

8664
8665

Diag'd. on diag. ch. No. 6154

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air Photographic

T-8664 & ✓

Field No. Office No. T-8665 ✓

LOCALITY

State OREGON & WASHINGTON

General locality Multnomah County, Oregon

Clark County, Washington

Locality Reeder Point, Columbia River &
Shillapoo Lake

194 7

CHIEF OF PARTY

R. A. Earle

LIBRARY & ARCHIVES

DATE

Dec 4-1947

B-1870-1 (1)

8664
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DATA RECORD

T-8664

Quadrangle (II): REEDER POINT, OREGON
(3 minute)

Project No. (II): CS-322

Field Office: Portland, Oregon Chief of Party: R. A. Earle

Compilation Office: Portland, Ore. Chief of Party: R. A. Earle

Instructions dated (II III): July 12, 1945
Supplemental Instructions: Aug. 29, Sept. 10,
Oct. 25, Nov. 30 and Dec. 6, 1945

Copy filed in Descriptive
~~Report No. T-~~ (VI)
Div. Photogram. Office Files

Completed survey received in office: *27 Jan. 1947*

Reported to Nautical Chart Section:

Reviewed: *28 Mar. 1947* Applied to chart No. Date:

Redrafting Completed: *18 Aug. 1947*

Registered: *22 Oct. 1947 11/47* Published: *1947*

Compilation Scale: 1:8000 Published Scale: *1:9600*

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III):* See below

Reference Station (III): W-TEN-2 (USE) Ore. 1912 r 1946

Lat.: $45^{\circ} 43' 26.593''$ (821.0m) Long.: $122^{\circ} 46' 19.027''$ (411.5m) Adjusted X
Unadjusted

State Plane Coordinates (VI): *Oregon North*

X = *1,419,826.06 feet* Y = *758,230.98 feet*

Military Grid Zone (VI)

- * (M.H.W. = 6.29 ft. above Mean Sea Level) (M.L.W. = 1.29 ft. above Mean Sea Level)
A 11 elevations are on the Standard 1929 general adjustment of leveling in the U.S.A.

940

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
			1:17000 contact	
631 to 634	Inc. 6-30-45	14:45	1: 8000 ratio	11.9 ft. above M.L.W.
670 to 673	" 7- 1-45	10:15	"	11.7 ft. " "
3561 to 3564	" 11-21-45	14:15	"	4.9 ft. " "
3576 to 3579	" 11-21-45	14:15	"	4.9 ft. " "
1391 to 1399	" 7- 10-45	10:30	1: 5000 contact	9.9 ft. " "

Tide from (III): Daily readings of the U.S. Engineer tide gauge located at Government Moorings on the west shore of the Willamette River just south of St. Johns Bridge. The 0+00 of the gauge is 1.29 ft. above Mean Sea Level, which is M.L.W.

Mean Range: Spring Range: Columbia River.

Camera: (Kind or source) K 17, focal length 12 inches

Field Inspection by: See remarks, page 3 date:

Field Edit by: F. H. Elrod, Prin. Photo. Aid date: Jan., 1947

Date of Mean High-Water Line Location (III) Nov. 21, 1945

Note: According to supplemental instructions dated Sept. 10, 1945, a high-water line of 5.0 ft. above Mean Low-Water is to be shown on the map manuscripts. Photographs made on Nov. 21, 1945, were taken when the water level was at 4.9 ft. above M.L.W.

Projection and Grids ruled by (III) Washington Office date: June, 1946

" " " checked by: Washington Office date: June, 1946

Control plotted by: Eda H. Bunce date: Sept., 1946

Control checked by: Richard Foster date: Sept., 1946

Radial Plot by: James L. Harris & J. E. Deal date: Oct. 11, 1946

Detailed by: Marie B. Elrod date: Oct. 29, 1946

Reviewed in compilation office by: R. A. Davidson date: Dec. 5, 1946

Corrections and changes after field edit by: M.B. Elrod date: Jan. 13, 1947

Review after changes due to field edit by: Ree H. Barron date: Jan. 16, 1947

Elevations on Field Edit Sheet

checked by: Charles Hanavich, Topographic Engineer date: Jan. 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 5.5

Shoreline (More than 200 meters to opposite shore): 25.0 statute miles

Shoreline (Less than 200 meters to opposite shore): 6.0 statute miles

Number of Recoverable Topographic Stations established: 6
(all are fixed aids to navigation)

Number of Temporary Hydrographic Stations located by radial
plot: None

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

Field Inspection by: W. J. Bushnell, Photo. Aid	date: April, 1946
Shoreline Inspection by: J. C. LaJoye, Prin. Photo. Aid	date: April, 1946 Sept., 1945
Recovery of Horizontal Control by: J. C. LaJoye	date: April, 1946
Recovery of Vertical Control by: J. H. Winniford, Photo. Aid	date: Oct., 1945
Investigation of Geographic Names and Civil Boundaries By:	L. E. Ervast, Photo. Aid date: July, 1946 Jan. 8, 1947

RECORD SHEET

Div. of Photogrammetry
Graphic Compilation Sect.

GENERAL LOCALITY Sauvie Island, Oregon
LOCALITY Reeder Point, Columbia River
PHOTOS ORDERED Aug. 1945 8-11, 9-24-45
REC'D 1-21-46
PROJECTION ORDERED May 1946 REC'D 6-21-46

SHEET NO. T-8664
PROJECT NO. CS-322
SCALE 1:8000

CONTROL:

COMPUTED Foster VERIFIED Bushnell

PLOTTED Bunce VERIFIED Foster

PHOTO PREPARATION:

CONTROL Bunce Bushnell

AZIMUTHS Davidson

PASS POINTS Bunce

TEMPLATES Sherwood VERIFIED Harris

RADIAL PLOT:

PLOTTED BY Harris DATE 10-7-46

VERIFIED Deal DATE 10-11-46

COMPILATION:

DETAIL POINTS M. B. Elrod DATE 10-16-46

DETAIL BY M. B. Elrod DATE 10-29-46

VERIFIED BY R. A. Davidson DATE 12-5-46

COMPARISON WITH PREVIOUS SURVEYS; TOPO., HYDRO., AND CHARTS:

Due to scale difference only a visual comparison was made with the USGS Hillsboro, Ore. - Wash., 15 min. quadrangle, Scale: 1:62500. Differences were noted along both shores of the Columbia River which in most cases is due to the dumping of spoil, and on Sauvie Island where extensive drainage operations have been in progress since the quadrangle was made. (over)

REMARKS:

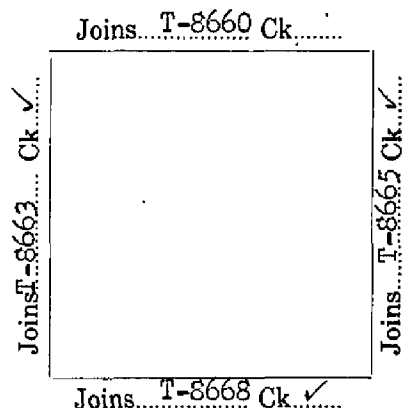
All corrections and additions which were found during the field edit were applied to the map manuscript. A final compilation office review was then made.

FORWARDED TO Washington Office DATE January 20, 1947

R. A. Earle
R. A. Earle
Chief of Party

M-2305-12

gld



DATE OF PHOTOS See reverse side

TIME OF PHOTOS "

STAGE OF TIDE "

COMPARISONS (cont'd.)

In general, the planimetry common to the map manuscript and quadrangle is in agreement.

Comparison was made with the black line prints on clear acetate of previous topographic surveys No's. 6571b and 6572, Scale: 1:10,000, enlarged to a scale of 1:8000. In many places the shorelines of the Columbia River has either been built up, due to the dumping of spoil, or eroded. Much of the shoreline common to the map manuscript and topographic survey sheets is however, in excellent agreement.

Comparison was made with Nautical Chart No. 6154, Scale: 1:40,000, by use of the vertical projector. The same differences as noted in the comparison with the topographic surveys were noticed and in addition, there are many pond areas on Sauvie Island which have been reclaimed since the chart was made.

PHOTOGRAPH DATA

<u>Number</u>		<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
				1:17000 contact	
631 to 634	Inc.	6-30-45	14:45	1: 8000 ratio	11.9 ft. Above M.L.W.
670 to 673	"	7- 1-45	10:15	"	11.7 ft. " "
3561 to 3564	"	11-21-45	14:15	"	4.9 ft. " "
3576 to 3579	"	11-21-45	14:15	"	4.9 ft. " "
1391 to 1399	"	7-10-45	10:30	1: 5000 contact	9.9 ft. " "

DATA RECORD

T- 8665

Quadrangle (II): Shillapoo Lake, Clark Co., Project No. (II): CS-322
Washington (3 minute)

Field Office: Portland, Oregon Chief of Party: R. A. Earle

Compilation Office: Portland, Ore. Chief of Party: R. A. Earle

Instructions dated (II III): July 12, 1945 Copy filed in Descriptive
Supplemental Instructions: Aug. 29, Sept. 10, Report No. T- (VI)
Oct. 25, Nov. 30 and Dec. 6, 1945

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: *18 Apr. 1947* Applied to chart No. Date:

Redrafting Completed: *3 June, 1947*

Registered: *23 Oct 1947 11/47* Published: *1947*

Compilation Scale: 1:8000 Published Scale: *1:9600*

Scale Factor (III): None

Geographic Datum (III): N. A. 1927 Datum Plane (III): See below*

Reference Station (III): ROBINSON, 1946

Lat.: $45^{\circ} 43' 40.625''$ (1254.2m) Long.: $122^{\circ} 43' 50.528''$ (1092.6m) Adjusted
Unadjusted X

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

* (M.H.W. = 6.29 ft. above Mean Sea Level) (M.L.W. = 1.29 ft. above Mean Sea Level).
All elevations are on the Standard 1929 general adjustment of leveling in the U.S.A.

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PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
			1:17000 contact	
468 to 471 Inc.	6-30-45	12:00	1: 8000 ratio	11.9 ft. above M.L.W.
828 to 832 "	7- 1-45	12:50	" "	11.7 ft. " "
847 to 859 "	7- 1-45	13:20	1: 5000 contact	11.7 ft. " "
Nine lens				
15123	11-21-45	13:00	1: 10000 contact	5.0 ft. " "

Daily readings of the U. S. Engineer tide gauge located at Government Moorings on the west shore of the Willamette River
Tide from (III): just south of St. Johns Bridge. The 0+00 of the gauge is 1.29 ft. above Mean Sea Level, which is M.L.W. Columbia River.

Mean Range: **Spring Range:**

Camera: (Kind or source) K 17, focal length 12 inches
 U.S. Coast & Geodetic Survey 9 lens, focal length 8.25.

Field Inspection by: See remarks, page 3 **date:**

Field Edit by: J. H. Winniford, Photo. Aid **date:** Dec., 1946

Date of Mean High-Water Line Location (III): Nov. 21, 1945
Note: According to supplemental instructions dated Sept. 10, 1945, a high-water line of 5.0 ft. above Mean Low-Water is to be shown on the map manuscripts. Photographs made on Nov. 21, 1945, were taken when the water level was at 4.9 ft. above M.L.W.

Projection and Grids ruled by (III) Washington Office **date:** June, 1946

" " " **checked by:** Washington Office **date:** June, 1946

Control plotted by: Eda H. Bunce **date:** Sept., 1946

Control checked by: Helen L. Letson **date:** Sept., 1946

Radial Plot by: James L. Harris & J. E. Deal **date:** Sept. 19, 1946

Detailed by: Carita C. Wiebe **date:** Nov. 4, 1946

Reviewed in compilation office by: R. A. Davidson **date:** Dec. 12, 1946
Corrections and changes after field edit by: Carita Wiebe **date:** Jan. 15, 1947
Review after changes due to field edit by: Ree Barron **date:** Jan. 17, 1947
Elevations on Field Edit Sheet
checked by: Charles Hanavich, Topo. Engineer **date:** Dec., 1946

STATISTICS (III)

Land Area (Sq. Statute Miles): 7.0

Shoreline (More than 200 meters to opposite shore): 6.0 statute miles

Shoreline (Less than 200 meters to opposite shore): 12.0 statute miles

Number of Recoverable Topographic Stations established: 3
(1 landmark and 2 topographic stations)

Number of Temporary Hydrographic Stations located by radial
plot: None

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

Field Inspection by:	W. J. Bushnell, Photo. Aid	date: April, 1946
Shoreline Inspection by:	J. C. LaJoye, Prin. Photo. Aid	date: May, 1946
Recovery of Horizontal Control by:	J. C. LaJoye	date: April, 1946
Recovery of Vertical Control by:	J. H. Winniford, Photo. Aid	date: Oct., 1945
Investigation of Geographic Names and Civil Boundaries by:	L. E. Ervast, Photo. Aid	date: July, 1946

RECORD SHEET

Div. of Photogrammetry
Graphic Compilation Sect.

GENERAL LOCALITY Clark County, Washington
LOCALITY Shillapoo Lake
PHOTOS ORDERED Aug. 1945 8-17, 9-26-45 REC'D 6-21-46
PROJECTION ORDERED May 1946 REC'D 6-21-46

SHEET NO. T-8665
PROJECT NO. CS-322
SCALE 1:8000

CONTROL:
COMPUTED Harris VERIFIED Bunce
PLOTTED Bunce VERIFIED Letson

PHOTO PREPARATION:
CONTROL Harris
AZIMUTHS Davidson
PASS POINTS Bunce

TEMPLATES Sherwood VERIFIED Harris

RADIAL PLOT:
PLOTTED BY Harris DATE 9-13-46
VERIFIED Deal DATE 9-19-46

COMPILATION:
DETAIL POINTS Wiebe DATE 10-11-46
DETAIL BY Wiebe DATE 11-4-46
VERIFIED BY Davidson DATE 12-12-46

DATE OF PHOTOS See reverse side

TIME OF PHOTOS "

STAGE OF TIDE "

COMPARISON WITH PREVIOUS SURVEYS; TOPO., HYDRO., AND CHARTS:

Due to scale difference only a visual comparison was made with the USGS Portland, Oregon - Washington, 15 min. quadrangle, Scale: 1:62500. On the quadrangle map a road, which parallels the northeast shoreline of Shillapoo Lake, could not be found on the ground. Mundays Ferry has been abandoned, and the high-water line in Salmon Creek is in error. Elsewhere, the common planimetry of the map (over)

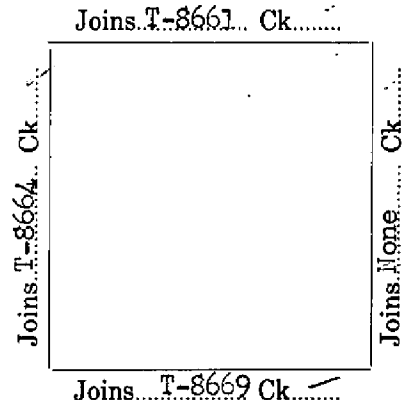
REMARKS

All corrections and additions which were found during the field edit were applied to the map manuscript. A final compilation office review was then made.

FORWARDED TO Washington Office DATE January 20, 1947

R. A. Earle
R. A. Earle
Chief of Party

M-2305-12



COMPARISONS (cont'd)

manuscript and quadrangle is in fair agreement.

Comparison was made with Nautical Chart No. 6154, Scale: 1:40, 000, by use of the vertical projector, and in most places the high-water line is in agreement. On the chart, parts of the Lake River are not in their correct geographic position and the interpretation of the high-water line of Salmon Creek appears to be in error. There are many marsh and pond areas between Shillapoo Lake and Round Lake which are not shown on the chart.


PHOTOGRAPH DATA

Number	Date	Time	Scale	Stage of Tide
468 to 471 Inc.	6-30-45	12:00	1:17,000 contact 1: 8,000 ratio	11.9 ft. above M.L.W.
828 to 832 "	7- 1-45	12:50	"	11.7 ft. " "
847 to 859 "	7- 1-45	13:20	1: 5,000 contact	11.7 ft. " "
Nine lens 15123	11-21-45	13:00	1:10,000	5.0 ft. " "

FIELD INSPECTION REPORT
T-8664 and T-8665
Project CS-322

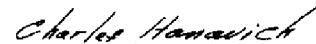
1 to 25: All the information that is applicable to these side headings is given in the "Field Inspection Report, Project CS-322, Area of the Fourth Radial Plot", which was enclosed with the Descriptive Report for Quadrangles T-8669 and T-8670. This Descriptive Report has been submitted.

Approved by:



Robert A. Earle
Chief of Party

Respectfully submitted:



Charles Hanavich
Topographic Engineer

Amendment to File Data

Since project CS-322 was reviewed and registered, it was decided that a Completion Report for each project would be written and filed in the Bureau of Archives. This Completion Report should include all special reports, correspondence of probable future interest or importance, a project layout, a photo index, and a copy of the initial and supplementary project instructions.

A special file has been set up in the library for Division of Photogrammetry projects. The Completion Report and other special reports will be filed under the project number, and these will be arranged in numerical order.

The following reports and records for project CS-322 are now filed in the Bureau Archives, rather than according to the red notes in the Descriptive Reports:

- | A. Special Reports: | | Access No. |
|---|------------------------|----------------|
| 1. Investigation of Boundary Monuments and Land Lines for Radial Plots 1, 2, 3, and 4 | CS-322 Rept. 1 | |
| 2. Radial Plots 1, 2, 3, and 4 | " " | 2 |
| 3. Legal descriptions of boundaries | " " | 3 |
| 4. Field inspection for plots 1, 2, 3, and 4 | " " | 4 |
| B. Computations: Triangulation and Traverse | | 943/GTZ G-6785 |
| C. Field records: | | |
| 1. Horizontal Angles (form 250) 12 vol. | 943/GH | G-7082 |
| 2. Traverse Measurements (form 590) 9 vol. | 943/GB | G-7083 |
| 3. Descriptions (form 525) and recoveries (form 526) | 943/GA | G-6786 |
| 4. Pricking cards (form M-982-1) for tri. and Trav. | Div. of Photogrammetry | General File |
| 5. Recoverable Topographic stations (form 524) | Div. of Photogrammetry | General File |
| D. Recovery of bench marks (form 685) | Filed in Leveling Sec. | |
| E. Supplemental data: maps, plans | | |
| These were transferred to the Map Section (Mr. Stanley, Chief), Division of Charts, to be selectively filed or discarded. | | |

LTS
January 1951

COMPIRATION REPORT
MAP MANUSCRIPTS T-8664 and T-8665
PROJECT CS-322

26. Control:

At the time this project was started there were forty-eight horizontal control stations in the area of these two map manuscripts. Nine of these stations were recovered and five were identified on the photographs for use in the radial plot. In order to satisfactorily control the photographs, two permanent triangulation stations were established in the area of Quadrangle T-8665. *Robinson clearing*

A complete tabulation of the horizontal control stations which were originally in the area of these two map manuscripts is attached to the "Field Inspection Report, Project CS-322, Area of the Fourth Radial Plot". This report was included with the descriptive report for Map Manuscripts T-8669 and T-8670 which was forwarded on 8 January 1947.

→ Filed in Div. Photogram. General Files under "Special Reports".

The two new triangulation stations which were established in this area are listed in a tabulation attached to a special report, "Third-Order Triangulation and Traverse, Project CS-322, Area of the Fourth Radial Plot", which has been forwarded.

→ Filed in Library & Archives under G-6785

27. Radial Plot:

The facts concerning the radial plot for the area of these two map manuscripts have been fully covered in the "Descriptive Report, Fourth Radial Plot, Project CS-322". This radial plot report was included with the descriptive report for Map Manuscripts No's. T-8669 and T-8670, which was submitted to the Washington Office on 8 January 1947.

→ Filed in Div. Photogram. General Files under "Special Reports".

28. Detailing:

Compilation was done in accordance with instructions for Project CS-322 and special instructions applicable to planimetric mapping.

The photography was adequate. The reflight photographs made on November 21, 1945, were helpful in determining the high-water line and other shoreline details. They were not satisfactory for accurately determining the detail falling in the outer limits of the photograph or for orientation and use in the radial plotting of the minor pass points. In some cases it was difficult to interpret from the ratio print, the correct shape and size of buildings. This was attributed to the loss of sharpness when the contact prints were enlarged.

When any item relative to the field inspection data was doubtful, it could be clarified by consultation with the field man who had done the inspection work. It was, therefore, unnecessary to make discrepancy overlays for the field edit work.

The classification symbols for tree or brush areas are placed on the inside of the curled line which denotes the limits of said areas. These curled lines and the letter symbols are in green acid ink.

All boundary and land claim lines are shown by appropriate symbols in red acid ink. A legend shown in the margin of each map manuscript identifies these lines.

Pertinent notes, relative to various items, have been lettered in the margins of the map manuscripts.

29. Supplemental Data:

The following map, which was forwarded to the Washington Office on 14 January 1947, was used to supplement the photographs:

Sheet 12, of a set of 74 sheets published by the Multnomah County Assessor's Office, Scale: 1" = 600'.

30. Mean High-Water Line:

The mean high-water line was detailed from information submitted by the field parties and from stereoscopic examination of the photographs. Most of the shoreline data is shown on field photographs taken on November 21, 1945. The mean high-water line, bordering firm ground, is shown by a continuous heavy-weight black acid ink line, at a plane five feet above the U. S. Engineers low-water datum, which is 1.29 feet above mean sea level. The mean high-water line bordering marsh or mud, is shown with a continuous light-weight black acid ink line at the same plane. Where the field inspection unit could not definitely establish the location of the high-water line, it is shown by dashed black acid ink lines, of the same weights, as described above.

31. Low-Water and Shoal Lines:

The field inspection unit indicated several small areas which bare at low-water. They have been shown enclosed in a dotted black acid ink line and appropriately noted. The field inspection unit did not indicate any shoal areas.

32. Details Offshore from the Mean High-Water Line:

There are no details offshore from the mean high-water line.

33. Wharves and Shoreline Structures:

Piers, wharves, dolphins, dikes, etc., have been shown.

34. Landmarks and Aids to Navigation:

In the area of Map Manuscript No. T-8664, Forms 567 are being submitted for the following:

✓ KNAPP POINT LIGHT	✓ WILLOW BAR "3" LIGHT
✓ WILLOW BAR RANGE FRONT LIGHT	✓ WILLOW BAR DIKE LIGHT
✓ WILLOW BAR RANGE REAR LIGHT, (Triangulation Station).	✓ REEDER POINT LIGHT
	✓ HUTCHINSON DIKE LIGHT

In the area of Map Manuscript No. T-8665, Forms 567 are being submitted for the retention of Nautical Landmark "FELIDA AVIATION BEACON", on Nautical Chart No. 6154.

35. Hydrographic Control:

No additional hydrographic control stations were established along the Columbia River as a sufficient number of existing horizontal control stations and fixed aids to navigation had been recovered or located to comply with the instructions. Several recoverable topographic stations were established along the Lake River for use during future hydrographic surveys.

36. Landing Fields and Aeronautical Aids:

There are no landing fields within the area of these two map manuscripts. Form 567 is being submitted for the retention of "FELIDA AVIATION BEACON" as an Aeronautical Aid on Chart No. W - 1.

37. Geographic Names:

Only undisputed geographic names are shown on the map manuscripts. Geographic names are the subject of a special report, "Investigation of Geographic Names, Project CS-322, Area of the Fourth Radial Plot", which was forwarded on 8 January 1947.

38. Recoverable Topographic Stations:

In the area of Map Manuscript No. T-8664 copies of Forms 524 are being submitted for the six fixed aids to navigation, listed in Paragraph 34, which are not triangulation stations.

In the area of Map Manuscript No. T-8665 copies of Forms 524 are being submitted for the following:

✓ SILO, 1946	-	✓ NORTHWEST CUPOLA, 1946	-	✓ FELIDA AVIATION BEACON, 1946
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33. Wharves and Shoreline Structures:

Piers, wharves, dolphins, dikes, etc., have been shown.

34. Landmarks and Aids to Navigation:

In the area of Map Manuscript No. T-8665, Forms 567 are being submitted for the following:

WILLOW BAR "3" LIGHT
WILLOW BAR DIKE LIGHT
RENDER POINT LIGHT
HUTCHINSON DIKE LIGHT

KNAPP POINT LIGHT
WILLOW BAR RANGE FRONT LIGHT
WILLOW BAR RANGE REAR LIGHT
(triangulation station).

*Special Report: Investigation of Boundary Monuments and Lines...
Area of the Fourth Radial Plot.
Filed in Div. Photogram. Gen. Files under "Special Reports."*

35. Hydrographic Control:

No additional hydrographic control stations were established along the Columbia River as a sufficient number of existing horizontal control stations and fixed aids to navigation had been recovered or located to comply with the instructions. Several recoverable topographic stations were established along the lake river for use during future hydrographic surveys.

36. Landing Fields and Aeronautical Aids:

There are no landing fields within the area of these two map manuscripts. Form 567 is being submitted for the retention of "TETLA AVIATION FIELD" as an Aeronautical Aid on Chart No. W - 1.

37. Geographic Names:

Only unduplicated geographic names are shown on the map manuscripts. Geographic names are the subject of a special report, "Investigation of Geographic Names, Project GS-322, Area of the Fourth Radial Plot," which was forwarded on 8 January 1947.

38. Recoverable Topographic Stations:

In the area of Map Manuscript No. T-8665 copies of Forms 52A are being submitted for the six fixed aids to navigation, listed in paragraph 34, which are not triangulation stations.

In the area of Map Manuscript No. T-8665 copies of Forms 52A are being submitted for the following:

SITIO, 1946 - NORTHWEST CORNER, 1946 - TETLA AVIATION
FIELD, 1946

39. Junctions:

Complete and satisfactory junctions have been made between Map Manuscripts No's. T-8664 and T-8665, and with adjoining map manuscripts.

40. Bench Marks:

Bench marks have been detailed as identified by the field inspection units. Each bench mark is indicated by a black acid ink cross with the name and elevation to the nearest 1/10 foot lettered nearby.

*6 new
3 plotted*

41. Donation Land Claim and Section Lines:

Filed with map manuscript

Donation land claim and section lines were located on ozalid prints of the map manuscripts after the initial compilation had been completed. These lines, with pertinent explanatory notes, were placed on the prints in red and purple ink respectively, by the field party, and were then traced on the map manuscripts by the compilers. The ozalid prints containing these lines are being forwarded.

44. Comparison with existing Topographic Surveys:

See record sheet which accompanies each map manuscript.

45. Comparison with Nautical Charts:

See record sheet which accompanies each map manuscript.

Approved and forwarded:

Robert A. Earle
Robert A. Earle
Chief of Party

Respectfully submitted:
January 17, 1947

J. Edward Deal Jr.
J. Edward Deal, Jr.
Photogrammetric Engr.

FIELD EDIT REPORT
QUADRANGLES T-8664 and T-8665
PROJECT CS-322

46. Methods:

These map manuscripts were field edited in accordance with the Field Edit Instructions dated 24 August 1945. All corrections and additions have been made accurately on the field edit prints in colored ink, or the place where a correction or addition is to be made has been indicated by a note which refers to a field photograph. All features which are to be deleted have been crossed out in colored ink.

New buildings were located either by pacing or taping and are shown on the field edit prints. A legend on each of these prints will furnish a key to all the symbols and to the different colored inks used.

47. Adequacy of the Compilation:

The planimetry as delineated on the map manuscripts may be considered as complete and adequate with respect to the corresponding ground detail. Except for the deletions, corrections, additions, and notations made on the field edit prints, it is accurate, also in regard to relative position.

Any omissions or drafting of detail that seemed to be questionable was called to the attention of the Compilation Office by notes. The additional names and numbers of roads were obtained and verified from official signs. Special attention was given to the various notes on the map manuscripts calling the field editor's attention to features which the Compilation Office had considered questionable. Several dikes, which were delineated in the office by stereoscope, were deleted. Several drainage ditches, which were recently constructed (in T-8664) were located by planetable methods or field measurements on the field photographs. As a result of this several intermittent and perennial ponds were drained.

All the shoreline features were checked. Reeder Point Light, which was rebuilt, was indicated by the field editor on field photograph 632. It is to be noted that the various lowland areas, unprotected by dikes and noted on the field edit sheets, become flooded during the annual freshets or out of season floods. For additional information refer to side headings 1 and 7 of the "Field Inspection Report, Area of the Fourth Radial Plot, Project CS-322".

In accordance with the field edit instructions, these map manuscripts were examined for completeness and accuracy in regard to geographic names, boundaries, public land lines, and detail by Mr. Bernard Morris, County Surveyor of Clark County, Vancouver, Washington. Sheet T-8664 was examined, also, by Mr. George B. Stocks of the U. S. Soil Conservation, Box 116D, Portland, Oregon. The geographic names in this area have been reviewed by Mr. Lewis A. McArthur, Collaborator for the U.S. Coast & Geodetic Survey.

48. Accuracy Tests:

No horizontal accuracy tests were run in this area. For map accuracy tests near the area of these map manuscripts refer to the Field Edit Reports for Quadrangles T-8675 and for T-8679 to T-8681 inclusive.

49. Bench Mark Elevations:

The elevations of the bench marks shown on these sheets have been checked.

50. Donation Land Claim and Section Lines:

Donation land claims and section lines were located on additional ozalid prints of the map manuscripts by a special field party after the initial compilation had been completed. These lines were indicated in red and purple ink, respectively, and supplemented, if necessary, by explanatory notes. These additional ozalid prints will be submitted with the field edit sheets.

Field Edit reviewed by:

Charles Hanavich
Charles Hanavich,
Topographic Engineer

Field Edit by:

F. H. Elrod
F. H. Elrod,
Prin. Photo. Aid

Approved by:

R. A. Earle
R. A. Earle
Chief of Party

Division of Photogrammetry

Review Report

Planimetric Survey Manuscript T-8664.

Paragraph numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. CONTROL

The field party recovered nine triangulation stations and considered fourteen lost in the area of this survey. Additional stations located in the same area, all established approximately sixty-five years ago, were not plotted by the reviewer since no descriptions were available.

28. DETAILING

Corrections, made during review, have been shown on the manuscript in brown acid ink.

37. STATE LINE, OREGON-WASHINGTON

A note has been placed on the manuscript indicating that a portion of this state line is indefinite. The state line is said to follow the main channel of the Columbia River. However, there is no clearly defined channel along this shore.

41. DONATION LAND CLAIM AND SECTION LINES

The section lines have been straightened between recovered corners and are in a position approximating their original layout as shown on the General Land Office plats. Since much of the land in this area has built up since the original surveys, the land lines have been cut back to cover only the area of the land at the time of the original surveys. The Horace J. McIntire D.L.C. was not shown on the map manuscript, nor was it listed in the special report, "Investigation of Boundary Monuments and Lines, Area of the Fourth Radial Plot," but since it was clearly shown on General Land Office plat No. 8 it has been added. Four other claims that show on the General Land Office plats have not been added but they have been shown on the ozalid print forwarded to Lt. Comdr. Earle. Lt. Comdr. Earle has been asked to state whether or not these claims are existing.

44. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS

U.S.G.S.-Hillsboro, Oreg.-Wash. 15' quadrangle,
scale 1:62,500, surveyed in 1915 - fair agreement.

U.S.E.-Revision of above quadrangle - 1939-1940.
This quadrangle is in good agreement with T-8664.

Both of these quadrangles are superseded by T-8664
in common areas.

44a. COMPARISON WITH TOPOGRAPHIC SURVEYS BY THE BUREAU

T-1562	1:20,000	1884
T-6572	1:10,000	1937
T-6571b	1:10,000	1937

The above surveys and the map manuscript were compared with the aid of the vertical projector. The west shoreline in the area of the bluffs was in very good agreement with the map manuscript. The west side of the river was generally in better agreement than the east side. Addition of spoil banks, erosion and other factors have changed the shoreline since the time of the above surveys.

45. COMPARISON WITH NAUTICAL CHARTS

This survey has not been applied to nautical charts..

Reviewed by:

Reviewed under direction of:

Harold R. Brooks
Harold R. Brooks
Photogrammetrist

S. V. Griffith
S. V. Griffith 10 Apr 1947
Chief, Review Section

APPROVED BY:

B. J. Jones 11/47
Technical Assistant to the
Chief, Div. of Photogrammetry

Robert L. ...
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. H. Green
Chief, Div. of Coastal Surveys

Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-8665

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. CONTROL:

One permanent triangulation station was established in the area of this survey. The second one, mentioned in the compilation report, is located to the east of this survey and outside the limits of the project.

28. DETAILING:

Corrections made to the manuscript, during review, are shown in brown acid ink. The offshore limits of wooded marsh have been changed from a dashed line to a thin solid line.

41. DONATION LAND CLAIM AND SECTION LINES:

The section lines have been straightened between recovered corners and are in a position approximating their original layout as shown on the General Land Office plats.

It was necessary to make adjustments to all the donation land claims on this manuscript. Two claims, ^{and not on} belonging to W. D. Patterson and S. Mathews, were omitted ^{pub. map.} entirely. These claims had been shown as parts of the Wm. Green and Christian Pouli claims respectively. The name Pouli is spelled Powley on the G.L.O. plat covering this area, and John Stanley is shown as Joseph Stanly on the plat. The special report, "Investigation of Boundary Monuments and Lines, Area of the Fourth Radial Plot," agrees, in the spelling of names, with the manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS:

U.S.G.S., 15' Quadrangles, Portland, Oreg.-Wash.,
scale 1:62,500, Surveyed in 1896,
Edition of 1905

U.S.E. Revision of same quadrangle - 1939, 1940

Both of these surveys are superseded by T-8665 in common areas.

45. COMPARISON WITH NAUTICAL CHARTS, HYDROGRAPHIC AND TOPOGRAPHIC SURVEYS:

This manuscript has been visually compared with Chart #6154 and supersedes this chart and the hydrographic and topographic surveys of the area as far as their common planimetry is concerned.

The manuscript has not been applied to nautical chart #6154 as of the date of this report.

Reviewed by:

Reviewed under direction of:

Harold R. Brooks
Photogrammetrist
18 April 1947

S. J. Gifford
Chief, Review Section *April 18, 1947*

APPROVED BY:

B. J. Jones 11/47
Technical Assistant to the
Chief, Div. of Photogrammetry

R. H. Hutterling
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. H. Green
Chief, Div. of Coastal Surveys

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYProject CS-322
T-8664

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTED~~
~~TO BE DELETED~~

STRIKE OUT ONE

Portland, Oregon

January 14, 1947

The following fixed aids to navigation ~~have been inspected from seaward to determine their value as landmarks to be~~
~~recommended that the following objects which have been inspected from seaward to determine their value as landmarks to be~~
~~charted on (deleted from) the charts indicated.~~

The positions given have been checked after listing by *W. H. H.*

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART			CHARTS AFFECTED			
				LATITUDE		LONGITUDE		DATUM	D. P. METERS			INSHORE CHART	OFFSHORE CHART					
				°	'	°	'											
OREGON & WASHINGTON	KNAPP POINT	F. W.	LIGHT	45 44	(500.0)	122 45	(703.8)	N.A.	1927	Radial Plot	4-9-46	X			6154			
	WILLOW BAR RANGE FRONT				(903.4)		(807.2)	"		"	"	X			"			
	FL. W., 4 Seconds		"	45 44	(948.0)	122 45	(864.3)	"		Triangulation	"	X			"			
	WILLOW BAR RANGE REAR	F. W.	"	45 44	(1174.4)	122 45	(432.8)	"		Triangulation	1913	X			"			
	WILLOW BAR "3"		"	45 44	(1284.8)	122 45	(492.9)	"		Radial Plot	4-9-46	X			"			
	FL. G., 5 Seconds		"	45 44	(567.6)	122 45	(44.9)	"		"	"	X			"			
	WILLOW BAR DIKE		"	45 43	(1038.0)	122 45	(1252.8)	"		"	"	X			"			
	FL. W., 4 Seconds		"	45 43	(814.4)	122 45	(1064.7)	"		"	"	X			"			
	REEDER POINT	(Rebuilt 1946)	"	45 42	(777.6)	122 46	(232.7)	"		"	4-17-46	X			"			
	FL. W., 4 Seconds	(same location)	"	45 42	(1074.8)	122 46	(815.1)	"		"	"	X			"			
	HUTCHINSON DIKE		"	45 42	(1850.6)	122 46	(483.0)	"		"	5-8-46	X			"			
	FL. R., 4 Seconds		"	45 42	(1.8)	122 46		"		"	"	X			"			

Index 248 (1947)

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

GEOGRAPHIC NAMES

Survey No.

T-8664 and T-8665

[illegible]

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
c/o Swan Island Postal Station
Portland 18, Oregon



POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

20 August 1947

To: *[Signature]* Chief, Division of Photogrammetry
U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: W. D. Patterson and S. Mathews Tracts

Reference: Your Letter, 78-aar, dated 8 August 1947

In reply to the above reference the W. D. Patterson and S. Mathews Claims were again investigated and it was found that the W. D. Patterson Claim is a subdivision of the original Ira Patterson Donation Land Claim. It should, therefore, be deleted as shown on the ozalid print of T-8665. The S. Mathews Claim was a legal claim but not a donation land claim. As its boundaries are purely property lines, it is recommended that it be deleted on both T-8665 and T-8669.

This S. Mathews Claim had not been deleted on T-8669 because all information pertaining to this claim had been forwarded to your office when T-8665 was investigated and it was assumed that you had reasons for ignoring our original recommendation for deletion.

Both ^{the} Assessor and County Surveyor of Clark County, state that these claims are not shown in their records as original donation land claims.

Answers to other questions in the above reference have been placed on the attached prints.

[Signature]
R. A. Earle
Lt. Comdr., USC&GS
Chief of Party

RAE/gw

B 8/24/47

KTA
7H/44
78
POST-OFFICE ADDRESS:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
c/o Swan Island Postal Station
Portland 18, Oregon

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

1 May 1947

To: Chief, Division of Photogrammetry
U. S. Coast & Geodetic Survey
Washington 25, D. C.

From: Lt. Comdr. R. A. Earle

Subject: Review and Smooth Drafting of Map Manuscripts T-8663,
T-8664 and T-8665

Reference: Your Letter 711-RCR dated 23 April 1947

With regard to the above reference, the reviewed map manuscripts were received after the metal mounted blueline prints had been forwarded to Washington. We are therefore, returning the map manuscripts this date so that the bluelines can be corrected.

It is strongly felt that the method used in Washington of correcting the map manuscripts by drawing straight land lines between recovered corners, in accordance with ancient G.L.O. plats, is wrong for large scale maps. This is due to the fact that the lines were far from straight and even though the corners may have been lost for fifty years, local information and exhaustive search in county files and in the field often establishes the recognized position of a corner or line and the straightening or moving of lines in the review section, just throws out this local information. For example both the writer and Mr. Deal studied the adjustment of lines on the above listed map manuscripts and, because the G.L.O. plats are inaccurate, found that they could be adjusted in several different ways. Our recommendation would be to leave them as Mr. Ervast (who as previously stated left the organization three months ago) listed them because he studied many old surveys and contacted people in the area. Without an exhaustive search, we cannot disprove the new location, particularly as we have no record of the original location, except for lines which appear scratched out on the map manuscript.

Due to the fact that the ozalid prints of most of the map manuscripts were made prior to the location of these lines, we have no record of our original lines in this office. It is therefore requested that in the future, an ozalid print of the map manuscript be made in your office and the lines be reviewed and changes made in red ink, on said print. By doing this we know exactly what changes have been made and can more readily verify or disprove these changes. An example of the difficulties encountered is evident on sheet T-8686. In this case a black ozalid showing revised lines in black was forwarded so we have absolutely no manner of knowing what changes were made.

The section lines in the area of the above three map manuscripts may be adjusted in several different ways. The lines shown on the map manuscripts were the result of exhaustive investigation by the field unit and information obtained from persons who know conditions in this area. It is felt that changes should not have been made, however, this office cannot disprove the new locations without exhaustive search.

An ozalid print of T-8664 is being returned on which several notes have been made in answer to questions by the reviewer on Donation Land Claims in that area.

R. A. Earle

R. A. Earle
Chief of Party

Giffith -

For the remainder of this project where changes in land lines are sent to Portland for verification be sure to send the field edit sheet or other copy of the original manuscript as well as a revised copy. I also suggest we send any photos showing field work on the land lines to him to assist in verifying our changes.

This letter raises the question of whether we are making too many changes? In any particular case unless you feel sure of ~~some~~ the revision perhaps we should let the line stand as originally compiled.

Please make this letter part of the report on land lines ~~1918~~

70
485m

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
c/o Swan Island Postal Station
Portland 18, Oregon

234
File T-8665

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

7 March 1950

To: The Director
U.S. Coast and Geodetic Survey
Washington 25, D.C.

Subject: Position of Felida Aero Beacon on T-8665

As requested in letter No. 784rs, dated 21 February 1950, Felida Aero Beacon was visited to verify its position.

The beacon is at the position shown on Map T-8665. N-W cupola was not visited but is visible from the beacon. Both objects are properly labeled on the map.

The position of the beacon on attached form 524 is therefore correct and the position on attached form 567 incorrect. Form 567 was corrected to agree with Form 524.

Forms 524 and 567 and Map T-8665 are returned herewith.

Charles W. Clark
Charles W. Clark
Lt. Comdr.-USC&G Survey
Chief of Party

N.B. This information does not affect the map and all records have been corrected in conformance with this letter.

CWC/gr

S. J. Griffith
Chief, Review Section

NAUTICAL CHARTS BRANCH

SURVEY NO. T8664, 8665

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.