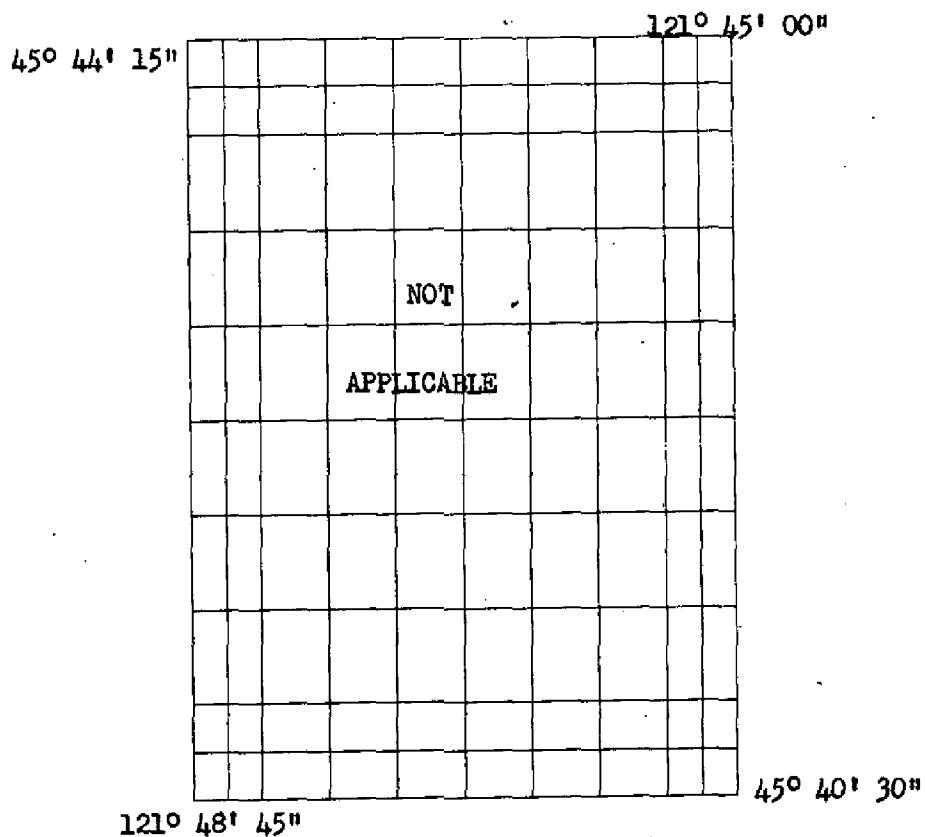
Y= 750,076.11

X= 1,669,939.76

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

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): Robert B. Melby
Charles H. Bishop

Date: 3-4-59

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 8-30-58 and delineated by Kelsch Stereoscopic Instrument on this photography supplemented by models of U.S.E. photography taken on 7-22-57. The shoreline is the gradient of Bonneville Dam Pool from 72.0 ft. normal pool level at the forebay and proceeding upstream at the pool gradient of 30 Aug. 1958, the date of photography.

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

Date: 12-20-58

Projection and Grids checked by (IV): Shoup

Date: 12-23-58

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

Date: 3-6-59

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

Date: 3-11-59

Radial Plot or Stereoscopic Control extension by (III): George Ball

Date: 2-11-59

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

Date: 4-6-59

Date:

Manuscript delineated by (III): D. N. Williams (Scribing)
C. C. Harris (Stick-up)

Date: 4-24-59
7-21-59

Photogrammetric Office Review by (III): J. L. Harris

Date: 4-17-59

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
		Time			Pool (Forebay)
58-S-7880A & 7881A	8-30-58	10:20	1:30,000 Contact 1:10,000 Ratio		73.6 ft. above M.S.L.

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): 8

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

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 14

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III): 1

Number of Temporary Photo Hydro Stations established (III): 0

Recovered: 11

Recovered:

Identified: 0

Identified:

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 PH-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 1952) and results of field inspection of February to April 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 crenar 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.

August 1961

FIELD INSPECTION REPORT

Project Ph-5807

Sheets 10840 and 10841

2. Areal Field Inspection:

The field inspection features were annotated on single lens 1:10,000 scale ratio prints taken 30 August 1958. The quality of the photographs was considered adequate. The 1:6,000 scale single lens contact photographs taken on 30 August 1958 were used in conjunction with the 1:10,000 scale ratio photographs to aid in identifying and verifying the images of desired features and objects. No annotation was made on the 1:6,000 scale photography.

This portion of the project area is common to both shores of the Columbia River. Along the south shore of the river the area is served by the Union Pacific Railroad and U. S. Highway 30. Along the north shore of the river the area is served by the Spokane, Portland and Seattle Railway and U. S. Highway 830. Steep cliffs are adjacent to both shores of the Columbia River. Rocky slide areas are found on the mountain slopes.

Near the mouth of the Wind River is the unincorporated community of Home Valley, Washington. On the south shore of the Columbia River near the mouth of Gorton Creek is the unincorporated community of Wyeth, Oregon. Few cultural features exist in the area. Farming and logging operations are carried on near Home Valley, Washington.

3. Horizontal Control:

- (a) No supplemental control was established.
- (b) No datum adjustment was made by the field party.
- (c) All horizontal control recovered in the area was established by the Coast and Geodetic Survey
- (d) All required control stations were identified.
- (e) All Coast and Geodetic Survey stations were searched for.
- (f) The quality of identification is stated on the Control Station Identification Card. (Form 152) (Form M-2226-12).

4. Vertical Control:

Not applicable.

5. Contours and Drainage:

Contours not applicable.

Portions of the drainage pattern were indicated on the field photographs where the images of this feature were visible, usually at the mouth of the streams. The upper courses of the streams are obscured by dense woodland cover that is predominate in the bottoms of deep draws and ravines. An excessive amount of field work would have been required to accurately delineate the entire drainage pattern.

6. Woodland Cover:

Most of the woodland cover of the upper mountain slopes is coniferous trees. Mixed timber is found along the stream courses and lowland area. The hardwoods are mostly scrub oak, maple and willow. Willow clumps are found along the sandy areas adjacent to the Columbia River.

7. Shoreline and Alongshore Features:

(a) The mean high water is not applicable to this project. The mapping shoreline is the normal pool level of 72.0 ft. above M.S.L. at Bonneville Dam forebay, and the gradient of the pool at time of photography.

The pool gradient at the time of the photography was about 1.5 feet above normal pool. Due to the generally steep banks along the shore, the horizontal displacement of the shoreline is negligible in most instances. The shore is composed of boulders, stone and sand interspersed with basaltic cliffs.

(b) The low water line is not applicable.

(c) Foreshore areas have been indicated where this feature was visible on the field photographs.

(d) Abrupt cliffs extend along both shores of the Columbia River, and form the gorge through which the river flows. Cliffs at the shoreline were indicated on the field photographs.

(e) There are few boat landings, wharves or piers along the Columbia River. There are log dumps in the mouth of the Wind River and near Home Valley.

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

(g) There is a stone jetty upstream from the mouth of the Wind River constructed to afford shelter for a log dump.

8. Offshore Features:

Rocks, piles and stumps are found offshore. These features were visited by small boat and have been indicated on the field photographs. The heights of the rocks above the water surface were estimated in the field and were indicated on the field photographs with the date and time of inspection.

9. Landmarks and Aids:

(a) Landmarks for charts are listed on Form 567.

(b) Buildings that were considered to have landmark value were indicated and classified on the field photographs. They were not considered of a significance to be listed on Form 567. It is suggested they be shown as alongshore features.

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

(d) Fixed aids to navigation were identified on the field photographs, ~~and described on Form 567.~~

(e) There are no floating aids in the area.

10. Boundaries, Monuments and Lines:

The only political boundary is the Oregon and Washington State boundary that lies mid-stream in the Columbia River. Coordinates of the turning points on this boundary are on file in the Portland Photogrammetric Office.

11. Other Control:

The navigation lights along the shores of the Columbia River were identified on the field photographs for location by photogrammetric methods.

12. Other Interior Features:

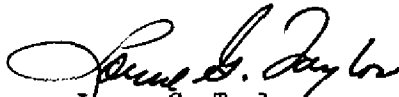
Roads were classified in accordance with Photogrammetric Instructions 56, dated 1 July 1958. Railroads, buildings, bridges and other interior features have been indicated on the field photographs.

13. Geographic Names:

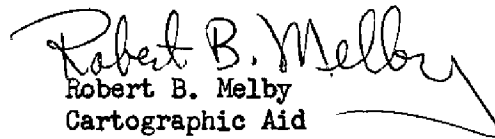
Geographic Names are contained in the special report Geographic Names Report - Part 1, Columbia River, Bonneville to The Dalles.

Approved:

Submitted:



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



Robert B. Melby
Cartographic Aid
C&GS

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10840

Project Ph-5807

Refer to "Photogrammetric Plot Report, Columbia River, Ph-5807 (Stereoplanigraph Bridge)" which is included in the Descriptive Report for T-10837, Project Ph-5807 (1959).

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-10840 PROJECT NO Ph-5807 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
FARR, 1939	Oregon North P-27	N.A. 1927	743,049.84	3049.84 (1950.16)		929.6 (594.4)	
			1,667,280.67	2280.67 (2719.33)		695.1 (828.9)	
FARR 2, 1957	"	"	742,918.53	2918.53 (2081.47)		889.6 (634.4)	
	P-275		1,667,584.37	2584.37 (2415.63)		787.7 (736.3)	
GLORIA, 1957	"	"	741,259.72	1259.72 (3740.28)		384.0 (1140.0)	
	"		1,672,218.14	2218.14 (2781.86)		676.1 (847.9)	
GORTON, 1939	"	"	741,474.48	1474.48 (3525.52)		449.4 (1074.6)	
	P-27		1,674,304.29	4304.29 (695.71)		1311.9 (212.1)	
HOME, 1939	"	"	746,480.12	1480.12 (3519.88)		451.1 (1072.9)	
	"		1,672,701.33	2701.33 (2298.67)		823.4 (700.6)	
SOLID, 1939	"	"	748,892.53	3892.53 (1107.47)		1186.4 (337.6)	
	"		1,665,355.58	355.58 (4644.42)		108.4 (1415.6)	
Ts 2 & 3N, Rs 8 & 9E	"	"	740,611.76	611.76 (4388.24)		186.5 (1337.5)	
CORNER (USE) 1939	P-46		1,679,004.52	4004.52 (995.48)		1220.6 (303.4)	
T3N, R8E, Sec. 35 & 36	"	"	744,712.92	4712.92 (287.08)		1436.5 (87.5)	
Iron Pipe, 1939	P-37		1,680,180.67	180.67 (4819.33)		55.1 (1468.9)	
T3N, R8E, Sec. 35 & 36	"	"	741,059.18	1059.18 (3940.82)		322.8 (1201.2)	
Meander Cor., 1939	"	"	1,673,712.76	3712.76 (1287.24)		1131.6 (392.4)	
VALLEY, 1957	"	"	750,076.11	76.11 (4923.89)		23.2 (1500.8)	
	P-277		1,669,939.76	4939.76 (60.24)		1505.6 (18.4)	13
WIND MOUNTAIN, 1939	"	"	747,451.43	2451.43 (2548.57)		747.2 (776.8)	
	P-26		1,679,505.82	4505.82 (494.18)		1373.4 (150.6)	

1 FT. = 3048006 METER

COMPUTED BY J.E.D.

DATE 4-16-59

CHECKED BY L.L.G.

DATE 4-17-59

COMM. DC-57843

COMPILATION REPORT

Map Manuscript T-10840

Project Ph-5807

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry. The C&GS Photography was adequate to compile the planimetric details to the limits indicated on the project index.

Refer to last paragraph under this heading in the descriptive report for T-10837 (1959).

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:

None.

34 to 37:

Facts relative to the subjects of Items 34 thru 37 are practically identical with those described under these paragraphs in the descriptive report for T-10837 (1959).

38. Control for Future Surveys:

For this manuscript there were sufficient triangulation stations recovered along the shorelines of the Columbia River to meet the spacing requirement for control for future surveys.

39. Junctions:

A satisfactory junction was completed with T-10839 on the west and T-10841 on the east. There are no contemporary surveys to the north and south.

40 - 46 & 47:

Facts relative to the subjects of Items 40 - 46 & 47 are identical with those described under these paragraphs in the descriptive report for T-10837.

Approved:

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

Respectfully submitted:

J. Edward Deal
J. Edward Deal
Cartographer
C&GS

15
48. Geographic Names:

Columbia River
Columbia River Highway
Gorton Creek
Home Valley
Hood River County
Lewis & Clark Highway
Oregon
Skamania County
Spokane, Portland & Seattle RR
Union Pacific RR
Washington
Wind Mountain
Wind River
Wyeth

George M. Bane
Geographic Names Section
6 July 1961

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10840

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 X

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline X 13. Low-water line None 14. Rocks, shoals, etc. X 15. Bridges X 16. Aids to navigation None 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 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 X40. C.C. Harris 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:

M-2623-12

17

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.

*T-10838 only
river datum
planes could*

63. Comparison with Maps of Other Agencies

Bonneville Dam, Ore.-Wash., 1:62,500, 1957, U.S. Geological Survey
Hood River, Ore.-Wash., 1:62,500, 1957, U.S. Geological Survey
White Salmon, Ore.-Wash., 1:62,500, 1957, 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

6157 1:40,000 Revised to March 1961

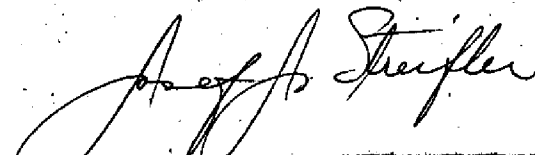
There are considerable disagreements between these surveys. An evaluation of these by the Nautical Chart Division for possible early consideration is recommended. Typical major discrepancies are at the following locations:

1. Lat. 45° 41', Long. 121° 51' - in the vicinity of Government Cove
2. Lat. 45° 41' 45", Long. 121° 41' - see long point of land and islands SW thereof
3. At the Oregon shore of Columbia River directly west of Hood River - White Salmon Bridge (lat. 45° 43' - long. 121° 30' to 31').

66. Adequacy of Results and Future Surveys

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

Reviewed by:



Josef J. Streifler

Approved by:



Chief, Review & Drafting Section



Chief, Nautical Chart Division

 5/10/62

Chief, Photogrammetry Division



Chief, Operations Division

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10840

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.