8656
8657

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

Field No. T-8656 & ✓ Office No. T-8657 ✓

LOCALITY

State OREGON AND WASHINGTON

General locality Columbia County, Oregon
Clark County, Washington

Locality Bachelor Island & Ridgefield, Wash.

Date of Photos - 1945

1947

CHIEF OF PARTY

R. A. Earle

LIBRARY & ARCHIVES

DATE Dec 4 - 1947

B-1870-1 (1)

8656
8657

Form T-1

DATA RECORD

T- 8656

Quadrangle (II): BACHELOR ISLAND (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. Photogrammetry Office files

Completed survey received in office: 3 April, 1946

Reported to Nautical Chart Section:

Reviewed: 26 June, 1947 **Applied to chart No.** **Date:**

Redrafting Completed: 11 July, 1947

Registered: 21 Oct, 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): DOS (OREGON) 1937 r1946

Lat.: 45° 48' 25.504" (787.4m) **Long.:** 122° 47' 46.488" (1003.8m) **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.

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
638 to 641 Inc.	6-30-45	14:45	1:17000 Contact 1: 8000 ratio	11.9 ft. above M.L.W.
3541 to 3545 "	11-21-45	13:45	"	4.9 ft. " "
3555 to 3557 "	11-21-45	14:15	"	4.9 ft. " "

Tide from (III): 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.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: F. H. Elrod, Prin. Photo. Aid **date:** Feb., 1947

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

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

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

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

Control plotted by: Eda Bunce **date:** October, 1946

Control checked by: Roy A. Davidson **date:** October, 1946

Radial Plot by: James L. Harris & Roy A. Davidson **date:** November, 18, 1946

Detailed by: Marie B. Elrod **date:** Feb. 10, 1947

Reviewed in compilation office by: Roy A. Davidson **date:** 12 Feb. 1947

Corrections and changes after field edit by: Marie B. Elrod date: 24 Feb. 1947

Review after changes due to field edit by: R.H. Barron date: 26 Feb. 1947

Elevations on Field Edit Sheet checked by: Charles Manavich, Topo. Engineer **date:** February, 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 4.0

Shoreline (More than 200 meters to opposite shore): 12.2 statute miles

Shoreline (Less than 200 meters to opposite shore): 18.0 statute miles

Number of Recoverable Topographic Stations established: 4
(3 fixed aids to navigation and 1 topographic station).

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: May, 1946

Shoreline Inspection by: J. C. LaJoye, Prin. Photo. Aid — date: May, 1946

Recovery of Horizontal Control by: J. C. LaJoye — date: Aug., 1946

Recovery of Vertical Control by: J. H. Winniford, Photo. Aid — date: Oct., 1946

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 Bachelor Island

SHEET NO. T-8656

PROJECT NO. CS-322

SCALE 1:8000

PHOTOS ORDERED Aug. 1945 REC'D 9-24,26-45 1-21-46

PROJECTION ORDERED June 1946 REC'D 7-16-46

Joins T-8652 Ck

Joins T-8655 Ck

Joins T-8657 Ck

Joins T-8660 Ck

CONTROL:
COMPUTED Bunce VERIFIED Harris

PLOTTED Bunce VERIFIED Davidson

PHOTO PREPARATION:
CONTROL Harris

AZIMUTHS Davidson

PASS POINTS Bunce, Harris, Elrod

TEMPLETS Davidson VERIFIED Harris

RADIAL PLOT: Davidson
PLOTTED BY Harris DATE 11-18-46

VERIFIED Deal DATE 11-19-46

COMPILATION:
DETAIL POINTS M. Elrod DATE 1-16-47

DETAIL BY M. Elrod DATE 2-10-47

VERIFIED BY Davidson DATE 2-12-47

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 USES St. Helens, Oreg.-Wash. 15 min. Quadrangle Scale 1:62500. The planimetry which is common to the map manuscript and quadrangle map is in general agreement. Comparison was made with black line prints on clear acetate of Topographic Surveys Nos. 6570b and 6571a of October 1937, Scale 1:10000, enlarged to a scale of

(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 3 March 1947

R. A. Earle
Chief of Party

M-2305-12

1:8000. The following differences were noted:

The west shoreline of the Columbia River between Lat. 45° 49' 30" and 45° 50' 30" has built up since the topographic surveys were made.

A shoal or low-water area north of Bachelor Island Shoal, shown on the topographic surveys, could not be determined from the photographs available for this project.

The west shoreline of the Columbia River between Lat. 45° 48' 10" and 45° 49' 00" has eroded from 0 to 30 meters since the topographic surveys were made.

The west shoreline of the Columbia River in the vicinity of Lat. 45° 48' 05" has built up due to the dumping of spoil.

The east shoreline of the Columbia River between Lat. 45° 49' 45" and 45° 50' 05" has built up.

At Lat. 45° 50' 50" and the east shoreline of the Columbia River a slough is closed at the water level of this project.

Due to dredging operations there are many differences in the area of Bachelor Island Shoal, since the topographic surveys were made.

The north tip of Bachelor Island is now of a more pointed shape than that shown on the topographic surveys.

Comparison was made with Nautical Chart No. 6154 by use of the vertical projector. The differences are too numerous to list and the planimetry as shown on the map manuscript should supercede that of the chart.

PHOTOGRAPH DATA

Number	Date	Time	Scale	Stage of Tide
638 to 641 Inc.	6-30-45	14:45	1:17000 contact 1: 8000 ratio	11.9 ft. above M.L.W.
3541 to 3545 "	11-21-45	13:45	"	4.9 ft. " "
3555 to 3557 "	11-21-45	14:15	"	4.9 ft. " "

Form T-1

DATA RECORD

T- 8657

Quadrangle (II): RIDGEFIELD, CLARK CO., WASH. (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. Photog. Office files

Completed survey received in office: 3 April, 1946

Reported to Nautical Chart Section:

Reviewed: 2 May, 1947 **Applied to chart No.** **Date:**

Redrafting Completed: 12 May. 1947

Registered: ~~8 Aug~~ Oct 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): GRAIL (WASH.), 1946.

Lat.: 45° 48' 44.556" (1375.6m) **Long.:** 122° 44' 15.336" (331.1m) **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.

gts

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
			1:17000 contact	
460 to 463 Inc.	6-30-45	12:00	1: 8000 ratio	11.9 ft. above M.L.W.
677 to 680 "	7-1-45	10:15	"	11.7 ft. " "
836 to 839 "	7-1-45	12:50	"	11.7 ft. " "
3583 to 3586 "	11-21-45	14:15	"	4.9 ft. " "

Tide from (III): 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.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: F. H. Elrod, Prin. Photo. Aid **date:** Feb., 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: Roy A. Davidson **date:** Oct., 1946

Control checked by: Eda H. Bunce **date:** Oct., 1946

Radial Plot by: James L. Harris, Roy A. Davidson **date:** Nov. 19, 1946

Detailed by: Mary Davison **date:** Feb. 4, 1947

Reviewed in compilation office by: J. E. Deal **date:** Feb. 7, 1947

Corrections and changes after field edit by: Marie Elrod date: Feb. 25, 1947

Review after changes due to field edit by: Ree H. Barron date: Feb. 26, 1947

Elevations on Field Edit Sheet checked by: Charles Hanavich, Topo. Engineer **date:** Feb., 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 2.5

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

Shoreline (Less than 200 meters to opposite shore): 2.0 statute miles

Number of Recoverable Topographic Stations established: 2
(1 section corner and 1 topographic station)

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: May, 1946

Shoreline Inspection by: J. C. LaJoye, Prin. Photo. Aid; W. J. Bushnell — date: April, 1946

Recovery of Horizontal Control: J. C. LaJoye, — date: June, 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 Ridgefield, Wash.

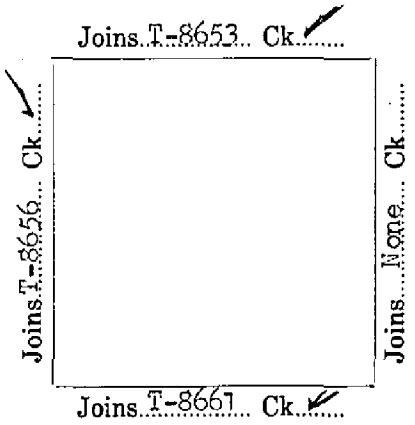
SHEET NO. T-8657

PROJECT NO. CS-322

SCALE 1:8000

PHOTOS ORDERED Aug.1945 REC'D 9-24,26-45 1-21-46

PROJECTION ORDERED June1946 REC'D 7-16-46



CONTROL:
COMPUTED Harris VERIFIED Bunce

PLOTTED Davidson VERIFIED Bunce

PHOTO PREPARATION:
CONTROL Harris

AZIMUTHS Davidson

PASS POINTS Bunce, Sherwood
Davidson

TEMPLETS Elrod VERIFIED Harris

RADIAL PLOT: Davidson,
PLOTTED BY Harris DATE 11-18-46

VERIFIED Deal DATE 11-19-46

COMPILATION:
DETAIL POINTS Davison DATE 12-30-46

DETAIL BY Davison DATE 2-4-47

VERIFIED BY Deal DATE 2-7-47

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 USGS La Center 15 min. quadrangle Scale, 1:62500. The planimetry which is common to the map manuscript and the quadrangle map is in general agreement. Comparison was made with Nautical Chart No. 6154 by use of the vertical projector. The shorelines of Lake River as shown on the chart are in general agreement with the shorelines shown

(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 3 March 1947

R. A. Earle
Chief of Party

M-2305-12

FIELD INSPECTION REPORT
T-8656 and T-8657
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-8699 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:

		Access No.
A.	Special Reports:	
	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 Photogrammetr. General File
	5. Recoverable Topographic stations (form 524)	Div. of Photogrammetr. 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-8656 and T-8657
Project CS-322

26. Control:

At the time this project was started there were forty-one horizontal control stations in the area of these two map manuscripts. Ten were recovered and six of these were identified for use in the radial plot.

In the area of Map Manuscript T-8657, the field unit established one permanent and one temporary triangulation station and one temporary traverse station. GRAIL, '46

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. Photogrammetry General files, "Spl. Reports"

The supplemental horizontal control 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 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 T-8669 and T-8670, which was submitted to the Washington Office on 8 January 1947.
→ Filed in Div. Photogrammetry General files

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 re-flight photographs made on 21 November 1945, were helpful in determing the high-water line and other shoreline details. During the running of the radial plot for this part of the project, it was found necessary to substitute re-flight photographs for many of the original photographs which were found to be tilted. Though the detail on these re-flight photographs was not as sharp and clear as that on the original photographs, it was possible to select and radially plot enough pass points, which were common to both sets of photographs to enable the compiler to satisfactorily detail the map manuscripts. Where the detail on the re-flight photographs was not clear the tilted photographs were referred to for interpreting the planimetry which has been shown on the map manuscripts. In some cases it was difficult to delineate 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 descrepancy 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:

There was no supplemental data used in the area of these two map manuscripts.

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 21 November 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.

31. Low-Water and Shoal Lines:

The field unit did not indicate any low-water lines within the limits of these two map manuscripts. Approximate shoal areas have been shown as indicated by the field unit.

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 T-8656 copies of Forms 567 are being submitted for the following aids to navigation:

HENRICI CROSSING 2 LIGHT
HENRICI LANDING RANGE RRONT LIGHT
HENRICI LANDING 2 LIGHT
DUCK CLUB LIGHT (Triangultion station)
WARRIOR ROCK LIGHT (Triangulation station)
HENRICI CROSSING 1 LIGHT (Triangulation station)

35. Hydrographic Control:

No additional hydrographic 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. One recoverable topographic station was established along Lake River and one was established along Bachelor Island Slough for use during future hydrographic surveys.

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 814 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. Filed in Geog. Names Section, Chart Division

38. Recoverable Topographic Stations:

In the area of Map Manuscript T-8656 copies of Froms 524 are being submitted for the following:

- NORTH GABLE BARN, 1947
- HENRICI LANDING 2 LIGHT, 1946
- HENRICI CROSSING 2 LIGHT, 1946
- HENRICI LANDING FRONT RANGE LIGHT, 1946

In the area of Map Manuscript T-8657 copies of Forms 524 are being submitted for the following:

- SOUTH GABLE BARN, 1946
- WILLAMETTE MERIDIAN, T 4N R 1E-1W½ section corner 24-19,1946

39. Junctions:

Complete and satisfactory junctions have been made between Map Manuscripts T-8656 and T-8657 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 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:
28 February 1947

J. Edward Deal Jr.

J. Edward Deal, Jr.
Photogrammetric Engineer

FIELD EDIT REPORT
Quadrangles T-8656 and T-8657
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. All offshore and shoreline features were checked. The field inspection of several dolphins, piling areas, and overhead cable crossings and their vertical clearances, which were omitted during the field indpection in the vicinity of Bachelor Island Slough and Lake River, were inspected during field edit and cross referenced between the field photographs and the field edit prints and supplemented by pertinent notes. Other minor changes and omissions were noted and corrected.

Except for a few changes, the numerous inland wooded marsh, pond, and lake areas appear to have been delineated correctly. These low land areas, when unprotected by dikes and terrain relief, become inundated during the annual freshets. 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 T-8656, the shoreline in the vicinity of Bachelor Island Shoal in the Columbia River was determined by planetable methods, at the plane of reference for this project, during shoreline inspection of this area. The shoreline as delineated had not changed at the time of the field edit; however, the area may change, if additional dredging work is done.

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. Wm. Norris, District

Engineer for the Sauvie Island Soil Conservation District and by Mr. Bernard Morris, County Surveyor of Clark County, Vancouver, Washington. The geographic names in this area have been reviewed by Mr. Lewis A. McArthur, Collaborator for the U. S. Coast and Geodetic Survey. 814

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 T-8651, T-8654 and T-8655.

49. Bench Mark Elevations:

The elevations of the bench marks shown on these sheets have been checked. Some of the elevations at the USC & GS bench marks are unadjusted elevations and are subject to correction when adjusted.

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.

51. Geographic Names: (Listed in Geographic Names Report) ✓

CANVASBACK LAKE: In T-8656 on Bachelor Island 814

Through a typographical error this name was listed as CANVASSBACK LAKE in the geographic names report for the fourth radial plot. The correct spelling is; CANVASBACK LAKE.

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 of

Planimetric Map Manuscript T-8656

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

26. Control.

Triangulation stations, Henrici Crossing Light and Eleven-2, 1937 were indicated as recovered on Forms 526. The Field Inspection Report-Area of the Fourth Radial Plot listed the first station as lost and the second without a status.

28. Detailing.

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 southern boundary of the S. Hendricks Donation Land Claim has been moved to the north as shown on the map manuscript in brown acid ink.

Section lines were adjusted approximately to the positions they occupied on the General Land Office plats.

44. Comparison with Existing Topographic Surveys.

Comparison was made with the following (A) Previous Surveys and (B) Quadrangles and the planimetry in all common areas is superseded by T-8656:

A. Previous Surveys.

T-1542	1:10,000	1882
T-1563	1:10,000	1880
T-6570	1:10,000	1937
T-6571	1:10,000	1937

Comparisons with the T-6570 and T-6571 are adequately described on the Record Sheet attached to this Descriptive Report.

B. Quadrangle.

U.S.E. St. Helens, Ore.-Wash. 15', 1:62,500

45. Comparison with Nautical Charts.

6154 1:40,000 1945

This manuscript has not been applied to nautical charts as of the date of this report.

Reviewed by:

B. Thomas Hynson
B. Thomas Hynson
Photogrammetrist
26 June 1947

Reviewed under direction of:

S. V. Griffith
S. V. Griffith
Chief, Review Section 6/27/47

APPROVED BY:

B.G. Jones 10/47
Technical Assistant to the
Chief, Div. of Photogrammetry

K.T. Adams
Chief, Div. of Photogrammetry

Chief, Nautical Chart Br.
Division of Charts

E.F. Green
Chief, Div. of Coastal Surveys

F. Shobart (D.C. 86)
B. W. Pickens (DC 142
M M Mandel (DC 110
} Not to be put on map.

Division of Photogrammetry

Review Report of

Planimetric Map Manuscript T-8657

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

26. Control.

One temporary triangulation station and one temporary traverse station established in the area of this survey by the field unit have been deleted from the manuscript.

28. Detailing.

Corrections made to the manuscript during review are shown in brown acid ink.

According to the project layout, detailing on this sheet is confined to the area covered by the westerly one minute, i.e. λ 122°44' to λ 122°45'. However, Donation Land Claim lines and the Ridgefield City Boundary line extending east of this minute have been completed and will be shown on the printed map.

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 western boundary of the Preston Lands Donation Land Claim has been moved approximately 100 feet to the east.

Three Donation Claims, not shown on the manuscript, are to be investigated. These are indicated on an ozalid which has been forwarded to the Portland Office. (Letter attached)

44. Comparison with Existing Topographic Surveys.

A. Comparison was made with the following previous surveys and the planimetry in all common areas is superseded by T-8657:

T-1542	1:10,000	1882
T-1563	1:10,000	1880

B. Comparison was made with the following quadrangles and the planimetry in all common areas is superseded by T-8657:

U.S.G.S.	La Center, Wash.	15'	1:62,500
U.S.E.	La Center, Wash.	15'	1:62,500

45. Comparison with Nautical Charts.

Comparison was made with nautical chart No. 6154, 1:40,000, 1945. Comments made on the Record Sheet are adequate. This survey has not been applied to nautical charts as of the date of this report.

Reviewed by:

Harold R. Brooks
Harold R. Brooks
Photogrammetrist 5/2/47

Reviewed under direction of:

S. V. Griffith
S. V. Griffith 5/6/47
Chief, Review Section

APPROVED BY:

W.B. Jones 10/47
Technical Assistant to the
Chief, Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

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

KTA
71
71
78 gw.

~~733~~

93

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:

21 May 1947

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

File with

From: Lt. Comdr. R. A. Earle

Subject: Review of Map Manuscript T-8657

Reference: Your Letter, 78-RCR, dated 12 May 1947

With regard to the above reference, the correction made by the reviewer to the west line of the Preston Laws D.L.C. has been verified by this office.

Tracts 86 and 142 are land claims and not donation land claims. As stated in many previous letters, no local surveys were based on land claims, therefore, they would fall in the category of property lines. Multnomah County Officials have repeatedly requested that we show only original donation land claims, and for this reason other types of claims were omitted on all map manuscripts in that county and many of the map manuscripts in other counties. Mr. Morrison, Clark County Surveyor, would like these lines shown because land records in said county were very poorly recorded, however, they still are property lines and not a basis for surveys. The names of people who established these claims are shown on the attached ozalid print.

In places where the offshore limits of wooded swamp were shown on the map manuscript with a thin dashed line, it was intended that this symbol should represent a shoreline which could not be determined accurately by field investigation or by examination of the photographs. On page 3 of the published pamphlet, "SYMBOLS, AIR PHOTOGRAPHIC SHEETS, U. S. COAST AND GEODETIC SURVEY", the shoreline at swamp, mangrove, or marsh (definite limit of vegetation above mean high water) is shown with a light full line. This same weight line was dashed on the map manuscripts to indicate that the offshore limits of wooded swamp could not be accurately defined and the line should not be considered as a definite shoreline at the water level of this project.

R A Earle
R. A. Earle
Chief of Party

RAE/gw

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Project CS-322
T-8656

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon 24 February, 1947

I recommend that the following objects which have ~~(have 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 by J.W.Neal

R. A. Earle *Chief of Party.*

STATE OREGON AND WASHINGTON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
LIGHT	HENRICI CROSSING 2, F.W. (New position Tri. Sta. destroyed)	LIGHT	45 48	(1484.8) 367.6	122 47	(524.5) 770.9	N.A. 1927	Radial Plot	4-5-46		X		6154
LIGHT	HENRICI LANDING RANGE FRONT Fl.W., 1 Sec. Fl.W., 4 Sec. (New position)	LIGHT	45 48	(540.0) 1312.4	122 47	(735.4) 1160.0	"	"	4-4-46		X		"
LIGHT	HENRICI LANDING 2 (New Position) Fl. R., 4 Sec.	LIGHT	45 48	(904.0) 948.4	122 47	(330.8) 964.6	"	"	"		X		"
	NOTE: The following fixed aids to navigation have been inspected on the charts indicated.												
LIGHT	DUCK CLUB Fl. W., 4 Sec.	LIGHT	45 49	(1001.6) 850.9	122 47	(249.4) 1045.8	N.A. 1927	Triangulation	1937		X		"
LIGHT	HENRICI CROSSING 1, Fl.W., 4 Sec.	LIGHT	45 48	(771.7) 1080.7	122 47	(944.7) 350.8	"	"	"		X		"
LIGHT	WARRIOR ROCK Gp. Fl. W., 15 Seconds 2 flashes	LIGHT	45 50	(135.0) 1717.4	122 47	(995.7) 298.9	"	"	"		X		"

Letter 451 (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-8656 & T-8657

1 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	
Both sheets:										1
Washington										2
Clark County										3
Lake River										4
Quigley Lake										5
Lancaster Lake										6
Gee Creek										7
Hathaway Lake										8
										9
										10
										11
T-8656:										12
Oregon										13
Columbia County										14
Columbia River										15
Bachelor Island										16
Bachelor Island Slough										17
Bachelor Island Shoal										18
Canvasback Lake										19
Henrici Bar										20
Henrici Crossing 2 Light										21
Henrici Landing 2 Light (Names Report deletes Henrici Landing except as name of the light)										22
Henrici Landing Range Front Light										23
Sauvie Island										24
Cunningham Slough										25
Multnomah Channel (two places)										26
Warrior Rock Light										27

See line 20, page 2

M 234

NAUTICAL CHARTS BRANCH

SURVEY NO. T-8656, 8657

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/21/48	6154	Pinegar	~~Before~~ After Verification and Review T8656 Partially Applied.
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.