8671 8672
8673

8671 8672 8673

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. ..... Office No. T-8671, T-8672 & T-8673

Horiz. Acc'y Test for T-8671

LOCALITY

State Oregon and Washington

General locality Multnomah Co., Oregon
Clark Co., Washington

Locality Multnomah Channel, Ramsey Lake
Hayden Island

194 6

CHIEF OF PARTY

R. A. Earle

LIBRARY & ARCHIVES

DATE 10 Dec 5 - 1947

8-1870-1 (1)

# RECORD SHEET

Div. of Photogrammetry
Graphic Compilation Sect.

GENERAL LOCALITY Multnomah County Ore. SHEET NO. T-8671

LOCALITY Multnomah Channel PROJECT NO. CS-322

PHOTOS ORDERED Aug., 1945 REC'D 9-24, 9-26, 1945 1-4-1946 SCALE 1:8000

PROJECTION ORDERED Apr. 1946 REC'D 5-15-46

Joins T-8667 Ck. ✓

Joins None Ck. | Joins T-8672 Ck. ✓

Joins None Ck.

CONTROL:
COMPUTED Harris VERIFIED Bunce

PLOTTED Bunce VERIFIED Conn

PHOTO PREPARATION:
CONTROL Conn

AZIMUTHS Davidson

PASS POINTS Bunce

TEMPLETS Conn Bunce VERIFIED Harris

DATE OF PHOTOS See reverse side

RADIAL PLOT:
PLOTTED BY Harris DATE 7-26-46

VERIFIED Deal DATE 8-2-46

TIME OF PHOTOS " "

STAGE OF TIDE " "

COMPILATION:
DETAIL POINTS Bunce DATE 8-21-46 9-26 &

DETAIL BY Turner DATE 10-7-46

VERIFIED BY Barron DATE 11-12-46

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

Due to scale difference only a visual comparison was made with the U.S.C.S. Hillsboro, Oreg.-Wash. 15 min. quadrangle, Scale: 1:62500. The water level of the quadrangle is much higher than that of the map manuscript. The shoreline of the map manuscript is more detailed than that of the quadrangle. Many changes such as new roads, new buildings, and new industrial developments have been (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 December 18, 1946

R. A. Earle
Chief of Party

M-2305-12

made in the area since the quadrangle was compiled. In general the map manuscrip and quadrangle are in agreement.

Comparison was made with a black line print on clear acetate of Topographic Survey No. 6617b Scale: 1:10000, enlarged to a Scale of 1:8000. Except for some minor detail in the high-water line, which is probably due to difference of interpretation, the map manuscript and survey are in good agreement.

Comparison was made with Chart No. 6154, Scale, 1:40000 by use of the vertical projector. The high-water line of the chart and map manuscript is in general agreement except at Lat. 45° 38' 05", and Long. 122° 49' 05", where the shoreline has built up since the chart was made. Gilbert River, as shown on the chart, is not in agreement with the map manuscript. The roads shown on the chart are in poor agreement with common roads of the map manuscript.

Comparison was made with Chart No. 6155 (insert) Scale, 1:20000. The high-water line of the chart and map manuscript is in agreement except at Lat. 45° 37' 08" and 122° 48' 10", where the west shoreline of the Multnomah Channel has eroded. Roads adjacent to the high-water line are not in good agreement.

PHOTOGRAPH DATA

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| 339 to 344 Inc. | 6-30-45 | 9:50 | 1:17000 contact 1: 8000 ratio | 11.9 ft. above M.L.W. |
| 426 to 430 " | 6-30-45 | 11:30 | " | 11.9 ft. " |
| 523 to 527 " | 6-30-45 | 13:00 | " | 11.9 ft. " |
| 3529 to 3531 " | 11-21-45 | 13:45 | " | 4.9 ft. " |
| 3569 to 3570 " | 11-21-45 | 14:15 | " | 4.9 ft. " |
| 1114 to 1123 " | 7- 1-45 | 14:55 | 1: 5000 | 11.7 ft. " |
| 1291 to 1303 " | 7- 2-45 | 13:00 | " | 11.0 ft. " |

Form T-1

# DATA RECORD

T- 8671

**Quadrangle (II):** Multnomah Channel, 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:** ✓ 31 Dec. 1946

**Reported to Nautical Chart Section:** -

**Reviewed:** 9 May, 1947 **Applied to chart No.** **Date:**

**Redrafting Completed:** 25 June 1947

**Registered:** ~~7 Nov.~~ Dec. 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):** MILLER 1938, r1945

**Lat.:** 45° 37' 07.433" (229.5m) **Long.:** 122° 48' 23.532" (509.8m) **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 |
|---|---|---|---|---|
| | | | 1:17000 contact | |
| 339 to 344 Inc. | 6-30-45 | 9:50 | 1: 8000 ratio | 11.9 ft. above M.L.W. |
| 426 to 430 " | 6-30-45 | 11:30 | " | 11.9 ft. " " |
| 523 to 527 " | 6-30-45 | 13:00 | " | 11.9 ft. " " |
| 3529 to 3531 " | 11-21-45 | 13:45 | " | 4.9 ft. " " |
| 3569 to 3570 " | 11-21-45 | 14:15 | " | 4.9 ft. " " |
| 1114 to 1123 " | 7- 1-45 | 14:55 | 1: 5000 | 11.7 ft. " " |
| 1291 to 1303 " | 7- 2-45 | 13:00 | " | 11.0 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 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 (May 1946 approx) **date:**

**Field Edit by:** L. E. Ervast, Photo Aid **date:** Nov., 1946

**Date of Mean High-Water Line Location (III):** November 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 November 21, 1945, were taken when the water level was 4.9 ft. above M.L.W.

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

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

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

**Control checked by:** Dale D. Conn **date:** June, 1946

**Radial Plot by:** James L. Harris and J. E. Deal **date:** July, 1946

**Detailed by:** Al C. Turner Jr. **date:** October, 1946

**Reviewed in compilation office by:** Ree H. Barron **date:** November 12,1946

Corrections and changes after field edit by: Al C. Turner Jr. date: December 11,1946

Review after field edit by: J. E. Deal date: December 13,1946

**Elevations on Field Edit Sheet checked by:** Charles Hanavich, Topo. Engineer **date:** November, 1946

# RECORD SHEET

Div. of Photogrammetry
Graphic Compilation Sect.

GENERAL LOCALITY Multnomah County, Oregon

LOCALITY Ramsey Lake

SHEET NO. T-8672

PROJECT NO. CS-322

SCALE 1:8000

PHOTOS ORDERED Aug. 1945 REC'D 9-24 & 26-45 1-4-46

PROJECTION ORDERED Apr. 1946 REC'D 5-15-46

Joins T-8668 Ck.

Joins T-8671 Ck.

Joins T-8673 Ck.

Joins T-8678 Ck.

CONTROL:
COMPUTED Harris VERIFIED Bunce

PLOTTED Bunce VERIFIED Harris

PHOTO PREPARATION:
CONTROL Harris

AZIMUTHS Davidson

PASS POINTS Bunce, Conn

TEMPLETS Bunce VERIFIED Harris

DATE OF PHOTOS See reverse side

TIME OF PHOTOS "

STAGE OF TIDE "

RADIAL PLOT:
PLOTTED BY Harris DATE 7-26-46

VERIFIED Deal DATE 8-2-46

COMPILATION:
DETAIL POINTS Bunce, Turner DATE 8-9-46

DETAIL BY Jensen, Deal DATE 10-26-46

VERIFIED BY Turner DATE 11-8-46

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

Due to scale difference only a visual comparison was made with the U.S.G.S. Hillsboro, Oregon-Washington 15 min. quadrangle, Scale: 1:62500. The water level of the quadrangle is higher than that of the map manuscript. There are many changes since the quadrangle was made, such as new roads and industrial developements. Dikes have been built and an entire peninsula along the west shore of the (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 December 18, 1946

R. A. Earle
Chief of Party

M-2305-12

Willamette River has been dredged out and the earth used for fill in Ramsey Lake.

Comparison was made with a black line print on clear acetate of Topographic Survey No. 6618a, Scale: 1:10,000 enlarged to a scale of 1:8000. The following differences were noted:

> An Island and a large area of land, along the east shoreline of the Willamette River between Lat. 45° 36' 50", and Lat. 45° 38' 15", has been dredged out since the survey was made. Elsewhere, except for minor differences, due to interpretation, the survey and map manuscript are in good agreement.

Comparison was made with Chart No. 6154, Scale: 1:40,000 by use of the vertical projector. At Lat. 45° 38' 25", and Long. 122° 47' 00", the west shoreline of the Willamette has receded from that shown on the chart. An entire island, and a large point of land along the west shoreline of the Willamette River has been dredged out and the earth used as fill for Ramsey Lake. Numerous diaagreements in the location of the Columbia Slough were noted. Ramsey Lake area is being filled and subject to daily change. Elsewhere the common planimetry of the chart and map manuscript is in fair agreement.

Comparison was made with Chart No. 6155, Scale: 1:20,000 by use of the vertical projector. In general the same differences were noted as are stated above for Chart No 6154, however, the location of the Columbia Slough on Chart No. 6155, is in fair agreement with the map manuscript.

PHOTOGRAPH DATA

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| 609 | 6-30-45 | 14:05 | 1:17000 contact 1: 8000 ratio | 11.9 ft. above M.L.W. |
| 624 to 627 Inc. | 6-30-45 | 14:45 | " | 11.9 ft. " " |
| 663 to 666 " | 7- 1-45 | 10:15 | " | 11.7 ft. " " |
| 1108 to 1113 " | 7- 1-45 | 14:55 | 1:5000 | 11.7 ft. " " |
| 1280 to 1284 " | 7- 2-45 | 12:55 | " | 11.0 ft. " " |
| U.S. Engineers 103V - 9 & 10, 17 to 22 Inc., 33 & 34, 37 to 39 Inc., and 44 to 48 Inclusive. | 9-26-44 | 15:30 | 1: 8000 ratio | 1.7 ft. " " |
| 44-669 to 44-681 | 5-20-44 | 10:25 | 1:10000 | 6.6 ft. " " |

Form T-1

# DATA RECORD

T- 8672

**Quadrangle (II):** Ramsey Lake, Multnomah Co., Ore **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. Phtg. Office Files

**Completed survey received in office:** 31 Dec. 1946

**Reported to Nautical Chart Section:** ✓

**Reviewed:** 4-25-47 **Applied to chart No.** **Date:**

**Redrafting Completed:** 2 June 1947

**Registered:** ~~7 Oct.~~ Dec 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):** SECTION 1938, r1945

**Lat.:** 45° 36' 21.976" (678.5m) **Long.:** 122° 45' 47.215" (1023.2m) **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.

3568-72 10-21-45 1/8000 ratio



## PHOTOGRAPHS (III)

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| | | | 1:17000 contact | |
| 609 | 6-30-45 | 14:05 | 1: 8000 ratio | 11.9 ft. above M.L.W. |
| 624 to 627 Inc. | 6-30-45 | 14:45 | " | 11.9 ft. " " |
| 663 to 666 " | 7- 1-45 | 10:15 | " | 11.7 ft. " " |
| 1108 to 1113 " | 7- 1-45 | 14:55 | 1:5000 | 11.7 ft. " " |
| 1280 to 1284 " | 7- 2-45 | 12;55 | " | 11.0 ft. " " |
| U.S. Engineers 103-V- 9 & 10, 17 to 22, 33 & 34, 37 to 39, and 44 to 48 Inc. | 9-26-44 | 15:30 | 1:8000 ratio | 1.7 ft. " " |
| 44-669 to 44-681 | 5-20-44 | 10:25 | 1:10000 | 6.6 ft. " " |

**Tide from (III):** See reverse side.

**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:** Nov., 1946

**Date of Mean High-Water Line Location (III):** March 1, 1946

NOTE: U.S. Engineers photographs of Sept. 26, 1944, were used in conjunction with reflight photographs taken on ~~Nov.~~ Oct. 21, 1945, to delineate the high-water line in the main rivers. For the inland sloughs the U.S. Engineers photographs of May 20, 1944, were used. From these photographs a high-water line of 5.0 ft. above M.L.W., the datum of this project, was determined.

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

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

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

**Control checked by:** James L. Harris **date:** June, 1946

**Radial Plot by:** James L. Harris & J. E. Deal **date:** July 26, 1946

**Detailed by:** Al C. Turner & James Jensen **date:** October 26, 1946

**Reviewed in compilation office by:** J. E. Deal **date:** November 8, 1946

Corrections and changes after field edit by: Al Turner date: Dec. 12, 1946

Review after changes due to field edit by: J. E. Deal date: Dec. 13, 1946

**Elevations on Field Edit Sheet checked by:** C. Hanavich, Topo. Engineer **date:** Nov. 1946

TIDE from (111): Daily readings of the U.S. Engineers tide gauge located at Government Moorings on the west shore of the Willamette River just south of the St. Johns Bridge. The 0+00 of the gauge is M.L.W., Columbia River, which is 1.29 ft. above Mean Sea Level.

# STATISTICS (III)

Land Area (Sq. Statute Miles): 5.0

Shoreline (More than 200 meters to opposite shore): 13.0 statute miles

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

Number of Recoverable Topographic Stations established: 12
(5 nonfloating aids, 2 landmarks, 1 interior landmark, 2 D.L.C. corners and 1 section corner)

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: F.H. Elrod, Prin. Photo. Aid date: April, 1946

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

Recovery of Horizontal Control by: F.H. Elrod date: Aug., 1945

Recovery of Vertical Control by: J. C. LaJoye date: Sept., 1945

Investigation of Geographic Names and Civil Bounderies by: L. E. Ervast, Photo. Aid date: April May, 1946

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# RECORD SHEET

Div. of Photogrammetry
Graphic Compilation Sect.

GENERAL LOCALITY Multnomah County, Oregon

LOCALITY Hayden Island (Portland)

SHEET NO. T-8673

PROJECT NO. CS-322

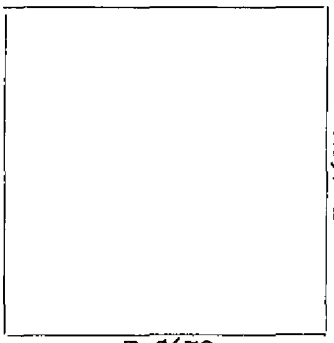
SCALE 1:8000

PHOTOS ORDERED Aug. 1945 REC'D 9-24 & 26-45 1-4-46

PROJECTION ORDERED Apr. 1946 REC'D 5-15-46

Joins T-8669 Ck ~

Joins T-8672 Ck ~



Joins T-8674 Ck ~

Joins T-8679 Ck ~

CONTROL:
COMPUTED Harris VERIFIED Bunce

PLOTTED Bunce VERIFIED Conn

PHOTO PREPARATION:
CONTROL Conn

AZIMUTHS Davidson

PASS POINTS Bunce Conn

TEMPLETS Bunce VERIFIED Harris

DATE OF PHOTOS See reverse side

TIME OF PHOTOS "

STAGE OF TIDE "

RADIAL PLOT:
PLOTTED BY Harris DATE 7-26-46

VERIFIED Deal DATE 7-31-46

COMPILATION:
DETAIL POINTS Bunce DATE 7-31-46

DETAIL BY H. Letson DATE 8-6-46

VERIFIED BY Barron DATE 11-5-46

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

Due to scale difference only a visual comparison was made with the U.S.G.S. Portland, Oregon - Washington, 15 min. quadrangle, Scale: 1:62500. Common planimetry of the quadrangle and map manuscript is in fair agreement. The housing areas of Vanport and St. Johns Woods, and the plant of the Aluminum Co. of America, at Vancouver, Washington, have been built since the quadrangle was compiled. (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 December 18, 1946

R. A. Earle
Chief of Party

M-2305-12

## COMPARISONS (continued)

Comparison was made with a black line print on clear acetate of Topographic survey No. 6620, Scale: 1:10000 enlarged to a scale of 1:8000. Except for an area along the north shoreline of the Columbia River, between Long. 122 42' 00" and Long. 122 44' 00", where spoil is being dumped, the map manuscript and survey shorelines are in agreement.

Comparison was made with Chart No. 6154, Scale 1:40000 and Chart No. 6155, Scale: 1:20000 by use of the vertical projector. Along the north shore of the Columbia River the bank line of the map manuscript has been used for the high-water line of the charts. This area is being constantly changed due to the dumping of spoil. There are numerous differences in the shoreline of Bybee Lake, Smith Lake, and adjacent pond and marsh areas, which is probably due to the difference in the water level at the time the charts were compiled. Elsewhere except for minor differences in the shoreline, the map manuscript and charts are in fair agreement.

## PHOTOGRAPH DATA

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| 475 to 479 Inc. | 6-30-45 | 12:00 | 1:17000 contact 1: 8000 ratio | 11.9 ft. Above M.L.W. |
| 663 to 666 " | 7- 1-45 | 10:15 | " | 11.7 ft. " " |
| 891 to 895 " | " | 13:40 | 1:5000 | 11.7 ft. " " |
| 921 to 930 " | " | 14:00 | " | 11.7 ft. " " |
| 939 to 949 " | " | 14:10 | " | 11.7 ft. " " |
| 3594 to 3596 " | 11-21-45 | 14:45 | 1:17000 con. 1:8000 r. | 4.9 ft. " " |
| 3639 to 3641 " | 11-21-45 | 15:00 | 1:17000 con. 1:8000 r. | 4.9 ft. " " |
| U.S. Engineer 44-665 to 44-669 | 5-20-44 | 10:25 | 1:10000 | 6.6 ft. " " |

Form T-1

# DATA RECORD

T-8673

**Quadrangle (II):** Hayden Island, Portland, 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 **Copy filed in** ~~**Descriptive Report No. T-**~~ ~~**(VI)**~~
Supplemental Instructions: Aug.29, Sept. 10, Oct. 25, Nov. 30, and Dec. 6, 1945 Div. Phtg. Office Files

**Completed survey received in office:** 31 Dec. 1946

**Reported to Nautical Chart Section:** ✓

**Reviewed:** 3-31-47 **Applied to chart No.** **Date:**

**Redrafting Completed:** 7 May 1947

**Registered:** ~~7 Nov.~~ Dec. 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):** BEACH (ORE.) 1938, r1945

**Lat.:** 45° 38' 00.759" (23.4m) **Long.:** 122° 43' 06.573"(142.4m) **Adjusted** X **Unadjusted**

**State Plane Coordinates (VI):** Ore, North (p.4)

X = 1,432,568.08 Y = 724,862.30

**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.

gcd

## PHOTOGRAPHS (III)

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| | | | 1:17000 contact | 11.9 ft. above M.L.W. |
| 475 to 479 Inc. | 6-30-45 | 12:00 | 1: 8000 ratio | |
| 663 to 666 " | 7- 1-45 | 10:15 | " " | 11.7 ft. " " |
| 3594 to 3596 " | 11-21-45 | 14:45 | " " | 4.9 ft. " " |
| 3639 to 3641 " | 11-21-45 | 15:00 | " " | 4.9 ft. " " |
| 891 to 895 " | 7- 1-45 | 13:40 | 1: 5000 | 11.7 ft. " " |
| 921 to 930 " | " | 14:00 | " | 11.7 ft. " " |
| 939 to 949 " | " | 14:10 | " | 11.7 ft. " " |
| U.S. Engineer 44-665 to 44-669 Inclusive | 5-20-44 | 10:25 | 1:10000 | 6.6 ft. " " |

**Tide from (III):** * See reverse side.

**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:** Nov., 1946

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

NOTE: In the main river areas the reflight photographs taken on Nov. 21, 1945, were used to delineate the high-water line. In the inland sloughs the U.S. Engineer's photographs taken on May 20, 1944, were used. From these photographs a high-water line of 5.0 ft. above Mean Low Water was determined for the shoreline in this area.

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

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

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

**Control checked by:** Dale Conn **date:** June, 1946

**Radial Plot by:** J. L. Harris & J. E. Deal **date:** July 26, 1946

**Detailed by:** Helen Letson **date:** Aug. 6, 1946

**Reviewed in compilation office by:** Ree H. Barron **date:** Nov. 5, 1946

Corrections and changes after field edit by: Helen Letson date: Dec. 13, 1946

Review after changes due to field edit by: J. E. Deal date : Dec. 16, 1946

**Elevations on Field Edit Sheet checked by:** Charles Hanavich, Topo. Engineer **date:** November, 1946

yew

* TIDE from (111): Daily readings of the U.S. Engineers tide gauge located at Government Moorings on the West shore of the Willamette River just south of the St. Johns Bridge. The 0+00 of the guage is M.L.W., Columbia River, which is 1.29 ft. above Mean Sea Level.

STATISTICS (III)

Land Area (Sq. Statute Miles): 4.2

Shoreline (More than 200 meters to opposite shore): 22.0 statute miles

Shoreline (Less than 200 meters to opposite shore): 8.0 statute miles

Number of Recoverable Topographic Stations established: 8
(4 landmarks and 4 nonfloating 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: | F. H. Elrod, Prin. Photo. Aid | date: March, 1946 |
| Shoreline Inspection by: | J. C. LaJoye, Prin. Photo Aid | date: Feb., 1946 |
| Recovery of Horizontal Control by: | J. C. LaJoye | date: Oct., 1945 |
| Recovery of Vertical Control by: | J. H. Winniford, Photo. Aid | date: Oct., 1945 |
| Investigation of Geographic Names and Civil Bounderies by: | L. E. Ervast, Photo Aid | date: April May, 1946 |

FIELD INSPECTION REPORT
QUADRANGLES T-8671, T-8672, & T-8673
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 Second Radial Plot", which was enclosed with the Descriptive Report for Quadrangles T-8674 and T-8675. 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-7085 |
| | 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-8671, T-8672 & T-8673
PROJECT CS-322

26. Control:

At the time this project was started there were fifty-five existing horizontal control stations in the area of these three map manuscripts. Thirty-one were recovered and twenty-three of these were identified for use in the radial plot.

In order to more satisfactorily control the orientation of the photographs, five new triangulation stations were established. Two of these were located in the western part of T-8671, two were prominent transmission towers on the east and west shores of the Willamette River in T-8672, and the other was the prominent stack on the Aluminum Co. of America plant at Vancouver, Washington, in T-8673.

A complete tabulation of the horizontal control stations which were originally in the area of these three map manuscripts is attached to the "Field Inspection Report, Project CS-322, Area of the Second Radial Plot". This report is included with the descriptive report for Map Manuscripts T-8674 and T-8675, which was forwarded on 11 October 1946.
→ Filed in Div. Photogram. General Files, under "Sp'l. Rep'ts."

The five new triangulation stations established in the area of these map manuscripts are listed in a tabulation attached to a special report, "Third-Order Triangulation and Traverse, Project CS-322, Area of the Second Radial Plot", which has been forwarded.
→ Filed in Library & Archives under G-6785

The following stations were plotted by using Lambert Coordinated, Oregon North Zone:

Twenty-Three, 3, (USE), Ore., 1916
X-1,416,324.53 Y-719,490.12

Eight, 2, (USE), Ore., 1916
X-1,419,116.65 Y-730,581.72

T-8672

JETTY (USE), Ore., 1919
X-1,432,955.15 Y-724,449.91

HICKSON (USE), Wash., 1930
X-1,434,672.18 Y-727,726.69

MULL (USE), Wash., 1919
X-1,436,182.28 Y-726,557.26

T-8673

27. Radial Plot:

The facts concerning the radial plot for the area of these three map manuscripts have been fully covered in the "Descriptive Report, Second Radial Plot, Project CS-322". This radial plot report was included with the descriptive report for map manuscripts numbered T-8674 and T-8675, which was submitted to the Washington Office on 11 October 1946.

Filed in Div. of Photogrammetry General Files under "Sp'l. Rep'ts."

28. Detailing:

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

The original photography was adequate for all planimetric details except the high-water line and adjacent details. A complete discussion of photographs used for detailing the high-water line may be found under Item 30, "Mean High-Water Line". The 1:5000 scale contact prints were a great help in interpreting detail along the shorelines of the Willamette and Columbia Rivers, and Multnomah Channel. Attention is called to tilted photograph No. 427, and pertinent notes thereon.

In some cases it was difficult to interpret, from the ratio prints, 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 and brush areas are placed on the inside of the curled line which denotes the limits of said area. 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.

In the area of T-8671, the compiler, in an effort to make the tree areas more definite, drew the curled green ink wood line symbol parallel to many roads and streams thereby creating cleared areas which do not exist. The symbol should have been stopped at the roads and continued across the streams. Due to the amount of work involved this condition was not corrected but all personnel have been advised not to show this symbol in this manner on other map manuscripts.

29. Supplemental Data:

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

Black Line Print: General arrangement of Oregon Shipyard
Scale: 1" = 200' *Filed with manuscript T-8672*

Black Line Print: Portland Port of Embarkation, General
Layout, Scale: 1" = 400' *Filed with this Descr. Rep't.*

Black Line Print: Vanport City, Oregon
Scale: Unknown *Filed with manuscript T-8680*

Black Line Print: St. John's Woods, Oregon -- 35024,
Scale: 1" = 320' *Filed with this Descr. Rep't.*

Black Line Print: Park Side Homes, Oregon -- 35025,
Scale: 1" = 210' *Filed with this Descr. Rep't.*

The following maps or plans which were also used were forwarded to the Washington Office on 7 November 1946, with the special report, "Investigation of Boundary Monuments and Lines, Area of the Second Radial Plot":

Multnomah County Assessor's Sheets No'd. 6, 7, 14, 15, 23, and 24, of a set of 74 sheets. Scale: 1" = 600' *Project File*

Map of the City of Portland, Scale: 1" = 1500' (approx.) *Project File*

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. In the area of T-8671, most of the data for the field inspection of the high-water line is shown on reflight photographs taken on Nov. 21, 1945. For the main river areas in T-8672, the data is contained on both the U.S. Engineer prints taken on Sept. 26, 1944, and the reflight photographs taken on Nov. 21, 1945. For the inland sloughs in T-8672, the U.S. Engineer prints, Scale: 1:10,000, taken on May 20, 1944, were used. In T-8673, the reflight photographs taken on Nov. 21, 1945, were used for the main areas of the Columbia River and the U.S. Engineer photographs taken on May 20, 1944, were used for the inland sloughs. All of these photographs were supplemented by the 1:5000 contact prints taken during the original photography and some field inspection data is shown on these prints.

The mean high-water line, which borders firm ground, is shown by a continuous heavy-weight black acid ink line at a plane five feet above the Engineers low-water datum, which is 1.29 ft. above mean sea level.

The mean high-water line, which borders mud flats or marsh areas, has been shown with a continuous light-weight black acid ink line.

31. Low-Water and Shoal Lines:

A sand bar on the west end of Hayden Island, in T-8673, is the only low-water area indicated by the field inspection party in the area of these three map manuscripts.

There are no shoal areas indicated within the area of the three map manuscripts.

32. Details Offshore from the High-Water Line:

There are no offshore details within the area of these three map manuscripts.

33. Wharves and Shoreline Structures:

All shoreline structures indicated by the field inspection units have been shown.

34. Landmarks and Aids to Navigation:

In the area of T-8671, Forms 567 are being submitted for the following:
Recommended for charting as new nautical landmarks:

TANK Most southerly of 2 tanks, S.P.& S. shops.
STACK Black and silver metal stack at Linnton Box Co.

Recommended for retention as nautical landmark:

TANK Green tank on west side Multnomah Channel.

Recommended for retention as nonfloating aids to navigation:

MULTNOMAH CHANNEL RANGE REAR, DAY BEACON
MULTNOMAH CHANNEL RANGE FRONT, DAY BEACON
MULTNOMAH CHANNEL NO.3 LIGHT

Recommended for deletion as nautical landmark:

STACK On west side of Multnomah Channel.

In the area of T-8672, Forms 567 are being submitted for the following:
Recommended for charting as new nautical landmarks:

TOWER W. Trans. tower Bonneville Power Adm. Willamette River
TOWER E. Trans. " " " " " "
TOWER W. Trans. " " " " Columbia Slough
TOWER E. Trans. " " " " " "

Recommended for retention as nautical landmarks:

TANK Portland Terminal #4 Elevated Tank, 1938
GRAIN ELEVATOR Triangulation Station, TERMINAL, 1938

Recommended for retention as nonfloating aids to navigation:

MULTNOMAH CHANNEL ENTRANCE GUIDE BEACON
MULTNOMAH CHANNEL ENTRANCE LIGHT
POST OFFICE BAR RANGE FRONT LIGHT
POST OFFICE BAR RANGE REAR LIGHT
WILLAMETTE RIVER ENTRANCE 1 LIGHT
GILLIHAN LIGHT

Recommended for deletion:

STACK West Oregon Lumber Co. Taller of 2
POST OFFICE BAR NO. 3 LIGHT
POST OFFICE BAR LOWER LIGHT

In the area of T-8673, Forms 567 are being submitted for the following:
Recommended for charting as new nautical landmarks:

TOWER N. Trans. Bonneville Power Adm. Columbia River
TOWER S. Trans. " " " " "
TOWER N. Trans. " " " N. Portland Harbor
TOWER S. Trans. " " " " "
STACK Triangulation Station, ALCOA STACK, 1946

Recommended for retention as nonfloating aids to navigation:

VANCOUVER RANGE REAR LIGHT
VANCOUVER LOWER RANGE REAR LIGHT
VANCOUVER LOWER RANGE FRONT LIGHT
MATHEWS POINT LIGHT

Recommended for deletion:

VANCOUVER RANGE FRONT LIGHT
MULLIGAN BEACON (Daymark)

35. Hydrographic Control:

In the area of T-8671, in Multnomah Channel, thirty-eight objects were located radially, and four by sextant fixes, for use as hydrographic signals. These were used during the recent hydrographic survey of this part of the Multnomah Channel, by the ship "Westdahl". They are indicated on the map manuscript by 2.0 mm black acid ink circles with reference numbers lettered nearby. The descriptions have been tabulated in the right hand margin of the map manuscript. This office compiled the shoreline and adjacent detail on map manuscript No. T-8671, in February 1946, and furnished the ship "Westdahl" with black and white prints, Scale: 1:5000.

In the area of T-8671 and T-8672, no additional hydrographic stations were established for the Willamette or Columbia Rivers. A sufficient number of existing horizontal control stations were recovered to comply with the instructions.

36. Landing Fields and Aeronautical Aids:

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

37. Geographic Names:

Only undisputed geographic names are shown on the map manuscripts. 814

Geographic names are the subject of the special report, "Investigation of Geographic Names, Project CS-322, Area of the Second Radial Plot", which was submitted to the Washington Office on 22 October 1946.

Special Report: Investigation of Boundary Monuments and
hand lines ... Area of the Second Radial Plot.
Filed in the Division of Photogrammetry General Files
under "Special Reports".

38. Recoverable Topographic Stations:

Forms 524 are being submitted for the twenty-two landmarks and non-floating aids to navigation, which are not triangulation stations but are recommended for charting or retention under Item 34, "Landmarks and Aids to Navigation. In addition Forms 524 are being submitted for the following:

In the area of T-8671:

T 1 & 2N R 1W Section Corner 5,6,31,32, 1946
Portland City Boundary Monument (West Boundary), 1946

In the area of T-8672:

STACK (White, concrete), City Incinerator, 1946, (Interior Landmark)
Witness Corner to Meander Corner, S.E. Cor. J. Charlton D.L.C., 1946
S.E. Cor. Jas. Loomis D.L.C., 1946
T 2N R 1W Meander Corner, Section 23 - 26, 1946

In the area of T-8673:

There are no additional recoverable topographic stations other than the landmarks and aids to navigation previously listed.

39. Junctions:

Complete and satisfactory junctions have been made between Map Manuscripts No's. T-8671, T-8672, and T-8673, and with adjoining map manuscripts. see Review Report

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 ft. 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 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
Chief of Party

Respectfully submitted:
20 December 1946

J. Edward Deal, Jr.
Photogrammetric Engineer

FIELD EDIT REPORT
QUADRANGLES T-8671, T-8672, & T-8673
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. Several buildings and railroad spurs, which were recently constructed, were located by planetable methods or field measurements on field photographs or the ozalid prints. The names and numbers of streets which were indicated on the prints were obtained and verified from official street signs. A few minor changes and omissions were noted and corrected in drainage and other features.

All offshore and shoreline features were checked. Newly constructed piers, buildings, dolphins, and other changes and omissions, were noted and corrected in the area of these three map manuscripts.

The small island (T-8672) in the Willamette River lying north of the mouth of Multnomah Channel has been removed by dredging operations. The flat bottom land area near Ramsey Lake is subject to changes, as it is being filled by accretions from dredging operations. It is to be noted that the flat bottom lands in the area of T-8672 and T-8673 and portions of the flat belt of land on the west side of Multnomah Channel in T-8671 become inundated when the sloughs, ponds, et cetera overflow during the annual freshets. The south end of Sauvie Island or that section of the Island enclosed by dikes is not subject to these severe flood conditions as the drainage is carefully controlled by pumping stations and dredged ditches.

For additional information refer to side heading 1 of the "Field Inspection Report, Area of the Fourth Radial Plot, Project CS-322".

It is believed that all submarine cable crossings or pipeline and cable areas have been indicated. The vertical and horizontal clearances of all bridges as well as the vertical clearances of all overhead cable crossings have been shown.

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. H.G. Richardson, City Surveyor of Portland. The geographic names in this area have been reviewed by Mr. Lewis A. Mc Arthur, Collaborator for the U. S. Coast and Geodetic Survey. 14

48. Accuracy Tests:

Results of the horizontal accuracy test in T-8671 are attached to the back of this report. For additional map accuracy tests near or adjacent to these map manuscripts refer, to the field edit report for T-8678 and T-8679.

These maps are believed to comply with the standard map accuracy requirements.

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.

Field Edit reviewed by:
Charles Hanavich
Charles Hanavich
Topo. Engineer

Approved by:
R. A. Earle
R. A. Earle
Chief of Party

Field Edit by:
L. E. Ervast
L. E. Ervast
Photo. Aid (T-8671)

F. H. Elrod
F. H. Elrod
Prin. Photo. Aid (T-8672 & T-8673)

HORIZONTAL ACCURACY TEST
Map Manuscript T-8671
Project CS-322

This test consists of a traverse between triangulation stations SPAR, 1946 and TRANS, 1946. The traverse is 4.0 statute miles in length; the probable error of the traverse is one part in 6,000. There are 20 test points available; 19 of them are within the limits of this map manuscript. In the tabulation, the geographic position from the traverse computation is referred to as T.P.No., and the scaled position from the map manuscript (scale 1 : 8,000) is referred to as M. M. No.

TABULATION OF TEST POINTS

| Description of Point | Test Point Number | Latitude | Longitude | Displacement in mm |
|---|---|---|---|---|
| Inter. of T-rd., 80 degrees | T.P.No. 1 | 45 37 706.7 | 122 50 635.8 | |
| | M.M.No. 1 | 708.2 | 637.9 | .26 |
| Inter. of T-rd., 90 degrees | T.P.No. 1A | 45 37 423.6 | 122 50 761.7 | |
| | M.M.No. 1A | 420.6 | 764.5 | .41 |
| | T.P.No. 1B | 45 37 244.8 | 122 50 736.8 | |
| | M.M.No. 1B | Temp. logging trail - not compiled | | |
| | T.P.No. 2 | 45 37 222.0 | 122 50 556.4 | |
| | M.M.No. 2 | Temp. logging trail - not compiled | | |
| | T.P.No. 3 | 45 37 221.7 | 122 50 553.8 | |
| | M.M.No. 3 | Temp. logging trail - not compiled | | |
| Inter. of tr.& rd., tr. not compiled | T.P.No. 4 | 45 37 103.4 | 122 50 64.3 | |
| | M.M.No. 4 | 103.2 | 65.6 | .14 |
| Inter.of rd. & rd., 10 deg.from tangent | T.P.No. 5 | 45 36 1061.4 | 122 49 1124.6 | |
| | M.M.No. 5 | 1055.0 | 1117.4 | .96 |
| Inter. of T-rd., 80 degrees | T.P.No. 5A | 45 36 646.2 | 122 49 1209.2 | |
| | M.M.No. 5A | 645.0 | 1208.1 | .16 |
| Center of bldg. | T.P.No. A | 45 36 809.5 | 122 49 948.7 | |
| | M.M.No. A | 802.9 | 951.2 | .71 |
| Center of bldg. | T.P.No. B | 45 36 698.6 | 122 49 1194.3 | |
| | M.M.No. B | 691.4 | 1190.6 | .78 |
| Center of bldg. | T.P.No. D | 45 36 646.8 | 122 50 259.8 | |
| | M.M.No. D | Outside of compilation limits | | |
| Center of bldg. | T.P.No. E | 45 36 1037.6 | 122 50 85.6 | |
| | M.M.No. E | 1033.4 | 82.6 | .52 |
| T.P.No. F | T.P.No. F | 45 36 833.6 | 122 50 115.9 | |
| | M.M.No. F | 829.8 | 113.4 | .45 |
| Center of bldg. | T.P.No. G | 45 36 1623.0 | 122 49 1288.2 | |
| | M.M.No. G | 1622.2 | 1283.2 | .51 |

con.

| | | | | | | |
|---|---|---|---|---|---|---|
| Inter. of X-rds., | T.P.No. 6 | 45 36 | 433.4 | 122 49 | 1167.0 | |
| 30 deg.from tangent | M.M.No. 6 | | 433.0 | | 1162.6 | .44 |
| Inter. of X-rds., | T.P.No. 7 | 45 36 | 322.0 | 122 49 | 1168.8 | |
| 30 deg.from tangent | M.M.No. 7 | | 325.2 | | 1166.0 | .42 |
| Inter. of X-rds., | T.P.No. 8 | 45 36 | 114.8 | 122 49 | 1156.2 | |
| 30 deg.from tangent | M.M.No. 8 | | 112.1 | | 1153.4 | .39 |
| Inter. of T-rd. | T.P.No. 9 | 45 35 | 1839.1 | 122 49 | 949.9 | |
| | M.M.No. 9 | Out of Project limits | | | | |
| Barn, Cupola, | T.P.No. Cup. | 45 36 | 906.5 | 122 50 | 188.4 | |
| Weathervane | M.M.No. Cup. | | 901.0 | | 185.6 | .62 |
| Bench Mark | T.P.No. N218 | 45 36 | 662.4 | 122 49 | 1209.4 | |
| N218(USC&GS&SS) | M.M.No. N218 | | 655.8 | | 1208.3 | .66 |

Test points No. 1B,2,3, and D were not scaled inasmuch as the first three were located at the intersection of a highway and temporary logging trails, which were not compiled, and point D fell outside of the compilation limits. Test point 4 at the intersection of a highway and a temporary trail, also, was not compiled; however, this point was scaled since it was possible to identify it from the detail point pricked at the edge of the road and the centerline of the trail.

Barn, Cupola, Weathervane, 1946 and N218(USC&GS&SS,1935), 1946, were established as intersection and marked traverse stations, respectively, on this traverse. These two stations were used as test points and they were scaled as such prior to submitting the geographic positions for them to the Compilation Office for plotting.

The less well defined points are 4, 5, A, B, E, G, Barn Cupola, and BM N218. The well defined points are 1, 1A, 5A, and F. Test points 6, 7, and 8 should probably be classified as less well defined points as the intersections at these points are at an acute angle. All the points were found to test within the accuracy requirements. For additional information on this traverse see "Special Report, Third-Order Traverse, SPAR, 1946 to TRANS, 1946, Quadrangle T-8671".

Approved by:
R. A. Earle
Chief of Party

Respectfully submitted:
Charles Hanavich
Topo. Engineer

Division of Photogrammetry

Review Report of

Map Manuscript T-8671

Subjects not used in this review report have been adequately covered in other parts of the descriptive report.

39. Junctions.

Planimetric detail junctioned well with the adjacent maps but the section lines had to be revised. The error appears to have resulted from the mislocation of section corner 5-6-31-32, since the manuscript and recovery form 524 do not agree, which has caused a similar displacement to the section line system. The land system has been revised to junction with T-8667 and T-8672. The parallel T-1-N, T-2-N has been reconstructed to form a tangent between corner 5-6-31-32 and the triangulation station "Section" on map manuscript T-8672.

41. Land Lines.

The reconstruction of section lines, as stated in 39 Junctions, causes a more satisfactory relationship between the section lines and donation land claim lines shown on the G.L.O. plats.

43. Comparisons with Previous Topographic Surveys.

6617b 1:10,000 1938

(See Record Sheet for details.)

44. Comparison with Existing Topographic Quadrangles.

U.S.G.S. - Hillsboro 1:62,500 1940

(See Record Sheet for details.)

Map manuscript T-8671 supersedes quadrangle Hillsboro in planimetric and shoreline detail. Extensive reclamation of land adjacent to the Multnomah Channel has changed the topography appreciably.

45. Comparison with Nautical Charts. (See Record Sheet)

| | | |
|---|---|---|
| 6154 | 1:40,000 | 1945 ed. |
| 6155 | 1:20,000 | 1945 ed. |

This manuscript has not been applied to charts 6154 and 6155 at the date of this review.

Reviewed by:

Lena T. Stevens
Photogrammetrist
9 May 1947

Reviewed under direction of:

S. V. Griffith
Chief, Review Section

APPROVED BY:

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

Chief, Nautical Chart Br.
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys

Division of Photogrammetry

Review Report of

Planimetric Map T-8672

Subjects not used in this review report have been adequately covered in other parts of this descriptive report.

26. Control.

Station 22-sub-3, U.S.E., 1938, listed as recovered in 1945 had been omitted from the manuscript and was plotted by the reviewer.

41. Land Lines.

A. Donation Land Claims:

1. Wm. Bybee was redrawn to conform to Land Office plat measurements. ok

2. The north line of D. S. Southmayd was moved north 380± feet (4.60 ch.) ok

3. The north line of J. Sanders was added; and the west line on T-8671 was relocated. not ok but extended to shoreline of Multnomah Channel thus eliminating north line

4. The north line of Solomon Richards was added. ok

5. Claim 63 is not believed to be a part of Sanders tract since that tract is No. 53. same tract

B. Other Boundary Lines:

A note was added, stating that the Multnomah-Clackamas Game Refuge boundary follows the north limits of the city of Portland.

The Portland City Boundary Line in the Willamette River and Multnomah Channel is in general agreement with the city map, Assessment Map No. 15, and Hillsboro quadrangle.

43. Comparisons.

Previous Topographic:

| | | |
|---|---|---|
| 1522 | 1:20,000 | 1884 |
| 6618a | 1:10,000 | 1938 |

Hydrographic:

| | | |
|---|---|---|
| 6334 | | 1938 |

44. Comparison with Existing Topographic Quadrangle.

U.S.G.S. Hillsboro, Oreg.-Wash., 1:62,500, 1940 reprint.

(See Record Sheet for details.)

Map manuscript T-8672 supersedes the quadrangle map in planimetric and shoreline details.

45. Comparison with Nautical Charts. (See Record Sheet)

| | | |
|---|---|---|
| 6154 | 1:40,000 | 1945 ed. |
| 6155 | 1:20,000 | 1945 ed. |

This manuscript has not been applied to charts 6154 and 6155 at the date of this review.

Reviewed by:

Lena T. Stevens
Lena T. Stevens
Photogrammetrist 4/25/47

Reviewed under direction of:

S. V. Griffith 4/30/47
S. V. Griffith
Chief, Review Section

APPROVED BY:

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

Chief, Nautical Chart Branch
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

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

Division of Photogrammetry

Review Report of

Planimetric Map T-8673

Subjects not used in this review report have been adequately covered in other parts of this descriptive report.

39. JUNCTIONS:

The junction between T-8673 and T-8674 necessitated appreciable change in the position of the east and west section lines. The planimetric features were in satisfactory agreement.

41. LAND LINES:

The adjustment of the Willamette Meridian at the western edge of T-8673 has been adjusted to form straight lines between recovered corners into the manuscripts to the north and south of T-8673. The southern line of the Wm. Bybee D.L.C. has been moved northward 7.88 chains to agree with the General Land Office plats and with the assessment map No. 14.

43. COMPARISON WITH NAUTICAL CHARTS AND TOPOGRAPHIC SURVEYS:

The planimetric and shoreline details are in fair agreement with the planimetry of the hydrographic and topographic surveys of this area but supersedes them in common areas. The comparison with nautical charts 6154 and 6155 shows reasonable agreement. Differences are noted on the back of the Record Sheet attached to the descriptive report.

This manuscript has not been applied to nautical charts Nos. 6154 and 6155 as of the date of this review report.

Reviewed by:

Lena T. Stevens

Lena T. Stevens
Photogrammetrist
8 April 1947

Reviewed under direction of:

S. V. Griffith

Chief, Review Section

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

8671
Project CS-322

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 5, 1946

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

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TANK | Most southerly of two tanks at the S.P.&S. car repair shop | TANK | 45 38 | (475.8) 1376.6 | 122 49 | (561.7) 737.6 | N.A. 1927 | Radial Plot | 4-12-46 | | X | | 6154 |
| STACK | Black and silver metal stack at Linnton Box. Co. | STACK | 45 37 | (587.7) 1264.7 | 122 49 | (1264.3) 35.4 | " | " | " | | X | | 6154 6155 |
| | Recommended for retention as nonfloating aids to navigation: | | | | | | | | | | | | |
| BEACON | Multnomah Channel Range Rear, Day Beacon | BEACON | 45 37 | (1287.9) 564.5 | 122 48 | (551.6) 748.3 | N.A. 1927 | Radial Plot | 4-12-46 | | X | | 6154 6155 |
| BEACON | Multnomah Channel Range Front, Day Beacon | BEACON | 45 37 | (1320.8) 531.6 | 122 48 | (681.7) 618.2 | N.A. 1927 | Sextant Fix | " | | X | | 6154 6155 |
| LIGHT | Multnomah Channel No. 3 Light | LIGHT | 45 37 | (1426.0) 426.4 | 122 48 | (1186.2) 113.7 | " | Radial Plot | 3-19-46 | | X | | 6154 6155 |
| | Recommended for retention as nautical landmark: | | | | | | | | | | | | |
| TANK | Green tank on west side of Multnomah Channel | TANK | 45 38 | (842.6) 1009.8 | 122 49 | (731.1) 568.3 | N.A. 1927 | Radial Plot | 3-8-46 | | X | | Insert 6155 |

Letter 289 (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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

T-3671
Project CS-322

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 5, 1946

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. H. Deal

R. A. Earle *Chief of Party.*

STATE OREGON

| CHARTING NAME | DESCRIPTION | SIGNAL NAME | POSITION | | | | DATUM | METHOD OF LOCATION AND SURVEY No. | DATE OF LOCATION | HARBOR CHART | INSHORE CHART | OFFSHORE CHART | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LATITUDE | | LONGITUDE | | | | | | | | |
| | | | ° ′ | D.M. METERS | ° ′ | D.P. METERS | | | | | | | |
| STACK | On west side of Multnomah Channel | STACK | 45 37 | 1732.0 | 122 49 | 273.0 | N.A. 1927 | | | | X | | 6154 |
| | THIS STACK HAS BEEN TORN DOWN. | | | | | | | | | | | | |

Letter 289 (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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

oject CS-322
T-8672 (Page 1)

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 10, 1946

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

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOWER | W trans. tower Bonneville Power Admn. Willamette River | TOWER | 45 36 | (391.0) 1461.3 | 122 47 | (655.6) 644.5 | N.A. 1927 | Triangu-lation | 4-16-46 | | X | | 6154 6155 |
| TOWER | E trans. tower, Bonneville Power Admn. Willamette River | TOWER | 45 36 | 50.8) 1801.5 | 122 47 | (1221.0) 78.9 | N.A. 1927 | " | " | | X | | " |
| TOWER | W trans. tower, Bonneville Power Admn. Columbia Slough | TOWER | 45 36 | (152.2) 1700.2 | 122 45 | (340.0) 960.0 | " | Radial Plot | 4-12-46 | | X | | " |
| TOWER | E trans. tower Bonneville Power Admn. Columbia Slough | TOWER | 45 36 | (81.4) 1771.0 | 122 45 | (453.2) 846.8 | " | " | " | | X | | " |
| | TO BE RETAINED AS NAUTICAL LANDMARKS: | | | | | | | | | | | | |
| TANK | Portland, Terminal No. 4 Elevated Black Tank, 1938 | TANK | 45 36 | (1364.4) 487.9 | 122 46 | (997.0) 303.3 | N.A. 1927 | Triangu-lation | 8-24-45 | | X | | " |
| GRAIN ELEVATOR | Triangulation Station, TERMINAL, 1938 | GRAIN ELEVATOR | 45 36 | (1221.2) 631.2 | 122 46 | (745.8) 554.5 | " | " | 4-15-46 | | X | | " |
| | TO BE RETAINED AS NONFLOATING AIDS TO NAVIGATION: | | | | | | | | | | | | |
| DAYMARK | Multnomah Channel Entrance Guide Beacon | DAYMARK | 45 37 | (1799.5) 52.9 | 122 47 | (1163.0) 137.0 | N.A. 1927 | Radial Plot | 4-12-46 | | X | | " |
| LIGHT | Multnomah Channel Entrance Light | LIGHT | 45 37 | (1578.2) 274.2 | 122 47 | (499.0) 801.0 | N.A. 1927 | " | 3-29-46 | | X | | " |
| LIGHT | Post Office Bar Range Front Light | LIGHT | 45 37 | (386.4) 1466.0 | 122 47 | (576.6) 722.5 | " | " | 11-18-45 | | X | | " |
| | | | | | | | | | | | | | |
| | Letter 48 (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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Project CS-322
T-8672 (Page 2)

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 10, 1946

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. H. Neal

R. A. Earle *Chief of Party.*

STATE OREGON

| 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 | Post Office Bar Range Rear Light | LIGHT | 45 37 | (169.8) 1682.6 | 122 47 | (524.4) 775.2 | N.A. 1927 | Radial Plot | 11-8-45 | | X | | 6154 6155 |
| LIGHT | Gillihan Light | LIGHT | 45 38 | (887.2) 965.2 | 122 46 | (339.5) 959.9 | " | " | " | | X | | " |
| LIGHT | Willamette River Entrance 1 Light | LIGHT | 45 38 | (718.0) 1134.4 | 122 46 | (927.5) 371.8 | " | " | " | | X | | " |

NOTE:

Multnomah Channel Entrance Guide Beacon and Post Office Bar Range Front Light agree well with the charted position;
Gillihan Light is in fair agreement with the charted position;
Multnomah Channel Entrance Light and Willamette Entrance 1 Light are not in agreement with the charted position on Chart No. 6154, but are in good agreement with the charted position shown on Chart No. 6155.

Letter 248 (1942)

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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Project CS-322
T-8672

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 10, 1946

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. H. Neal

R. A. Earle *Chief of Party.*

STATE: OREGON

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STACK (TALLER) | West Oregon Lumber Co. Taller and downstream of 2 stacks | STACK (TALLER) | 45 36 | 1278.1 | 122 47 | 434.7 | N.A. 1927 | Triangulation | 1938 | | X | | 1654 1655 |
| LIGHT | Post Office Bar 3 | LIGHT | 45 38 | 250.0 | 122 47 | 104.0 | " | Scaled Chart | | | X | | " |
| LIGHT | Post Office Bar Lower Light | LIGHT | 45 38 | 321.5 | 122 47 | 472.6 | " | Triangulation | 1938 | | X | | " |
| | NOTE: The above landmark and nonfloating aids to navigation have been destroyed. | | | | | | | | | | | | |

Letter 4-8 (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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Project CS-322
T-8673

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTED~~ / TO BE DELETED — STRIKE OUT ONE

Portland, Oregon — December 10, 1946

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.H.Neal

R. A. Earle — *Chief of Party.*

STATE OREGON

| CHARTING NAME | DESCRIPTION | SIGNAL NAME | POSITION | | | | | METHOD OF LOCATION AND SURVEY No. | DATE OF LOCATION | HARBOR CHART | INSHORE CHART | OFFSHORE CHART | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LATITUDE | | LONGITUDE | | DATUM | | | | | | |
| | | | ° ′ | D.M. METERS | ° ′ | D.P. METERS | | | | | | | |
| | VANCOUVER RANGE FRONT LIGHT | | 45 38 | 1140.1 | 122 44 | 262.3 | N.A. 1927 | | | | X | | 6154 6155 |
| | MULLIGAN BEACON (Daymark) | | 45 38 | 943.2 | 122 43 | 157.0 | " | | | | X | | " |
| | Both of the above nonfloating aids to navigation have been destroyed. | | | | | | | | | | | | |

Letter 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.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Project CS-322
T-8673

# NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Portland, Oregon December 10, 1946

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.E.Deal

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TOWER | Bonneville Power Admn. Tower North side of Columbia River | TOWER | 45 38 | (963.0) 889.4 | 122 42 | (445.8) 853.5 | N.A. 1927 | Radial Plot | 3-14-46 | | X | | 6154 6155 |
| TOWER | Bonneville Power Admn. Tower S side Columbia River on Hayden Island | TOWER | 45 37 | (80.0) 1772.4 | 122 43 | (1132.6) 167.0 | " | " | " | | X | | " |
| TOWER | North shore North Portland Harbor (recommended for N.Portland Harbor only) | TOWER | 45 37 | (590.9) 1261.5 | 122 43 | (807.7) 492.0 | " | " | 11-5-46 | | X | | " |
| TOWER | South shore North Portland Harbor (recommended for N. Portland Harbor only) | TOWER | 45 37 | (963.7) 888.7 | 122 43 | (572.2) 727.6 | " | " | " | | X | | " |
| STACK | Triangulation Station ALCOA STACK, 1946 | STACK | 45 38 | (127.3) 1725.1 | 122 43 | (143.5) 1155.7 | " | Triangulation | 1946 | | X | | " |
| | NOTE: The following fixed aids to navigation shown on charts No's. 6154 and 6155 have been investigated. The charted positions are only in fair agreement with the radially plotted positions: | | | | | | | | | | | | |
| Letter 2-28-1947 | VANCOUVER RANGE REAR LIGHT F.W., Fl.W., 10 Sec. | | 45 38 | (553.8) 1298.6 | 122 44 | (674.4) 624.9 | N.A. 1927 | Radial Plot | 2-21-46 | | X | | 6154 6155 |
| | VANCOUVER LOWER RANGE REAR LIGHT Occ. R., 6 Sec. | | 45 37 | (24.2) 1828.2 | 122 42 | (309.1) 990.5 | " | " | " | | X | | " |
| | VANCOUVER LOWER RANGE FRONT LIGHT Fl. W., 1 Sec. | | 45 38 | (1586.2) 266.2 | 122 43 | (1195.4) 104.2 | " | " | " | | X | | " |
| | MATHEWS POINT LIGHT Fl. G., 4 Sec. | | 45 38 | (36.6) 1815.8 | 122 44 | (404.5) 894.7 | " | " | " | | X | | " |

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-8671

| | Name on Survey | On Chart No. A | On previous survey No. B | On U. S. quadrangle Maps C | From local information D | On local Maps E | P. O. Guide or Map F | Rand McNally Atlas G | U. S. Light List H | K | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | Oregon | | | | | | | | | | 1 |
| ✓ | Multnomah County | | | | | | | | | | 2 |
| ✓ | Multnomah Channel | | | | | | | | | | 3 |
| ✓ | Harborton | | | | | | | | | | 4 |
| ✓ | Miller | | | | | | | | | | 5 |
| ✓ | Bonneville Power Administration Transmission Line | | | | | | | | | | 6 |
| ✓ | Portland General Electric Co. Power Line | | | | | | | | | | 7 |
| ✓ | Multnomah Clackamas Game Refuge | | | | | | | | | | 8 |
| ✓ | Skyline Boulevard | | | | | | | | | | 9 |
| ✓ | U.S. No. 30 St. Helens Road | | | | | | | | | | 10 |
| ✓ | Spokane Portland and Seattle | | | | | | | | | | 11 |
| ✓ | Multnomah Channel 3 Light | | | | | | | | | | 12 |
| ✓ | Multnomah Channel Range Front Beacon | | | | | | | | | | 13 |
| ✓ | Multnomah Channel Range Rear Beacon | | | | | | | | | | 14 |
| ✓ | Sauvie Island | | | | | | | | | | 15 |
| ✓ | Gillihan Loop Road | | | | | | | | | | 16 |
| ✓ | Gilbert River | | | | | | | | | | 17 |
| ✓ | River Junction Station | | | | | | | | | | 18 |
| ✓ | Burlington | | | | | | | | | | 19 |
| ✓ | Burlington Station | | | | | | | | | | 20 |
| ✓ | ~~Mar~~ McNamee Road | | | | | | | | | | 21 |
| ✓ | Newberry Road | | | | | | | | | | 22 |
| ✓ | Riverview Drive | | | | | | | | | | 23 |
| | | | | | | | | | | | 24 |
| | | | | | | | | | | | 25 |
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| | | | | | | | | | | | 27 |

Names underlined in red approved by L. Heck on 5/9/47

M 234

GEOGRAPHIC NAMES

Survey No. T-8672

| 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 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Oregon | ✓ | | | | | | | | | 1 |
| Multnomah County | ✓ | | | | | | | | | 2 |
| Columbia River | ✓ | | | | | | | | | 3 |
| Willamette River | ✓ | | | | | | | | | 4 |
| Columbia Slough | ✓ | | | | | | | | | 5 |
| Multnomah Channel | ✓ | | | | | | | | | 6 |
| Sauvie Island | ✓ | | | | | | | | | 7 |
| Spokane Portland and Seattle | | ✓ | | | | | | | | 8 |
| Union Pacific | ✓ | ✓ | | | | | | | | 9 |
| U.S. 30 St. Helens Road | | ✓ | (Columbia River Highway not used on any quads. west of Portland) | | | | | | | 10 |
| Bonneville Power Administration Transmission Line | | | | | | | | | | 11 |
| Portland General Electric Power Line | | | ✓ | | | | | | | 12 |
| | | | | | | | | | | 13 |
| St Johns | ✓ | | | | | | | | | 14 |
| St. Johns Woods | | | - | | | | | | | 15 |
| Pier Park | ✓ | | | | | | | | | 16 |
| Parkside Homes | ✓ | | | | | | | | | 17 |
| Portland Municipal Terminal No. 4 | | | ✓ | | | | | | | 18 |
| KPK Radio Sta. | | ✓ | | | | | | | | 19 |
| Oregon Shipbuilding Corporation | ✓ | | | | | | | | | 20 |
| Multnomah Channel Entrance Guide Beacon | | | | | | | | | | 21 |
| Ramsey Lake | | | | | | | | | | 22 |
| Bonneville Power Administration St. Johns Substation | | | | | | | | | | 23 |
| Post Office Bar | | | | | | | | | | 24 |
| Kelley Point | | | | | | | | | | 25 |
| Willamette River Entrance Light | 1 A | | | | | | | | | 26 |
| Gillihan Light | ✓ | | | | | | | | | 27 |

M 234

GEOGRAPHIC NAMES

Survey No. T-8672

| | 2 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Post Office Bar Range Front Light | | | | | | | | | | 1 |
| | Post Office Bar Range Rear Light | | | | | | | | | | 2 |
| | Gillihan Loop Road | | | | | | | | | | 3 |
| | Multnomah Channel Entrance Light | | | | | | | | | | 4 |
| | West Oregon Lumber Co. | | | | | | | | | | 5 |
| | Linnton | | | | | | | | | | 6 |
| | Linnton Park | | | | | | | | | | 7 |
| | Bybee Lake | | | | | | | | | | 8 |
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| | | | | | | | | | | | 12 |
| | | | Names underlined is not approved by L. Heck 05 (9/47) | | | | | | | | 13 |
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M 234

GEOGRAPHIC NAMES

Survey No. T-8673

| 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 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Oregon | . | | | | | | | | | 1 |
| Multnomah County | . | | | | | | | | | 2 |
| Washington | . | | | | | | | | | 3 |
| Clark County | . | | | | | | | | | 4 |
| Columbia River | . | | | | | | | | | 5 |
| Portland | . | | | | | | | | | 6 |
| Vancouver city limits | . | | | | | | | | | 7 |
| Multnomah Clackamas Game Refuge | . | | | | | | | | | 8 |
| Spokane Portland and Seattle | . | | | | | | | | | 9 |
| Northern Pacific | . | (same lines as S P and S) | | | | | | | | 10 |
| Union Pacific | . | | | | | | | | | 11 |
| North Portland Station | . | | | | | | | | | 12 |
| North Portland Road | . | | | | | | | | | 13 |
| North Portland Junction | | | | | | | | | | 14 |
| Western Wax Paper Company | . | | | | | | | | | 15 |
| Vanport City | . | | | | | | | | | 16 |
| Mud Slough | . | | | | | | | | | 17 |
| St. Johns Woods | . | | | | | | | | | 18 |
| Smith Lake | . | | | | | | | | | 19 |
| Bybee Lake | . | | | | | | | | | 20 |
| Stauffer Chemical Company | . | | | | | | | | | 21 |
| Northwest Box Company | . | | | | | | | | | 22 |
| North Portland Harbor | . | | | | | | | | | 23 |
| Hayden Island | . | | | | | | | | | 24 |
| Friendly Reach | . | | | | | | | | | 25 |
| Vancouver Lower Range Front Lt | . | | | | | | | | | 26 |
| Vancouver Lower Range Rear Lt. | . | | | | | | | | | 27 |

M 234

GEOGRAPHIC NAMES

Survey No. T-8673

| 2 Name on Survey | On Chart No. A | On previous survey No. B | On U. S. quadrangle Maps C | From local information D | On local Maps E | P. O. Guide or Map F | Rand McNally Atlas G | U. S. Light List H | K | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lower River Road | • | | | | | | | | | 1 |
| Aluminum Company of America | | • | | | | | | | | 2 |
| Mathews Point | | • | | | | | | | | 3 |
| Northwestern Electric Co. Power Line | | | | | | | | | | 4 |
| Bonneville Power Administration Transmission Line. | | | | | | | | | | 5 |
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Names underlined in red approved by L. Heck 5/9/47

M 234

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
c/o Swan Island Postal Station
Portland 18, Oregon
28 May 1947

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

From: Lt. Comdr. R. A. Earle

Subject: Review of Map Manuscript T-8671

Reference: Your Letter, 78-RCR, dated 15 May 1947

In reply to the above reference, Mr. Deal, assisted by the Multnomah County Surveyor, made an exhaustive investigation of the land lines in this and adjacent map manuscripts and has shown the correct position of these lines in green ink on the ozalid print. At my request he has also submitted a memorandum relative to the way these lines were located in order that they can be relocated on the map manuscripts. This memorandum is forwarded herewith.

The original pricking card, Contact Print 343 and Form 524 for Section Corner T 1N-2N R 1W, Section 5-6-31-32 which you forwarded, are respectfully returned herewith. Your attention is respectfully called to the fact that the above section corner must be replotted on the map manuscript, new position scaled and Form 524 revised.

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

Just Please file in the base report

RAE/gw

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:

28 May 1947

MEMORANDUM

To: Lt. Comdr. R. A. Earle

From: J. Edward Deal, Photogrammetric Engineer

Subject: Reinvestigation of Land Lines in the Area of Map Manuscript T-8671

Upon examining the changes in section and donation land claim lines in T-8671, recommended by the Washington Office Review Section, I decided to make a complete reinvestigation of the land lines falling in the area of this map manuscript.

From investigation in the field I find that the monumented section corner T 1N-2N R 1W, 5-6-31-32 is correct as located by the reviewer on the ozalid print of T-8671. Due to changes in personnel I have been unable to ascertain why the information on the original pricking card, which was absolutely correct, was disregarded or in what manner the error in locating the corner was made. I have shown in white ink, on Contact Print 343, pertinent field inspection data relative to the field identification of this corner. It will be necessary for the Washington Office to scale the new location of the corner from the map manuscript and correct the position shown on the attached Form 524.

Surveys on file in the office of the Multnomah County Surveyor define most of the sections falling in the area as very irregular in shape. Complete measurements were not available to plot the exact shape of each section, but I definitely found that the distances of 80 chains, in a north and south direction, shown on the General Land Office plats for the first row of sections lying north of the township line 1N-2N, are in error. Due to the irregular shapes of the sections the amount of error varies but they are all short of 80 chains in a north and south direction. Lack of complete data prevents the plotting of the land lines exactly as they are on the ground but I believe they will be well illustrated on the published map if they are plotted in the manner described below and shown in green ink on the ozalid prints of T-8667 and T-8671.

I first joined the ozalid prints of T-8671 and T-8672 and extended a straight line east and west from the new location of the monumented section corner T 1N-2N R 1W, 5-6-31-32 in T-8671, to triangulation station, "SECTION 1938, r1945", in T-8672. This will well represent the township line T 1N-2N R 1W in this area. I then measured 80 chains (from G.L.O. plats) easterly along the township line from the monumented section corner T 1N-2N R 1W, 5-6-31-32 and established section corner T 1N-2N R 1W, 4-5-32-33. I now separated the two ozalids and joined the ozalid print of T-8671 with the ozalid print of T-8667 to the north. I then extended a straight line in a north and south direction from the section corner T 1N-2N R 1W, 4-5-32-33 as established above in T-8671 to the monumented section corner T 2N R 1W, 4-5-8-9 which falls in the area of T-8667. Then from the monumented section corner T 2N R 1W, 4-5-8-9 in T-8667, I laid off an arc of 79.8 chains (from G.L.O. plats) to the west. Then from the monumented section corner T 1N-2N R 1W, 5-6-31-32 in T-8671, I extended a line north 00° 42' 5167.89 feet (from survey on file Multnomah County Surveyor) and established the section corner T 2N R 1W, 29-30-31-32. From this corner I extended a line north and south tangent to the arc laid off in T-8667. I then laid off an arc of 5312 feet (from survey on file Multnomah County Surveyor) to the east from monumented section corner T 2N R 1 W, 4-5-8-9 in T-8667. It will be noted that this arc will fall directly on a man made ditch line which indicates that the distance agrees with ground conditions. I then extended a line north and south from the established corner T 1N-2N R 1W, 3-4-33-34 in T-8671 tangent to the arc laid off to the east of the monumented corner in T-8667. I have now well established the three section lines running north and south through the two map manuscripts. I then measured 80 chains (from G.L.O. plats) for each section south along the section line, which runs through the center of the map manuscripts, from the monumented section corner T 2N R 1W, 4-5-8-9 and established corners along this line letting all the error or disagreement with G.L.O. plats fall within the first sections north of the township line T 1N-2N. I then measured 80 chains (from G.L.O. plats) for each section north along the section line, which falls along the west limits of the two map manuscripts, from the section corner T 2N R 1W, 29-30-31-32 and established all the section corners along that line. I then extended lines east and west through these established corners and found that an excellent junction could be made with the land lines of T-8672 as shown on the ozalid print of T-8671 by the reviewer. I then slightly altered the donation land claims in the area of T-8671 to agree with this new location of the section lines.

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Photogrammetric Engineer

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:

9 May 1947

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

From: Lt. Comdr. R. A. Earle

Subject: Review of Map Manuscript T-8672

Reference: Your Letter, 78-RCR, dated 1 May 1947

In accordance with the above reference a detailed study of existing records has been made of land lines on map manuscript T-8672. In making this study records in the offices of the City Surveyor, County Surveyor and County Assessor were consulted.

A sketch made on tracing paper has been attached to the ozalid print of T-8672, which shows the Solomon Richards D.L.C. and part of the J. Sanders D.L.C. The claim of Solomon Richards should be shown on the published map as indicated on the sketch by green crayon lines.

Notes, lines and figures, relative to questions which arose and changes which were made during the Washington Office review of this sheet, are shown in green on the ozalid print.

R. A. Earle
Chief of Party

RAE/gw

WILLIAM BYBEE D. L. C. BOOK 40 P. 153

T-8874/3

T 2 N R 1 W Sec's. 24 and 25

C.W.Burrage Surveyor under his appointment Sept. 14th 1863.

Commenced Sept. 23rd 1863

Var. 21° 30' East

Commenced at a point on the left bank of the Columbia River 20 Chains East of the Sec, Line between Sec's. 23 and 24.

T 2 N R 1 W Set Post
From Which
A Balm 10" in diam. bears South 8°East 29 links
" " 20" " " " " 32° 15' W. 42 links
Thence South

18.60 Line between Sec's. 24 and 25 20.25 West of ¼ Sec. Post.
20.70 Gulch 30 links wide
28.00 East Bank of the Columbia Slough. Course of Slough N. 35° W. and South 35° East. Offset to left 2.50
35.00 East edge of slough 1 chain 43 links to right from offset line
41.50 Offset to the right 2 chains 50 links into line of east bank of slough Course of Slough N. 7° E. and S. 15° 30' W.
55.50 To corner
Set post from which.
A willow 18" in diam. bears N. 30° W. 46 links
" " 11" " " " S. 38° E. 36 links
West
4.50 To the East bank of the Columbia Slough Measured Base Due South 1 Chain Course from end of the base to point over Slough N. 52° W.
5.78 Across Slough
10.00 To Cor. of Claim. Set Post
From which
A willow 12" in diam. bears North 38 links
" " 10" " " " S. 65° 30' 49 links
South
15.25 To the S.W. Cor. of the Claim Set post from which
A willow 4" in diam. bears S. 15° W. 62 links
An Ash 8" " " " N. 10° W 110 links
East
Along the South Boundary of the Claim
4.80 Bank of the Columbia Slough Measured Base South 50 links Course of Point over Slough from end of the Base N. 71° 30' E.
6.30 Across Slough
11.00 To Lake. Offset to left 5.25 chains
15.00 Offset to the right 5.25 chains into line across lake
30.00 To Lake Measured Base S. 10° E. 5 chains. Course from end of Base to point across lake N. 61° 10" E.
39.81 Across the lake
71.40 To Willamette Meridian Set post by fence. from which.
? A cottonwood 34" in diam. bears S. 86° 30' E. 9.47 chains.
No other good bearing tree

North along the Willamette Meridian which forms the East Boundary of the Claim.

16.65 To Mud Slough Measured Base East 1 Chain course from end of Base to point across the slough N 31° W

18.31 Across Slough

30.00 To bank of the Columbia River at Meander Post From Which.
A Willow 14" in diam. bears N.63° 15' W. 26 links
" " 10" " " " S.56° E. 1.69 chains

Thence along the Meanders of the Columbia River down stream as follows

N. 57 15 W 18.00 chains
N. 58 15 W 12.00 chains
N. 55 15 W 10 chains
N. 55 45 W 1.34 chains To line between Sec's. 24 and 25 5.75 Chains East of ¼ Sec. Post.
10.00 chains
N. 54 30 W 5.00 "
N. 55 W 18.22 chains to place of beginning

containing 320.15 acres

True copy from description on file in the Multnomah County Assesor's Office in Portland, Oregon

# NAUTICAL CHARTS BRANCH

SURVEY NO. T.8671 T.8672 T.8673

## Record of Application to Charts

| DATE | CHART | CARTOGRAPHER | REMARKS |
|---|---|---|---|
| Oct. 28/47 | 6155 | Pisegna | ~~Before~~ After Verification and Review T8672 prev. applied Partially applied T8671, T8673 |
| 5/26/48 | 6154 | " | " " " " Partially appld. T8671 2-3) |
| 16 Sept 49 | 6155 | Nichols | ~~Before~~ After Verification and Review Complete application T-8671, 8674 |
| | | | ~~Applied shoreline & hazy Trackmanship Chan. only.~~ |
| 2 Dec 49 | 6155 | Nichols | ~~Before~~ After Verification and Review |
| | | | all completely applied |
| | | | Before After Verification and Review |
| | | | Before After Verification and Review |
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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.