

# 10364

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Diag. Cht. Nos. 5902-2 & 6002-2.6152

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Planimetric (Photogrammetric)

Field No. Ph-155 Office No. T-10364

### LOCALITY

State Oregon

General locality Columbia River

Locality Svensen

19.52.55-1958

### CHIEF OF PARTY

V. Ralph Sobieralski, Chief of Party  
Lorne G. Taylor, Photogrammetric Office

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DATE MAY 1 1962

USCOMM-DC 5087

# 10364

DESCRIPTIVE REPORT - DATA RECORD

T - 10364

Project No. (II): Ph-155      Quadrangle Name (IV):

Field Office (II): Astoria, Oregon  
Seaview, Washington  
Photogrammetric Office (III): Portland, Oregon

Chief of Party: V. Ralph Sobieralski  
Unit Chief: C. D. Upham & W. P. James  
Officer-in-Charge: Lorne G. Taylor

Instructions dated (II) (III): 5 Oct. 1955 )  
12 Oct. 1955 ) II & III  
3 July 1957 )

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Kelsh Instrument

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:5000

Pantograph Scale: 1:10,000

Scale Factor (III): None

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 3/27/62

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows: X  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): BEAR (USE) 1905

Lat.: 46° 10' 30.608"

Long.: 123° 40' 39.360"

Adjusted X  
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

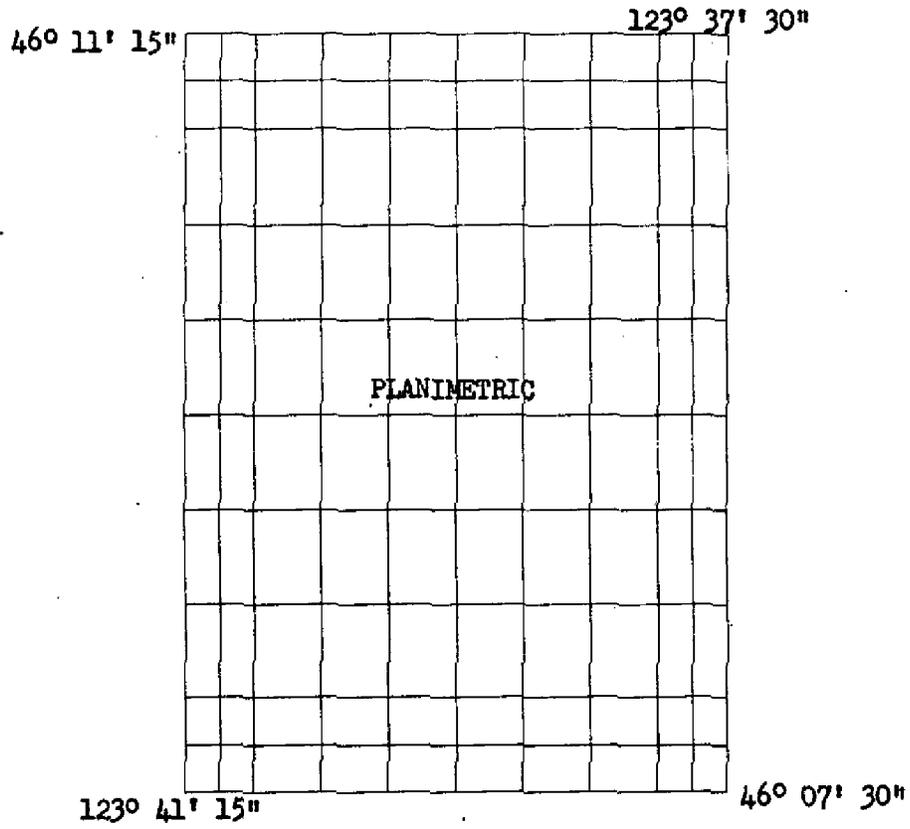
Y= 930,406.78

X= 1,195,127.17

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

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

DESCRIPTIVE REPORT - DATA RECORD



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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): C. D. Upham, E. T. Jenkins  
W. P. James, C. H. Bishop Date: Sept. 1957  
Oct. 1958

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): Located by field inspection in  
Sept. 1957. Compiled by Kelsh Instrument.

Projection and Grids ruled by (IV): J. B. Phillips Date: 9-3-57

Projection and Grids checked by (IV): J. B. Phillips Date: 9-3-57

Control plotted by (III): D. N. Williams Date: 11-20-57

Control checked by (III): L. L. Graves Date: 11-20-57

Radial Plot or Stereoscopic  
Control extension by (III): J. D. Perrow, Jr. Date: 11-28-57

Stereoscopic Instrument compilation (III): Planimetry D. N. Williams Date: 3-6-59

Contours Date:

Manuscript delineated by (III): L. L. Graves (Scribing) Date: 3-28-60  
C. C. Harris, (Stick-up) 7-29-60

Photogrammetric Office Review by (III): J. E. Deal Date: 8-30-60

Elevations on Manuscript  
checked by (II) (III): Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **C&GS Single lens "W"**

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
55-W-8584 thru 8587	6-6-55	10:57		1:10,000 ratio	2.2' above M.L.L.W.
55-W-8608 thru 8610	"	11:10		" "	" "
55-W-9771 & 9772	9-24-55	11:45		1:25,000 contact	4.7' "
55-W-9795 & 9796	"	12:00		" "	" "

Tide (III)

Reference Station: **Astoria (Tongue Point) Oregon**  
 Subordinate Station: **Settlers Point, Oregon**  
 Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
	6.5	8.2
	6.2	7.7

Washington Office Review by (IV):

*A. K. Fitzgerald*

Date: 2/23/62

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

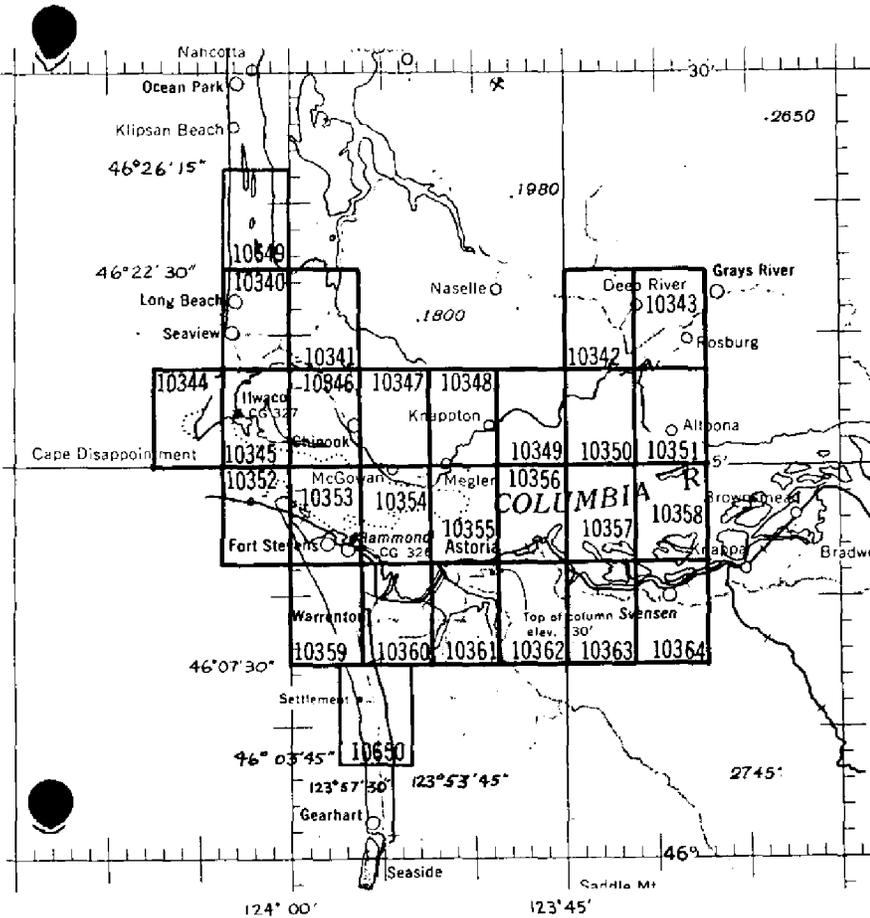
Date:

Land Area (Sq. Statute Miles) (III): **12**  
 Shoreline (More than 200 meters to opposite shore) (III): **12**  
 Shoreline (Less than 200 meters to opposite shore) (III): **3**  
 Control Leveling - Miles (II):  
 Number of Triangulation Stations searched for (II): **10** Recovered: **8** Identified: **7**  
 Number of BMs searched for (II): **6** Recovered: **6** Identified: **1**  
 Number of Recoverable Photo Stations established (III): **2 established & 1 recovered**  
 Number of Temporary Photo Hydro Stations established (III): **None**

Remarks:

# PLANIMETRIC PROJECT PH-155

## MOUTH OF COLUMBIA RIVER, WASH.-OREGON



### OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	LIN. MI. SHORT LINE	AREA SQ. MILES
10340	9	10
10341	8	12
10342	4	13
10343	7	13
10344	6	2
10345	13	3
10346	11	6
10347	3	12
10348	4	11
10349	4	8
10350	6	3
10351	8	9
10352	3	1
10353	9	4
10354	3	1
10355	4	2
10356	5	5
10357	8	1
10358	21	3
10359	5	6
10360	14	11
10361	15	9
10362	8	12
10363	17	10
10364	12	12
10649	8	8
10650	<u>4</u>	<u>8</u>
<b>TOTAL</b>	<b>219</b>	<b>193</b>

## FIELD INSPECTION REPORT

Map Manuscript T-10364

Project Ph-155

Refer to Field Inspection Report for Project Ph-155, Mouth  
of Columbia River to Altoona, July to November 1957. (10 T-10644)

AKA

## PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10364

Project Ph-155

Refer to the Stereoplanigraph Bridge Reports for Strips #1 and #2 which are included in the Descriptive Report for T-10353 (1957).

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

MAP T. 10364. PROJECT NO. Ph-155. SCALE OF MAP 1:10,000. SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $y$ -COORDINATE LONGITUDE OR $x$ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
ORCHARD (USE) 1936	Oreg.N. Office Comp.	N.A. 1927	912,053.67		2053.67	(2946.33)		626.0	(898.0)	
DO	"	"	1,199,380.26		4380.26	(619.74)		1335.1	(188.9)	
Sub Station	"	"	911,984.65		1984.65	(3015.35)		604.9	(919.1)	
JJ 203, 1936 (USE)	"	"	1,199,278.68		4278.68	(721.32)		1304.1	(219.9)	
BEAR (USE) (OREG) 1905	Oreg.N. P-183	"	925,975.26		975.26	(4024.74)		297.3	(1226.7)	
DO	"	"	1,198,206.75		3206.75	(1793.25)		977.4	(546.6)	
Sub Station	"	"	930,406.78		406.78	(4593.22)		124.0	(1400.0)	
INDIAN POINT 2 (OBE) 1935	Oreg.N. P-208	"	1,195,127.17		127.17	(4872.83)		38.8	(1485.2)	
DO	"	"	930,479.73		479.73	(4520.27)		146.2	(1377.8)	
Sub Station	"	"	1,195,179.84		179.84	(4820.16)		54.8	(1469.2)	
H 203, 1936 (USE)	Oreg.N. Office Comp.	"	932,054.16		2054.16	(2945.84)		626.1	(897.9)	
DO	"	"	1,208,175.23		3175.23	(1824.77)		967.8	(556.2)	
Sub Station	"	"	932,055.57		2055.57	(2944.43)		626.5	(897.5)	
FF 203, 1936 (USE)	"	"	1,208,233.04		3233.04	(1766.96)		985.4	(538.6)	
DO	"	"	925,403.83		403.83	(4596.17)		123.1	(1400.9)	
Sub Station	"	"	1,203,231.97		3231.97	(1768.03)		985.1	(538.9)	
D-203, 1936 (USE)	"	"	925,447.71		447.71	(4552.29)		136.5	(1387.5)	
DO	"	"	1,209,937.58		4937.58	(62.42)		1505.0	(19.0)	
Sub Station	"	"	925,497.52		497.52	(4502.48)		151.6	(1372.4)	
K-203, 1936 (USE)	"	"	1,210,044.27		444.27	(4955.73)		13.5	(1510.5)	9
DO	"	"	927,463.75		2463.75	(2536.25)		751.0	(773.0)	
Sub Station	"	"	1,218,621.22		3621.22	(1378.78)		1103.7	(420.3)	
K-203, 1936 (USE)	SVENSON QUAD #63	"	46 09 58.61					1809.7	(42.9)	
DO	"	"	123 40 17.68					379.3	(907.9)	

## COMPILATION REPORT

Map Manuscript T-10364

Project Ph-155

Items 31 and 32:

Refer to Descriptive Report for T-10361 (1957).

33. Supplemental Data:

None.

Items 34 thru 36:

Refer to Descriptive Report for T-10363 (1957).

37. Landmarks and Aids:

There are no landmarks.

Forms 567 are submitted for one fixed aid to navigation.

38. Control for Future Surveys:

One structure was located and one monumented station was recovered and located by Kelsh Instrument. Form 524, Recovery Note, is submitted. These stations are listed under Item 49, Notes to the Hydrographer.

39. Junctions:

Satisfactory junctions were made on the north with T-10358 and on the west with T-10363. On the east a junction was made with T-9267, Project Ph-50 (49) at Longitude  $123^{\circ} 37' 30''$ . All planimetry on T-9267 between Latitudes  $46^{\circ} 10'$  and  $46^{\circ} 11' 15''$  and Longitudes  $123^{\circ} 37' 30''$  and  $123^{\circ} 40'$  is superseded by the planimetry in this area shown on T-10364. There is no contemporary survey to the south.

40. Horizontal and Vertical Accuracy:

Refer to Descriptive report for T-10363 (1957).

46. Comparison with Existing Maps:

Refer to Descriptive Report for T-10363 (1957).

47. Comparison with Nautical Charts:

Refer to Descriptive Report for T-10363 (1957).

Approved:

  
Fred Natella, CAPT, C&GS  
Portland District Officer  
for  
Lorne G. Taylor, CDR, C&GS

Respectfully submitted:

  
J. Edward Deal  
Cartographer

PHOTOGRAMMETRIC OFFICE REVIEW

T-10364

- 1. Projection and grids
- 2. Title
- 3. Manuscript numbers
- 4. Manuscript size

CONTROL STATIONS

- 5. Horizontal control stations of third-order or higher accuracy
- 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)
- 7. Photo hydro stations None
- 8. Bench marks
- 9. Plotting of sextant fixes
- 10. Photogrammetric plot report
- 11. Detail points

ALONGSHORE AREAS

(Nautical Chart Data)

- 12. Shoreline
- 13. Low-water line
- 14. Rocks, shoals, etc.
- 15. Bridges
- 16. Aids to navigation
- 17. Landmarks None
- 18. Other alongshore physical features
- 19. Other along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable contours None
- 23. Stereoscopic instrument contours None
- 24. Contours in general None
- 25. Spot elevations None
- 26. Other physical features

CULTURAL FEATURES

- 27. Roads
- 28. Buildings
- 29. Railroads None
- 30. Other cultural features

BOUNDARIES

- 31. Boundary lines None
- 32. Public land lines None

MISCELLANEOUS

- 33. Geographic names
- 34. Junctions
- 35. Legibility of the manuscript
- 36. Discrepancy overlay None
- 37. Descriptive Report
- 38. Field inspection photographs
- 39. Forms

40. \_\_\_\_\_  
 Reviewer Edward Deal  
 Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

\_\_\_\_\_  
 Compiler Supervisor

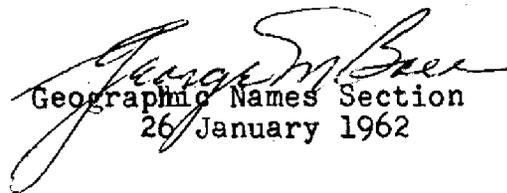
43. Remarks:



48. Geographic Names:

Bear Creek  
Burnside  
Calender Slough  
Ferris Creek  
Marys Creek  
Minaker Island  
Prairie Channel  
Russian Island  
\*Settler Point  
South Channel  
\*Svensen  
\*Svensen Island  
Svensen Junction  
Svensen Slough

\* B.G.N. Decision

  
Geographic Names Section  
26 January 1962

Map Manuscript T-10364

49. Notes to the Hydrographer:

Two recoverable topographic stations were located by Kelsh instrument. They are:

SIL0, 1957  
B.M. 11, 1945

The triangulation stations shown were recovered and identified during field inspection.

One aid to navigation was located by Kelsh Instrument.

Svensen Island Light 12A, 1957

**REVIEW REPORT**  
**T-10352 through 10364 and T-10650**  
**Planimetric December 18, 1961**

**62. Comparison with Registered Topographic Surveys**

Map No.	Scale	Year	Map No.	Scale	Year
317	1:22,962	1850-51	1806	1:10,000	1887
1112	1:10,000	1868	4226	1:20,000	1926
1123	"	1868	4250	"	"
1138	"	1869	4251	"	"
1139a&b	"	1869	4263	1:10,000	1926
1234	"	1870	4264	"	"
1235	"	1870	6521a	"	"
1249	"	1870	6521b	"	1936

The manuscripts covered by this review report supersede the surveys listed above for purposes of nautical chart construction.

**63. Comparison with Maps of Other Agencies**

Comparison was made with the latest existing maps during the photogrammetric review. Each report lists under "Comparison with Maps, etc." the quadrangles that were used.

**64. Comparison with Contemporary Hydrographic Surveys**

Where applicable, each map was compared with the latest hydrographic survey. All available hydrographic surveys are unverified. Discrepancies are listed under the heading of each map. If the map is not listed, no discrepancies exist during review.

T-10352 - The submerged rocks shown on the manuscript which appear to once have been part of the jetty were compiled in the photogrammetric office from a U.S. Engineer Survey dated 1956. This feature was not developed by hydro on sheets H-8421 through H-8423. See the Descriptive Report for this survey for details.

T-10354 - A pile is shown on the manuscript above MHW whereas hydro shows this pile submerged at latitude 46°14'37" and longitude 123°55'16". The pile was field inspected.

T-10356 - A rock is shown on the manuscript as awash MHW and on hydro sheet H-8420 as (4) with a position difference of approximately 5 meters. The rock is located at latitude 46°12'45" and longitude 123°45'18". The height of the rock was given by the field inspector.

T-10357 - Piles and/or shags shown on Chart 6151 in the vicinity of latitude  $46^{\circ}13'30''$  and longitude  $123^{\circ}42'30''$  and latitude  $46^{\circ}12'30''$  and longitude  $123^{\circ}42'30''$  are not shown on the unverified smooth sheet. They are too far offshore for photogrammetric location.

#### 65. Comparison with Nautical Charts

Comparison was made with Charts 6151 and 6152, 34 Edition October 10, 1960 corrected June 26, 1961. Nautical Charts did not use these surveys for the construction of the new edition. Many minor changes in offshore features and planimetric detail were noted. Only dangers to navigation or significant changes in detail have been noted for each sheet.

T-10354 - Some differences were noted in; shoreline features in the vicinity of Hammond at latitude  $46^{\circ}11'30''$ , longitude  $123^{\circ}56'00''$ . The pile area in the vicinity of latitude  $46^{\circ}12'30''$ , longitude  $123^{\circ}52'30''$  is incomplete. It is a shoal area and of no danger to navigation.

T-10361 - A difference exists in the position of a shag at latitude  $46^{\circ}11'03''$  and longitude  $123^{\circ}51'46''$  in Youngs Bay. Landmark "Drum" should be deleted from Chart as recommended on Form 567.

#### 66. Adequacy of Results and Future Surveys

These maps comply with instructions and meet National Standards of Map Accuracy.

Respectfully submitted:

A. K. Hayward  
A. K. Hayward

Approved:

L. C. Rande  
Chief, Review and Edit Sec.

Marvin Paulson  
Chief, Div. of Nautical Charts

J. E. Waugh 6/6/62  
Chief, Div. of Photogrammetry

Max Skiffet  
Chief, Div. of Coastal Surveys  
Operations

