

8704  
8705

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-8704 &

Field No. Office No. T-8705 ✓

### LOCALITY

State OREGON

General locality Clackamas County

Locality Oregon City & Gladstone

194 7

CHIEF OF PARTY

R. A. Earle

LIBRARY & ARCHIVES

DATE January 28, 1948

B-1870-1 (1)

8704  
8705

# RECORD SHEET

Div. of Photogrammetry  
Graphic Compilation Sect.

GENERAL LOCALITY Clackamas County, Oregon

SHEET NO. T-8704

LOCALITY Oregon City, Oregon

PROJECT NO. CS-322

PHOTOS ORDERED July 1945 REC'D Aug., Sept., 1945  
Jan. 1946

SCALE 1:8000

PROJECTION ORDERED Oct. '45 REC'D 11-5-45

## CONTROL:

COMPUTED Harris VERIFIED Jeeter

PLOTTED Bunce VERIFIED Harris

## PHOTO PREPARATION:

CONTROL Bunce, Harris, Jeeter

AZIMUTHS Salazar, Letson

PASS POINTS Jeeter, Bunce  
Bunce

TEMPLETS Jeeter VERIFIED Harris

RADIAL PLOT: Harris

PLOTTED BY Jeeter DATE 1-25-46

VERIFIED J.E. Deal DATE 1-26-46

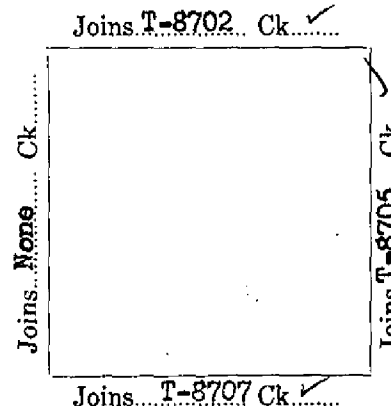
COMPILATION: Shoreline: M.B. Elrod 4-10-46

DETAIL POINTS Int.: Harris DATE 5-15-46

Shoreline: M.B. Elrod 4-24-46

DETAIL BY Int.: A. Turner DATE 3-11-47

VERIFIED BY Ree H. Barron DATE 3-13-47



DATE OF PHOTOS See reverse side.

TIME OF PHOTOS "

STAGE OF TIDE "

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

Due to a scale difference only a visual comparison was made with the U.S.G.S.

Oregon City, Oregon 15 min. quadrangle, scale 1:62500. In general the planimetry

which is common to the map manuscript and quadrangle map is in agreement. The

shoreline shown on the map manuscript is probably at a lower water level and more

detailed than that of the quadrangle map. Many cultural features have (over)

## REMARKS

All corrections and additions which were found during the field edit were applied

to the map manuscript and a final compilation office review was then made.

FORWARDED TO Washington Office DATE 1 April 1947

R. A. Earle  
Chief of Party

M-2305-12

9/6

# COMPARISONS (cont'd.)

been built in the area since the quadrangle map was made. There are no nautical charts covering the area of this map manuscript.

## PHOTOGRAPH DATA

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
			1:17000 contact	
769 to 711 Inc.	7-1-45	10:35	1: 8000 ratio	11.7 ft. above M.L.W.*
780 to 783 "	7-1-45	12:20	"	11.7 ft. "
3490 to 3492 "	11-21-45	13:15	"	5.0 ft. "
1030 to 1040 "	7-1-45	14:30	1: 5000 contact	11.7 ft. "
U.S. Engineers				
26V - 53 and 54	8-10-44	15:00	1: 8000 ratio	3.3 ft. "
26V - 16 to 21	8-10-44	15:00	"	3.3 ft. "



## DATA RECORD

T- 8704

Quadrangle (II): Oregon City, 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 & Dec. 6, 1945.

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

Completed survey received in office: *7 April, 1947*

Reported to Nautical Chart Section: -

Reviewed: *17 July, 1947* Applied to chart No. Date:

Redrafting Completed: *1 Aug. 1947*

Registered: *Jan 1948*  
~~20 Nov 1947~~ Published: *1947*

Compilation Scale: 1:8000 Published Scale: *1:2600*

Scale Factor (III): None

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

Reference Station (III): ALTA (USE) (OREGON), 1935 r 1946.

Lat.:  $45^{\circ} 21' 23.437''$  (723.5m) Long.:  $122^{\circ} 36' 14.288''$  (311.0m) Adjusted X  
Unadjusted

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.

*940*



PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
769 to 771 Inc.	7-1-45	10:35	1:17000 contact	11.7 ft. above M.L.W.*
780 to 783 "	7-1-45	12:20	1: 8000 ratio	"
3490 to 3492 "	11-21-45	13:15	"	11.7 ft. above M.L.W.
1030 to 1040 "	7-1-45	14:30	1: 5000 contact	5.0 ft. "
U.S. Engineers				
26V - 53 and 54	8-10-44	15:00	1: 8000 ratio	11.7 ft. "
26V - 16 to 21	8-10-44	15:00	1 "	3.3 ft. "

Daily readings of the U.S. Engineers 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 M. Tide from (III): L.W., Columbia River, which is 1.25 ft. above Mean Sea Level.

Mean Range:

Spring Range:

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: March, 1947

Date of Mean High-Water Line Location (III): December 15, 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. A high-water line at this plane was determined by field inspection and shown on the U.S. Engineers photographs taken in August, 1944. In the pool south of Willamette Falls, between Oregon City and Newberg, a high-water line at 52.0 ft. above Mean Sea Level is shown.\*

Projection and Grids ruled by (III) Washington Office date: October, 1945

" " " checked by: Washington Office date: October, 1945

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

Control checked by: James L. Harris date: Jan., 1946

Radial Plot by: James L. Harris & Fred P. Jeeter date: Jan. 25, 1946

Shoreline: Marie B. Elrod date: April 10, 1946

Detailed by: Interior: A. C. Turner, Jr. date: March 11, 1947

Reviewed in compilation office by: Ree H. Barron date: March 13, 1947  
 Corrections & changes after field edit by R.H. Barron date: March 26, 1947  
 Review after changes due to field edit by J.E. Deal date: March 27, 1947

Elevations on Field Edit Sheet

checked by: Charles Hanavich date: March, 1947

\* See paragraph 7 of Field Inspection Report, 3rd. Radial Plot, Project CS-322.

STATISTICS (III)

Land Area (Sq. Statute Miles):. 7.4

Shoreline (More than 200 meters to opposite shore): 12 Statute miles

Shoreline (Less than 200 meters to opposite shore): 3.0 Statute miles

Number of Recoverable Topographic Stations established: 8 (5 fixed aids to navigation, 2 topo. stations and 1 USGS. Prim. Trav. Sta.).

Number of Temporary Hydrographic Stations located by radial plot: 46

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: J.H. Winniford, Photo. Aid	date: Jan., 1946
Shoreline Inspection by: J. C. LaJoye, Prin. Photo. Aid	date: Dec., 1946
Recovery of Horizontal Control by: F.H. Elrod, Prin. Photo. Aid	date: Nov., 1945
Recovery of Vertical Control by: J.H. Winniford,	date: Oct., 1945
Investigation of Geographic Names and Civil Boundaries by: L.E. Ervast, Photo. Aid	date: May, 1946

# RECORD SHEET

Div. of Photogrammetry  
Graphic Compilation Sect.

GENERAL LOCALITY Clackamas County, Oregon

SHEET NO. T-8705

LOCALITY Gladstone, Oregon

PROJECT NO. CS-322

PHOTOS ORDERED Aug. 1945 REC'D 9-24, 26-45

SCALE 1:8000

PROJECTION ORDERED Oct. 1945 REC'D 11-1-45

Joins T-8703 Ck.....

## CONTROL:

COMPUTED Bunce VERIFIED Harris

PLOTTED Bunce VERIFIED Jeeter

## PHOTO PREPARATION:

CONTROL Bunce, Harris, Jeeter

AZIMUTHS Letson, Salazer

PASS POINTS Harris, Jeeter, Bunce  
Bunce,

TEMPLETS Harris VERIFIED Harris

## RADIAL PLOT:

PLOTTED BY Jeeter, Harris DATE 3-20-46

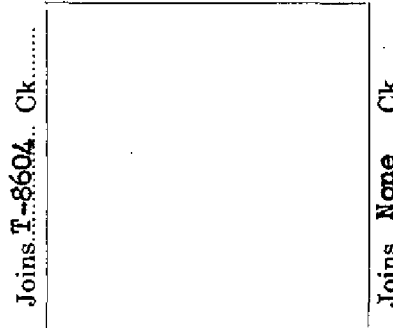
VERIFIED J. E. Deal DATE 3-22-46  
Shoreline: M. B. Elrod 4-10-46

COMPILATION: Detail: C. Randall 5-8-46

DETAIL POINTS Shoreline: M. B. Elrod DATE 4-24-46

DETAIL BY C. Randall DATE 5-30-46

VERIFIED BY R. H. Barron DATE 1-15-47



780 to 783, 7-1-45

1148 to 1151, 7-2-45

DATE OF PHOTOS 1220 to 1222, 7-2-45

TIME OF PHOTOS 780 to 783, 12:20;

1148 to 1151, 10:20; 1220 to 1222,  
12:00.

STAGE OF TIDE 11.9 and 11.7 ft.  
above M.L.W.

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

Due to a scale difference only a visual comparison was made with the U.S.G.S.,  
Oregon City, Oregon 15 min. quad. scale 1:62500. In general the planimetry  
which is common to the quadrangle map and map manuscript is in agreement.

## REMARKS

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

FORWARDED TO Washington Office DATE.....

R. A. Earle  
Chief of Party

M-2305-12

*gib*



## DATA RECORD

T- 8705

Quadrangle (II): GLADSTONE, ORE.  
(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 Copy filed in Descriptive  
Supplemental Inst.: Aug. 29, Sept. 10, Oct. 25, Report No. T- (VI)  
Nov. 30 & Dec. 6, 1945. *Div. Photogram. Office Files*

Completed survey received in office: *7 April, 1947*

Reported to Nautical Chart Section: -

Reviewed: *11 July, 1947* Applied to chart No. Date:Redrafting Completed: *19 Aug. 1947*Registered: *Jan 1948*  
~~21 Nov 1947~~ 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): H-14 (USE),, 1936 r 1945 \*\*

Lat.:  $45^{\circ} 21' 51.211''$  (1581.0m) Long.:  $122^{\circ} 35' 44.815''$  (975.3m) Adjusted  
\*\* Position from volume on Horizontal & Vertical Control Data, Unadjusted  
Oregon City Quad., issued by Office, Chief of Engineers, Wash. D.C.

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.

*gml*

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
			1:17000 contact	
780 to 783 Inc.	7-1-45	12:20	1: 8000 ratio	11.7 ft. above M.L.W.*
1147 to 1151 "	7-2-45	10:20	"	11.0 ft. "
1219 to 1221 "	"	12:00	"	11.0 ft. "

\* This water level applies only to the Columbia and Willamette Rivers and not to tributaries whose water level is controlled by periodical or out of season floods.

Daily readings of the U.S. Engineers 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 Tide from (III): M.L.W., Columbia River, which is 1.29 ft. above Mean Sea Level.

Mean Range:

Spring Range:

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

Field Inspection by: See remarks, page 3.

date:

Field Edit by: J. H. Winniford, Photo. Aid

date: Jan., 1947

Date of Mean High-Water Line Location (III): February 4, 1945 .

Note: The Clackamas River is not effected by tidal action and its water level varies according to periodical or out of season floods. At the time of the original photography the water level of this river was below normal and a high-water line of 5.0 ft. above the U. S. Engineers low-water datum was delineated on these photographs.

Projection and Grids ruled by (III) Washington Office date: October, 1945

" " " checked by: Washington Office date: October, 1945

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

Control checked by: James L. Harris date: Jan., 1946

Radial Plot by: James L. Harris & Fred P. Jeeter date: Jan. 25, 1946

Detailed by: Clyde A. Randall date: May 30, 1946

Reviewed in compilation office by: Ree H. Barron date: Jan., 15, 1947  
 Corrections and changes after field edit by A. C. Turner date: March 26, 1947  
 Review after changes due to field edit by: J. E. Deal date: March 27, 1947  
 Elevations on Field Edit Sheet  
 checked by: Charles Hanavich, Topo. Engr. date: Jan., 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 6.5

Shoreline (More than 200 meters to opposite shore): None

Shoreline (Less than 200 meters to opposite shore): 4.0 statute miles

Number of Recoverable Topographic Stations established: 2  
(1 topo. station and 1 USGS Prim. Trav. Sta.)

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: J. H. Winniford, Photo. Aid	Jan. date: Feb., 1946
Recovery of Horizontal Control by: F.H. Etrod, Prin. Photo. Aid	date: Nov., 1945
Recovery of Vertical Control by: J.H. Winniford	date: Oct., 1945
Investigation of Geographic Names and Civil Boundaries by: L.E. Ervast, Photo. Aid	date: May, 1946



FIELD INSPECTION REPORT  
T-8704 and T-8705  
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 Third Radial Plot", which was enclosed with the Descriptive Report for Quadrangles T-8702 and T-8703. This Descriptive Report has been submitted.

Approved by:

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

Respectfully submitted:

*Charles Hanavich*  
Charles Hanavich  
Topographic Engineer

FIELD INSPECTION REPORT  
T-8704 and T-8705  
Project CS-322

T-8704

Gardner { Sunset 1944  
Reservoir 1946  
White Sandpipe 1944

I to 25: All the information that is applicable to these headings is given in the "Field Inspection Report, Project CS-322, Area of the Third Radar Plot", which was enclosed with the Descriptive Report for Guard-ranges T-8704 and T-8705. This Descriptive Report has been submitted.

Respectfully submitted:

Charles E. Henshaw  
Topographic Engineer

Approved by:

H. A. Farley  
Chief of Party

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 probably 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:
- |   | <u>Access No.</u> |
|---|-------------------|
| 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



COMPILATION REPORT  
Map Manuscripts T-8704 and T-8705  
Project CS-322

26. Control:

At the time this project was started there were nine existing horizontal control stations within the area of the two map manuscripts. All were recovered and seven were identified for use in the radial plot.

In the area of Map Manuscript T-8704, the field unit established one permanent and two temporary triangulation stations. A geodetic party established two additional triangulation stations and re-established one existing U. S. Engineer traverse station.

In the area of Map Manuscript T-8705, all of the existing horizontal control stations were traverse stations established by the U. S. Engineers.

Data relative to adjusting an error in the U. S. Engineer traverse south from Oregon City along U. S. Highway No. 99E, is found in the "Descriptive Report Third Radial Plot, Project CS-322", which was attached to the descriptive report for Map Manuscripts T-8702 and T-8703.

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 Third Radial Plot". This report is included with the descriptive report for Map Manuscripts T-8702 and T-8703, which has been forwarded.

A complete tabulation of supplemental horizontal control stations established in this area is attached to a special report, "Third-Order Triangulation and Traverse, Project CS-322, Area of the Third Radial Plot", which has been forwarded.

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, Third Radial Plot, Project CS-322". This radial plot report was included with the descriptive report for Map Manuscripts T-8702 and T-8703, which has been forwarded.

28. Detailing:

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

The high-water line and shoreline features of the Willamette River were delineated and detailed from photographs obtained from the U. S. Engineers at Portland, Oregon, and ratio printed at a scale of 1:8000 by the Coast & Geodetic Survey in the Washington Office.



In all inland areas the original photography was adequate. The 1:5000 scale contact prints, taken along the shorelines of the Willamette River, were a great help in interpreting detail. The high-water lines and shoreline features of the Clackamas River were delineated and detailed from the original photographs taken in July, 1945.

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.

Map Manuscript T-8704 was assigned, for shoreline compilation, to a compiler who had been transferred to this office as an experienced employee. Without consulting the supervisor the compiler attempted to change the radially plotted positions of many temporary hydrographic stations shown on the map manuscript, which along with the poor use of an exacto knife, resulted in several holes being scratched through the acetate. When the damage was discovered, the compiler was instructed in the methods of pricking and radially plotting pass points and also the proper use of an exacto knife. After several experiments the map manuscript was repaired by inserting small rectangular pieces of acetate in the damaged areas. These were held in place by applying clear methacrylate to each side of the acetate. Some distortion in the acetate material resulted from this repair but it is believed that satisfactory prints may be obtained for smooth drafting. If the inserts become dislodged and lost, the planimetry, as compiled, may be obtained from an ozalid print made on paper subject to low distortion which is being forwarded with the map manuscript.

#### 29. Supplemental Data:

The following maps or plans, which were used to supplement the photographs, are being forwarded with the map manuscripts:

Cahier.....Legal Description and Charter Admendments  
to the City of West Linn, Oregon

*Proj. 322  
Spd.*



Blue line print .... Crown Zellerbach Co. West Linn Plant,  
 Scale: 1" = 200'. *with this Deser. Rept.*  
 Black line print ... Location of McLoughlin House, Scale: Unknown. *with this Deser. Rept.*  
 " ... Map of Oregon City, Oregon, Scale: 1" = 600'. *"Project 322"*  
 " ... Reconstruction of Barge Locks, Willamette Falls,  
 Scale: 1" = 100'. *with map manuscript 8707*

### 30. Mean High-Water Line:

The high-water line of the Willamette River was detailed from information submitted by the field units and shown on single lens ratio prints at a scale of 1:8000. These photographs were taken by the U. S. Engineers at a contact scale of 1:10,000 on 10 August 1944, when the water level of the river was 3.3 ft. above M.L.W. The high-water line of the Clackamas River was detailed from information submitted by the field units and shown on field ratio prints of the original photography taken in July, 1945. The Clackamas River is not affected by tidal action and its water level varies according to periodical or out of season floods. At the time of the original photography the water level of this river was below normal and a high-water line of 5.0 ft. above the U. S. Engineers low-water datum was delineated on the photographs. The Willamette River south of Willamette Falls, between Oregon City and Newberg, is not effected by tidal action. This part of the river is a pool in which the water level is controlled by the height of sluice boards placed above the dam at Willamette Falls. The U. S. Engineers usually maintain a water level at the elevation of 51.6 feet above Mean Sea Level which is the elevation of the first tier of removable sluice boards. After considerable study the field inspection units decided to show a high-water line of 52.0 ft. above Mean Sea Level in this part of the river. (See the detailed discussion on this subject in paragraph 7 of the "Field Inspection Report, Area of the Third Radial Plot, Project CS-322", which has been forwarded).

There are no marsh areas immediately bordering the high-water line.

The mean high-water line is shown by a continuous heavy-weight black acid ink line. The approximate bank line during normal spring floods has been shown by a light-weight dashed black acid ink line and appropriately noted.

### 31. Low-Water and Shoal Lines:

The field inspection unit indicated definite low-water lines at several places along the Willamette River. These low-water lines have been shown by a light-weight dash and dot line in black acid ink. There were no shoal areas indicated by the field inspection unit.

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

Several small islands are the only details offshore from the high-water line.



33. Wharves and Shoreline Structures:

All piers, wharves, dolphins, piling areas, etc. have been shown.

34. Landmarks and Aids to Navigation:

In the area of Map Manuscript T-8704 copies of Form 567 are being submitted recommending the charting of the following objects:

- |                            |  |
|----------------------------|--|
| JENNINGS LODGE LIGHT       | WILLAMETTE FALLS LIGHT                 |
| BINGHAM LANDING LIGHT      | STACK (Hawley Pulp & Paper Mill)       |
| CLACKAMAS RAPIDS LIGHT     | TOWER (Transmission S. E. Oregon City) |
| STARKWEATHER LANDING LIGHT |  |

35. Hydrographic Control:

Forty-six objects were located radially for use as temporary hydrographic signals. These were used during the recent hydrographic survey of this part of the Willamette River by the ship "Westdah". They are indicated on the map manuscript by 2.0 mm black acid ink circles with a number lettered nearby. This number refers to a description which is listed in the right hand margin of the map manuscript. This office compiled the shoreline and adjacent detail on Map Manuscript T-8704 in April, 1946, and then furnished the ship "Westdah" with black and white prints at a scale of 1:5,000.

36. Landing Fields and Aeronautical Aids:

There are no landing fields or aeronautical aids within the limits of these two map manuscripts.

37. Geographic Names:

Only undisputed geographic names are shown on the map manuscript.

Geographic Names are the subject of the special report, "Investigation of Geographic Names, Project CS-322, Area of the Third Radial Plot", which has been forwarded.

*→ Filed in Geographic Names Section, Div. of Charts*

38. Recoverable Topographic Stations:

In the area of Map Manuscript T-8704 copies of Forms 524 are being submitted for the following:

✓ The seven aids to navigation and landmarks listed in paragraph 34.

PTS 9 (USGS) (1911), 1945. (U.S.G.S. Bull. 551, p. 292 for G.P.s) *no fm 524*  
(USE Oreg. City Quad, N. V. center, 19, 77, p. A34)

In the area of Map Manuscript T-8705 copies of Forms 524 are being submitted for the following:

PTS 3 (USGS) (1911), 1945  
*(E. of detailed area)*

✓ GREEN ROOF TANK (Elev.), 1946

Photostatic copy found and filed



35. Wharves and Shoreline Structures:

417 piers, wharves, dolphins, piling areas, etc. have been shown.

36. Landmarks and Aids to Navigation:

In the area of Map Manuscript T-8704 copies of Form 567 are being submitted recommending the carrying of the following:

T-8704

16 recov.

13 plotted

T-8705

12 recov

11 plotted

LEWIS AND CLARK LIGHT

BRADY LIGHT

CLARK LIGHT

STARBUCK LIGHT

Special Report: Investigation of Boundary Monuments & Land Lines  
Area of the Third Radial Plot.

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

Forty-six objects were located radiating for use as temporary hydrographic aids. These were used during the recent hydrographic survey of this part of the Willamette River by the ship "Westland". They are indicated on the map manuscript by 2.0 m black solid ink circles with a number referred nearby. This number refers to a description which is listed in the right hand margin of the map manuscript. This office compiled the shoreline and adjacent details on Map Manuscript T-8704 in April, 1945, and then furnished the ship "Westland" with black and white prints at a scale of 1:5,000.

36. Landing Fields and Aeronautical Aids:

There are no landing fields or aeronautical aids within the limits of these two map manuscripts.

37. Geographic Names:

Only unduplicated geographic names are shown on the map manuscript.

Geographic names are the subject of the special report, "Investigation of Geographic Names, Project GS-322, Area of the Third Radial Plot", which has been forwarded.

38. Recreational Facilities:

In the area of Map Manuscript T-8704 copies of Form 524 are being submitted for the following:

The seven aids to navigation and landmarks listed in paragraph 34.

PTS 9 (uses) (1941), 1945.

In the area of Map Manuscript T-8705 copies of Form 524 are being submitted for the following:

GREEN ROCK TANK (1941), 1945.

PTS 3 (uses) (1941), 1945.

PTS 4 (uses) (1941), 1945.

port has been kept open, 1945.



39. Junctions:

Complete and satisfactory junctions have been made between Map Manuscripts T-8704 and T-8705 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.

41. Donation Land Claims and Section Lines:

Donation land claims 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 traced on the map manuscripts by the compilers. The ozalid prints containing these lines are being forwarded.

*Filed with map manuscript*

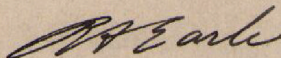
44. Comparison with Existing Topographic Surveys:

See record sheet which accompanies each map manuscripts

45. Comparison with Nautical Charts:

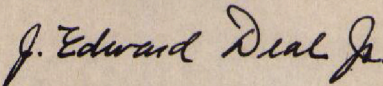
There are no nautical charts of the area of these two map manuscripts.

Approved and forwarded:



R. A. Earle  
Chief of Party

Respectfully submitted:  
28 March 1947



J. Edward Deal, Jr.  
Photogrammetric Engineer



FIELD EDIT REPORT  
T-8704 and T-8705  
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. Numerous houses and other structures have been built since the photographs were taken. This new cultural detail was located by planetable methods or field measurements on the field photographs or the ozalid sheets. Additional changes and additions are to be expected in the future because of contemplated construction work. The names and numbers of roads or streets, which were indicated on the prints, were obtained and the spelling verified from officially posted signs or from other official sources. The designation of State Highway #213 by the name of "Military By-pass U. S. 99E", was deleted from T-8705; this name was a temporary wartime measure. Plans were obtained from U. S. Corps of Engineers of the lock installations at the Willamette Falls. These plans supplemented by notes on the ozalid sheet of T-8704 are to be used for the correct delineation of the locks.

Several changes and additions were noted and corrected in the drainage. North of Oregon City, in T-8705, there is a large shallow pond which is subject to large seasonal variation. Extensive local inquiry established the fact that this area should be classified as perennial. Other minor changes, omissions, additions, and deletions were noted and corrected.

All offshore and shoreline features were checked. Several additions and corrections were noted. In T-8704 a private light (Willamette Falls Light) was located just southwest of the lock installations.

In accordance with the field edit instructions, the map manuscripts were examined for completeness and accuracy in regard to geographic names, boundaries, public land lines, and detail by Mr. Milln, Assistant County Surveyor of Clackamas County, at Oregon City. The geographic names in this area have been reviewed by Mr. Lewis A. McArthur, Collaborator for the U.S. Coast and 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 report for T-8699 to T-8701 inclusive.

49. Bench Mark Elevations:

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

50. Donation Land Claims 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

Approved by:

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

Field Edit by:

*Frank H. Elrod*  
F. H. Elrod (T-8704)  
Prin. Photo. Aid

*J. H. Winniford*  
J. H. Winniford (T-8705)  
Photo. Aid



Division of Photogrammetry  
Review Report of  
Planimetric Map Manuscript T-8704

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

31. Low-Water and Shoal Lines.

The low-water symbol on the map manuscript has been changed from a dash and dot line to a dotted line, since no measurements to this line are evident on the field inspection photographs. The reviewer found evidence of two shoal lines on the field inspection photographs and has shown them on the map manuscript by the standard symbol.

35. Hydrographic Control.

Forty-six temporary hydrographic signals are listed on the map manuscript and mentioned in the Compilation Report. However, there are forty-eight positions shown on the map manuscript. The two additional stations, without name or number, have been questioned on an ozalid print which is being sent to the Portland Office for Land Line verification. *OK'd.*

41. Donation Land Claim and Section Lines.

Corrections were made to the boundaries of four Donation Land Claims. They have been indicated in crayon on an ozalid print which is being forwarded to the Field Office for verification.

42. Bridges.

Several discrepancies in bridge clearances were noted, as follows, during the comparison of the map manuscript with the List of Bridges over the Navigable Waters of the United States and with the field inspection photographs:

→ See letter attached to this report, dated 29 July 1947



Void.

B 8/7/47

see letter 7/21/47  
at back of this report

Bridge	Cl.	Bridge List	Photo #45D782	(Photo #26V54)
Oregon City	H. C.	181'	190' L.W.	181.5'
Highway	V. C.	74' 83.5'	72'	70.6'
Bridge	H. C.	54' 63.5'		
Clackamas	H. C.	Not Navigable	243.9'	
River Bridge	V. C.		47.0'	

44. Comparison with Existing Topographic Surveys.

U. S. E. Oregon City, Ore., 15' 1:62,500 1939  
U.S.G.S., Oregon City, Ore., 15' 1:62,500 1911-12, Rep. 1945

Planimetry in all common areas is superseded by T-8704.

45. Comparison with Nautical Charts.

There are no nautical charts in the area of this map manuscript.

Reviewed by:

Reviewed under direction of:

*B. Thomas Hynson*

B. Thomas Hynson  
Photogrammetrist  
7-17-47

*S. V. Griffith*

S. V. Griffith  
Chief, Review Section



APPROVED BY:

*B. J. Jones 1/48*  
\_\_\_\_\_  
Technical Assistant to the  
Chief, Division of Photogrammetry

*W. H. H. H. H.*  
\_\_\_\_\_  
Chief, Nautical Chart Br.  
Division of Charts

*K. T. Adams*  
\_\_\_\_\_  
Chief, Division of Photogrammetry

*C. K. Green*  
\_\_\_\_\_  
Chief, Div. of Coastal Surveys

Supplement to the Review Report For  
Planimetric Map Manuscripts T-8702 and T-8704

This report states the results of an investigation into the accuracy of hydrographic signals as located by radial plot on map manuscripts T-8702 and T-8704. The investigation was instigated by the Chart Division after sextant angles on the signals did not verify the positions obtained by the radial plot.

They hydrographic signals were selected by a field inspection party of the Division of Photogrammetry, Portland Photogrammetric Office and spotted on aerial photographs. The signals were then located on the map manuscripts by the radial intersection method in the Portland Photogrammetric Office on the 1:8000 scale map manuscripts of the Columbia River, project CS-322. The intermediate steps between the field location and the radial intersecting were, in general, accurately performed.

Rechecking the radial intersections, it was discovered that they had not been made as carefully as they might have been and after adjusting the intersections some of the positions of the signals moved as much as 1.6 mm. The new positions are shown in red acetate ink on the manuscripts.

When these new positions for the signals were plotted on the 1:5000 hydrographic survey No. H-7128, the new positions checked the sextant angles very acceptably.

K. N. Maki  
Reviewer

S. V. Griffith  
Chief, Review Section



Division of Photogrammetry  
Review Report of  
Planimetric Map Manuscript T-8705

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

41. Donation Land Claims and Section Lines.

The northwest section of the Oregon City boundary, which is also a Donation Land Claim Line, was found to be in error. The new position of this boundary and all Donation Land Claim boundary changes are shown in red crayon on an ozalid print of the map manuscript which has been forwarded to the Portland office for verification.

*Letter 29 July 1947  
attached hereto*

44. Comparison with Existing Topographic Surveys.

Oregon City, Oregon, U.S.G.S., 1:62,500, 1911-12  
Oregon City, Oregon, U.S.E., 1:62,500, 1938-39

Planimetry common to these quadrangle maps and the map manuscript is in good agreement.

45. Comparison with Nautical Charts.

There are no nautical charts in the area of this map manuscript.

Reviewed by:

Reviewed under direction of:

K. N. Maki  
K. N. Maki  
Photogrammetrist  
7-11-47

S. V. Griffith  
S. V. Griffith  
Chief, Review Section



APPROVED BY:

*B. Jones 1/48*

Technical Assistant to the  
Chief, Div. of Photogrammetry

*H. F. Loring*

Chief, Nautical Chart Br.  
Division of Charts

*K. T. Adams*

Chief, Div. of Photogrammetry

*C. K. Green*

Chief, Div. of Coastal Surveys

TO BE CHARTED } STRIKE OUT ONE  
TO BE DELETED- }

## LANDMARKS FOR CHARTS

Portland, Oregon

26 March 1963

47

I recommend that the following objects which have ~~(been not)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing.

**R. A. Earle ;** *Chief of Party.*

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." 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-8704/05

T-8704:

1	Name on Survey	A	B	C	D	E	F	G	H	K	
	Oregon									1	
	Clackamas County									2	
	Willamette River									3	
	Clackamas River									4	
	Southern Pacific									5	
	Portland Traction Company									6	
	State Nos. 43, 215, 244 213									7	
	U.S. 99 E Pacific Highway East									8	
	Oregon City	(see list of names approved on manuscript, listed by numbers)									9
	Rivercrest name shown IN T-8707									10	
	Willamette Falls									11	
	Willamette Falls Light	= on E. side upstream entrance to locks.									12
	Portland General Electric Co. Transmission Line									13	
	Hawley <del>Paper Mill</del> Pulp and Paper Co.									14	
	Oregon City Highway Bridge									15	
	Crown Willamette Paper Company									16	
	Sunset Grade									17	
	Sunset/School									18	
	Full Gospel Church									19	
	Tanner Creek									20	
	Willamette Reservoir									21	
	Oregon City Hillsboro Highway									22	
	Rosemont									23	
	West Linn									24	
	West Linn Reservoir									25	
	West Linn High School									26	
	West Linn P.O.									27	

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# GEOGRAPHIC NAMES

Survey No.

T-8704/5

T-8704 (continued):

2	Name on Survey	A	B	C	D	E	F	G	H	K	
✓	Holly Gardens										1
✓	West Linn Fire Dept.										2
✓	Bolton										3
✓	Bolton Grade School										4
✓	Clackamas Rapids										5
✓	Clackamas Rapids Light										6
✓	Meldrum Bar										7
✓	John McLoughlin Bridge	(this is name, according to Oregon Guide: manu- script shows merely Clackamas River Bridge)									8
✓	Gladstone										9
✓	Oregon City Sand and Gravel Company										10
✓	River Road										11
✓	Glen Echo										12
✓	Jennings Bar										13
✓	Jennings Lodge										14
✓	Jennings Lodge Grade School										15
✓	Jennings Lodge Light										16
✓	Jennings Lodge First Congregational Church										17
✓	Jennings Lodge P.O.										18
✓	Camp Meeting Ground										19
✓	Cedar Island										20
✓	Outfield Road										21
✓	Starkweather Landing Light										22
✓	Bingham Landing Light										23
✓	Marylhurst College										24
✓	Robinwood										25
✓	Jennings Avenue										26
✓	Naef Road										27

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# GEOGRAPHIC NAMES

Survey No.

T-8704/05

T-8705:

3	Name on Survey	A	B	C	D	E	F	G	H	K	
	<u>Oregon</u>										1
	<u>Clackamas County</u>										2
	<u>Clackamas River</u>										3
	<u>Southern Pacific</u>										4
	<u>Portland Traction Company</u>										5
	<u>U.S. 99 E Pacific Highway East</u>										6
	<u>Oregon Nos. 212, 213, 215</u>										7
											8
											9
	<u>Oregon City</u>										10
	<u>Molalla Avenue</u>										11
	<u>Eastham School</u>										12
	<u>Oregon City Funeral Home</u>										13
	<u>Four Square Gospel Church</u>										14
	<u>Church of the Nazarene</u>										15
	<u>Morton Road</u>										16
	<u>Newell Creek</u>										17
	<u>Church of God</u>										18
	<u>Church of Christ</u>										19
	<u>Oregon City High School</u>										20
	<u>Oregon City Junior High School</u>										21
	<u>Trinity Lutheran Church and School</u>										22
	<u>Barclay School</u>										23
	<u>Buena Vista</u>										24
	<u>Buena Vista Club House</u>										25
	<u>Southern Pacific Freight Station</u>										26
	<u>Abernethy Creek</u>										27

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# GEOGRAPHIC NAMES

Survey No. T-8704/05

T-8705 (continued):

4	Name on Survey	A	B	C	D	E	F	G	H	K	
✓	Abernethy <del>Grange</del> Road										1
✓	Clackamas County Highway Dept.										2
✓	Kelly Athletic Field										3
✓	Redland Road										4
✓	Holcomb Road										5
✓	Holcomb Creek										6
✓	Holly Lane Road										7
✓	Moss Hill										8
✓	Clackamas Heights										9
✓	<del>Clackamas Heights Housing Project</del>										10
✓	<del>Samson Light Full Gospel Church</del>										11
✓	Forsythe Road										12
✓	Park Place										13
✓	Abernethy Grange										14
✓	Park Place School										15
✓	<del>Park Place</del> Park Place Community Church										16
✓	Park Place P.O.										17
✓	Park Place Station										18
✓	Clackamas River Drive										19
✓	Pacific Telephone and Telegraph Company										20
✓	St. Agnes' Home										21
✓	Gladstone										22
✓	Gladstone Baptist Church										23
✓	Gladstone Church of Christ										24
✓	Gladstone City Hall, Fire Dept.										25
✓	Gladstone Grade School										26
✓	Gladstone Convalescent Home										27



# GEOGRAPHIC NAMES

Survey No. T-8704/05

T-8705 (continued)

5	Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
✓	<u>Portland Road</u>									1
✓	<u>Gladstone Park</u>									2
✓	<u>Chautauqua Lake</u>									3
✓	<u>Oregon City Seventh Day Adventist School</u>									4
✓	<u>Seventh Day Adventist Camp and Revival Grounds</u>									5
✓	<u>Webster Road</u>									6
✓	<u>Oatfield Road</u>									7
✓	<u>Jennings Avenue</u>									8
✓	<u>Strawberry Avenue</u>									9
										10
	Crescent School (?)									11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Original Names Report approved this name: located south side Redland Road, on old quadrangle. Apparently now no long a school

Names underlined in red approved  
by L. Heckin 5/20/97

✓

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: c/o Swan Island Postal Station,  
Portland 18, Oregon

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:



*[Handwritten signature]*  
29 July 1947

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

Subject: Review of Map Manuscript T-8704.

Reference: Your Letter 78-aar dated 23 July 1947.

All information which was described in the above reference has been investigated and notes pertaining to same have been placed on the ozalid print in red crayon.

In the review report for this sheet, several discrepancies in bridge clearances were noted. These clearances were correct as they appeared on the map manuscript and on field photograph No. 45-D782. The bridge data appearing on field photograph No. 46-V54 should be voided. These clearances were accurately measured in the field.

*[Handwritten signature: R. A. Earle]*  
R. A. Earle,  
Lt. Comdr., USC&GS,  
Chief of Party

\$ 8/7/47

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY



POST-OFFICE ADDRESS: c/o Swan Island Postal Station  
Portland 18, Oregon

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

29 July 1947

78 En

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

Subject: Review of Map Manuscript T-8705

Reference: Your Letter 78-aar dated 14 July 1947

In accordance with the above reference, changes in the location of land lines, as recommended by the Washington Office, have been investigated.

This office is not in complete agreement with some of these changes. Differences have been indicated on the ozalid print by blue crayon lines, with explanatory notes written nearby.

*Reviewer's changes carried on final draft.*

*R. A. Earle*  
R. A. Earle,  
Lt. Comdr., USC&GS,  
Chief of Party

# 8/7/47



T8704

T 8705

### 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.