10357

Original

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

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-10357

LOCALITY

State Oregon

General locality Columbia River

Locality Cathlamet Bay

19 57

CHIEF OF PARTY

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

DATE

USCOMM-DC 5087

10357

FORM 181
(4-23-54)

2. U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T - 10357

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
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): Graphic and Kelsh Instrument

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:5000
Pantograph Scale: 1:10,000

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date:

Date registered (IV): 3/20/62

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): Refer to T-10356 (All triangulation stations on this manuscript are structures and cannot be occupied.)

Lat.: Long.: Adjusted
Unadjusted

Plane Coordinates (IV): State: Zone:

Y= X=

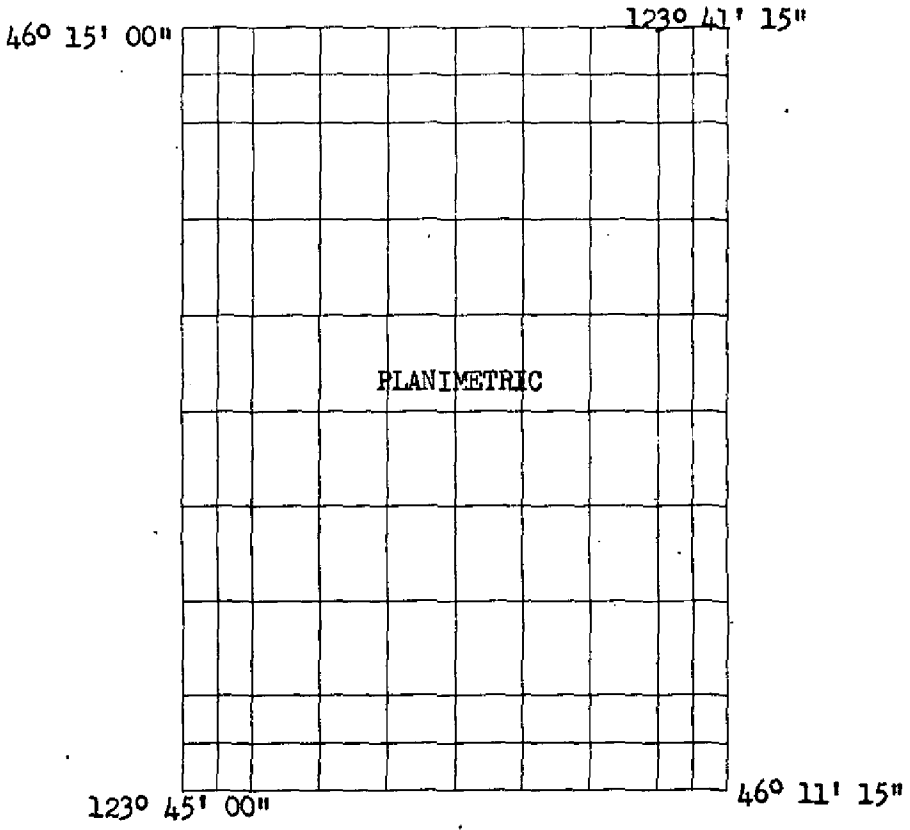
Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

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

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD



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

FORM 181b
(4-23-54)

4.

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

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

Planetable contouring by (II):
Date:

Completion Surveys by (II): Supplementary aids determined
Date: 1958

Mean High Water Location (III) (State date and method of location): Nov. 1958 by field inspection and compilation by Kelsh Instrument.

Projection and Grids ruled by (IV): J. R. Haskins
Date: 9-10-57

Projection and Grids checked by (IV): J. B. Phillips
Date: 9-11-57

Control plotted by (III): D. N. Williams
Date: Nov. 1957

Control checked by (III): L. L. Graves
Date: Nov. 1957

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

Stereoscopic Instrument compilation (III):
Planimetry D. N. Williams
L. L. Graves
Date: 1-10-58
Contours
Date:

Manuscript delineated by (III): L. L. Graves, Scribing
C. C. Harris, Stick-up
Date: 3-7-60
6-22-60

Photogrammetric Office Review by (III): C. C. Harris
Date: June 1960

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

COMM-DC-57842

FORM 181c
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

5. U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
55-W-9811 & 9812	9-24-55	12:16	1:25,000 Contact	3.4' above M.L.L.W.

Tide (III)

Ratio of Ranges	Mean Range	~~Spring~~ Diurnal Range
	6.5	8.2

Reference Station: Astoria (Tongue Point) Oregon
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): D. K. Hegwood Date: 2/23/56

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

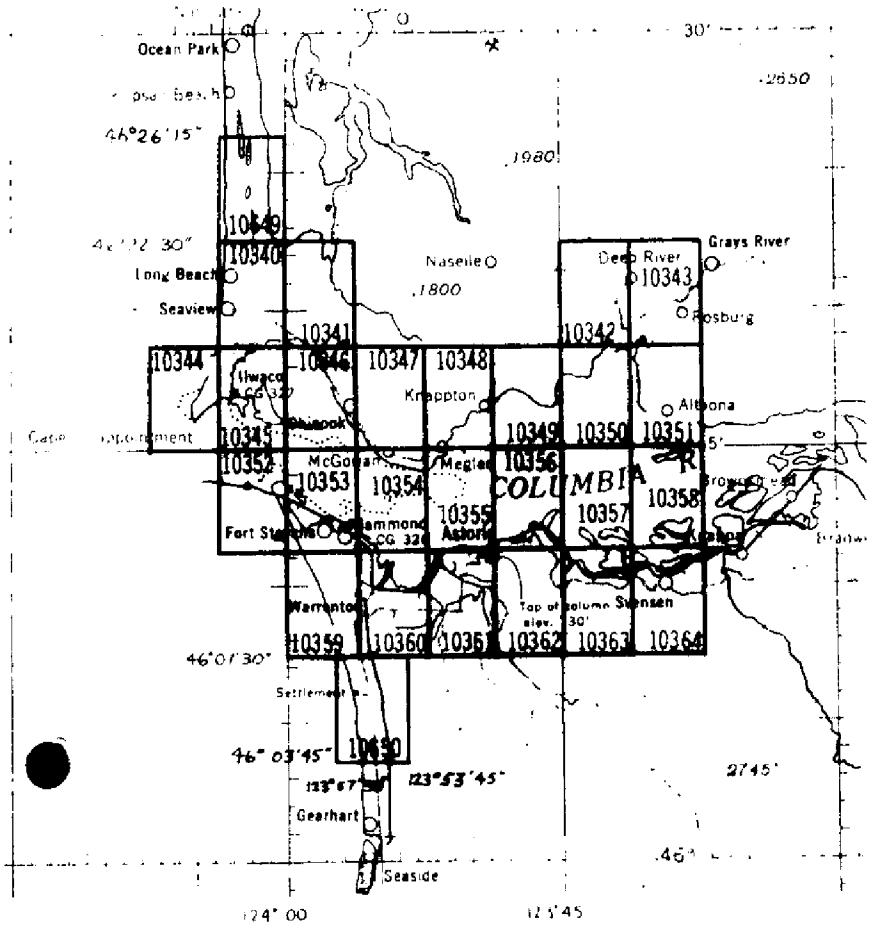
Land Area (Sq. Statute Miles) (III): 1
Shoreline (More than 200 meters to opposite shore) (III): 8
Shoreline (Less than 200 meters to opposite shore) (III): None
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 9 Recovered: 5 Identified: 5
Number of BMs searched for (II): None Recovered: Identified:
Number of Recoverable Photo Stations established (III): 2
Number of Temporary Photo Hydro Stations established (III): 6

Remarks:

COMM-DC-57842

PLANIMETRIC PROJECT PH-155

MOUTH OF COLUMBIA RIVER WASH OREGON



OFFICIAL TILEAGE FOR COST ACCOUNT		
SHEET NO.	LIN. MI. SHOR LINE	AREA SQ. MILES
10340	9	10
10341	8	12
10342	4	13
10343	[illegible]	13
10344	[illegible]	4
10345	13	3
10346	11	6
10347	3	12
10348	4	11
10349	4	8
10350	6	3
10351	5	9
10352	3	1
10353	[illegible]	4
10354	[illegible]	1
10355	[illegible]	2
10356	5	5
10357	[illegible]	1
10358	21	3
10359	5	6
10360	12	11
10361	15	9
10362	[illegible]	12
10363	13	10
10364	14	12
10649	8	8
10650	4	8
TOTAL	219	193

FIELD INSPECTION REPORT

Map Manuscript T-10357

Project Ph-155

Refer to Field Inspection Report for Project Ph-155, Mouth of Columbia River to Altoona, July to November 1957. (H T-10699) NKA

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10357

Project Ph-155

Refer to the Stereoplanigraph Bridge Reports for Strips #2 and #3 which are included in the Descriptive Report for T-10353 (1957).

FORM 164
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

AST AND GEODETIC SURVEY
NTROL RECORD

MAP T- 10357 PROJECT NO. Ph-155 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
GRASSY ISLAND LIGHT 8A, (OREG) 1958	Field Comp.	N.A. 1927	46 11 35.23 123 41 21.37			1087.8 (764.8) 458.3 (828.4)	
PRAIRIE CHANNEL LIGHT 3 (OREG) 1958	"	"	46 11 45.42 123 43 12.66			1402.4 (450.2) 271.5 (1015.1)	
HARRINGTON POINT CHANNEL LIGHT 54 1958	"	"	46 14 34.77 123 41 39.15			1073.6 (779.0) 838.7 (446.7)	
HARRINGTON POINT CHANNEL LIGHT 52 1958	"	"	46 14 03.72 123 42 46.78			114.9 (1737.7) 1002.4 (283.3)	
TONGUE POINT CROSSING LIGHT 49 (OREG) 1958	"	"	46 13 48.80 123 44 06.69			1506.7 (345.8) 143.4 (1142.4)	

1 FT. = .3048006 METER

COMPUTED BY: J.E.D. DATE 10-15-57 CHECKED BY: D.N.W. DATE 10-17-57

COMM-DC-57843

COMPILATION REPORT

Map Manuscript T-10357

Project Ph-155

31. Delineation:

The Kelsh Instrument was used to compile the planimetry. A number of points were identified and located by Kelsh Instrument which were used in sextant fix locations of details not visible on the photographs. The field inspection was adequate.

32. Control:

Horizontal control was adequate.

33. Supplemental Data:

None.

34. Contours and Drainage:

Contours are not applicable.

All of the planimetry for this manuscript is either reclaimed land, mud flats or marsh areas. There were no drainage patterns evident.

35. Shoreline and Alongshore Details:

These features were adequately field inspected and compiled without difficulty.

Foreshore areas are shown where visible on the photographs.

Approximate low-water lines could not be ascertained from the photography.

36. Offshore Details:

The water area contains many mud flats which bare at low water. Many of these could not be ascertained from the photography and are therefore not shown. For the same reason Woody Island South Channel and Woody Island Channel could not be compiled.

37. Landmarks and Aids:

There are no landmarks.

Forms 567 are submitted for fixed aids to navigation.

38. Control for Future Surveys:

Eight structures were located by Kelsh Instrument and are listed in Item 49, Notes to the Hydrographer.

39. Junctions:

On the north is the Columbia River and no junction of planimetry is required for T-10350. Satisfactory junctions were made with T-10356 on the west, T-10358 on the east and T-10363 on the south.

40. Horizontal and Vertical Accuracy:

Vertical accuracy is not applicable. There are no areas that are believed to be of sub-normal accuracy.

46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 7½ minute Cathlamet Bay, Oreg. quadrangle, Scale 1:24,000, published in 1949.

47. Comparison with Nautical Charts:

Comparison was made with Nautical Chart No. 6151, 34th Edition Oct. 10, 1960, Corrected through Jan. 7, 1961 and Nautical Chart No. 6002, Scale 1:180,789, 10th Edition July 9, 1942, Revised May 23, 1960, Corrected through Jan. 7, 1961.

Items to be Applied to Nautical Charts Immediately.

None.

Item to be Carried Forward.

None.

Approved:

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

Respectfully submitted:

J. Edward Deal
Cartographer

49. Notes to the Hydrographer:

Fixed aids to navigation are listed on Forms 567 which are submitted.

There are several natural objects shown which were identified in the field and which may be of use as hydrographic signals. The points are labeled on the manuscript as follows:

P.P.A., P.P.B., P.P.C., P.P.G., P.P.J., and P.P.H. which are transmission power poles and Dolphin #1.

The temporary dredging daybeacons shown were located by sextant fix and these may also be of use as hydrographic signals.

Two ship Anchoring Range Markers were located by Kelsh Instrument.

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-10357

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 ✓ 8. Bench marks None
9. Plotting of sextant fixes ✓ 10. Photogrammetric plot report ✓ 11. Detail points ✓

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line None 14. Rocks, shoals, etc. ✓ 15. Bridges None 16. Aids to navigation ✓ 17. Landmarks None 18. *Other alongshore physical features* ✓ 19. Other alongshore 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 ✓ 37. Descriptive Report ✓ 38. Field inspection photographs ✓ 39. Forms ✓

40. _____ (Reviewer) J. 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:

M-2623-12

Form (10-15)

U.S DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

T-10357

NONFLOATING AIDS [redacted] FOR CHARTS

TO BE CHARTED
[redacted]
} STRIKE OUT TWO

Portland, Oregon 9 Aug. 1961

I recommend that the following objects which have [redacted] been inspected from seaward to determine their value as landmarks be charted on [redacted] the charts indicated.

The positions given have been checked after listing by J. E. Deal

Fred Hatella *Chief of Party.*

STATE OREGON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE* ° ′	POSITION LATITUDE* ″ D.M. METERS	POSITION LONGITUDE* ° ′	POSITION LONGITUDE* ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
LIGHT	Tongue Point Crossing Light 49	1030	46 13	48.80 1506.7	123 44	06.69 143.4	N.A. 1927	Triangulation	1958		X		6151
LIGHT	Harrington Point Channel Light 52	1035	46 14	03.72 114.9	123 42	46.78 1002.4	"	"	"		X		"
LIGHT	Harrington Point Channel Light 54	1036	46 14	34.77 1073.6	123 41	39.15 838.7	"	"	"		X		"
LIGHT	Prairie Channel Light 3	1602	46 11	45.42 1402.4	123 43	12.66 271.5	"	"	"		X		"
LIGHT	Grassy Island Light 8A	1603	46 11	35.29 1087.6	123 41	21.37 458.3	"	"	"		X		"
	Note: The above geographic positions are from unadjusted field computations.												

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. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

USCOMM-DC 27128

48. Geographic Names:

Cathlamet Bay
Columbia River
Grassy Island
Harrington Point Range
John Day Channel
Mott Island
North Channel
Prairie Channel
Tongue Point Channel

Geographic Names Section
1 February 1962

T-10357 - Piles and/or snags shown on Chart 6151 in the vicinity of latitude 46°13'30" and longitude 123°42'30" and latitude 46°12'30" and longitude 123°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°11'30", longitude 123°56'00". The pile area in the vicinity of latitude 46° 12'30", longitude 123°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 snag at latitude 46°11'03" and longitude 123°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. Heywood

Approved:

Chief, Review and Edit Sec.

Chief, Div. of Nautical Charts

Chief, Div. of Photogrammetry

Chief, ~~Div. of Coastal Surveys~~ Operations

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.

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10357

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.