

10356

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-10356

LOCALITY

State Oregon

General locality Columbia River

Locality Tongue Point

1957

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE **MAY 1 1962**

USCOMM-DC 5087

10356

DESCRIPTIVE REPORT - DATA RECORD

T - 10356

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 & C. H. Bishop
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 Stereoscopic Instrument & Graphic

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): X

Mean sea level except as follows:
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): OLD TONGUE 3, 1947

Lat.: 46° 12' 46.411

Long.: 123° 45' 23.183"

Adjusted X
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

Y= 944,948.35

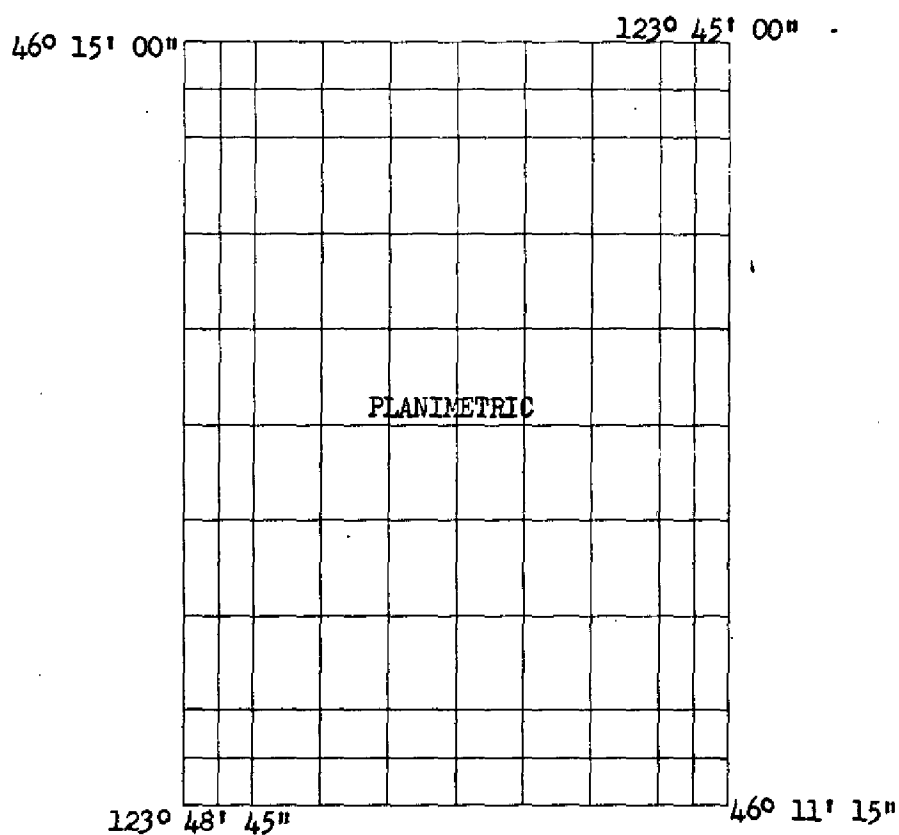
X= 1,175,722.46

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

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY



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

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 landmark determined Date: 1958

Mean High Water Location (III) (State date and method of location): Sept. 1957 and Nov. 1958 by field inspection and compilation by Kelsh Instrument and graphic methods.

Projection and Grids ruled by (IV): J. R. Haskins

Date: 9-10-57

Projection and Grids checked by (IV): J. B. Phillips

Date: 9-10-57

Control plotted by (III): D. N. Williams

Date: 11-27-57

Control checked by (III):

L. L. Graves

Date: 11-29-57

Radial Plot or Stereoscopic
Control extension by (III):

John D. Perrow, Jr.
L. L. Graves, Radial Plot

Date: 11-28-57
Jan. 1958

Stereoscopic Instrument compilation (III):

Planimetry D. N. Williams

Date: 1-13-58

Contours

Date:

Manuscript delineated by (III):

L. L. Graves, Scribing
C. C. Harris, Stick-up

Date: 2-12-59
4-12-59 &
6-20-60

Photogrammetric Office Review by (III): J. E. Deal

Date: July 1960

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS Single lens "W" Camera and nine lens camera

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
55-W-8626 thru 8628	6-6-55	11:25	1:10,000 ratio	3.2' above M.L.L.W.
55-W-9813 thru 9815	9-24-55	12:17	1:25,000 contact	3.4' " "
34385	10-25-51	11:43	1:10,000	5.6' " "

Tide (III)

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

Ratio of Ranges	Mean Range	Diurnal Spring Range
	6.5	8.2

Washington Office Review by (IV):

A. K. Huxford

Date: 2/23/62

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

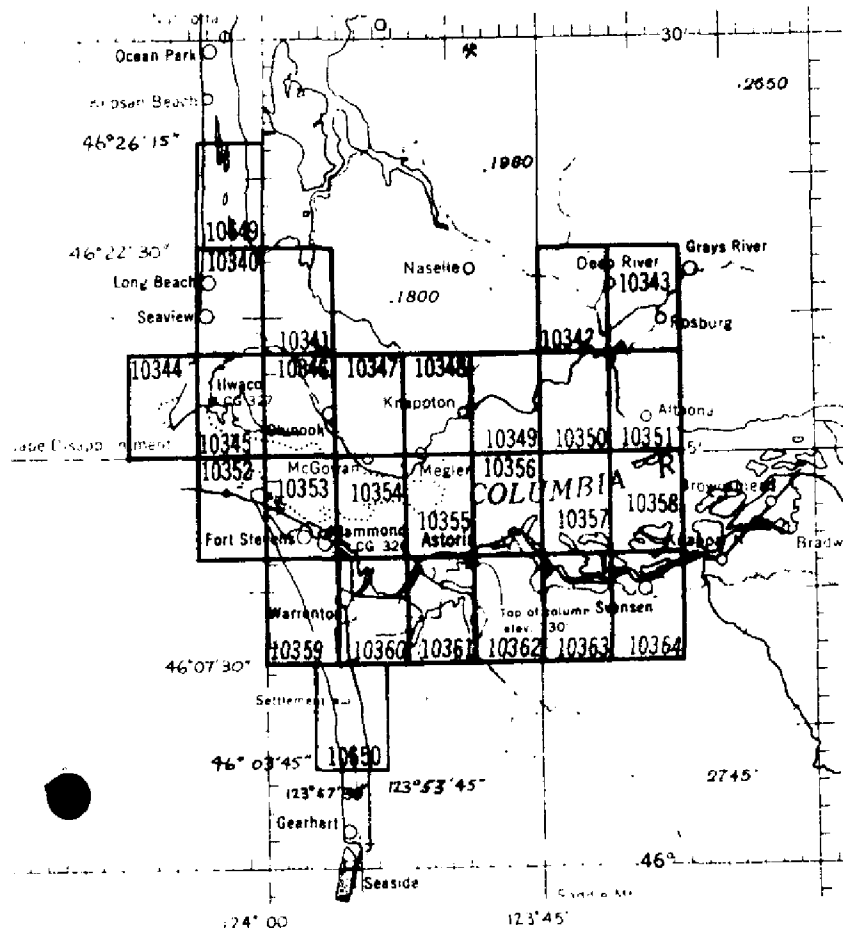
Land Area (Sq. Statute Miles) (III): 5
Shoreline (More than 200 meters to opposite shore) (III): 5
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 15 Recovered: 8 Identified: 4
Number of BMs searched for (II): 9 Recovered: 9 Identified: 3
Number of Recoverable Photo Stations established (III): 1
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 MILES	AREA SQ. MILES
10340	9	10
10341	8	12
10342	4	13
10343	7	12
10344	7	2
10345	13	3
10346	11	6
10347	3	12
10348	4	11
10349	4	8
10350	6	3
10351	1	9
10352	3	1
10353	9	4
10354	3	1
10355	7	2
10356	5	5
10357	1	1
10358	21	3
10359	5	6
10360	14	11
10361	15	9
10362	8	12
10363	17	10
10364	14	12
10649	8	8
10650	<u>4</u>	<u>8</u>
TOTAL	219	193



FIELD INSPECTION REPORT

Map Manuscript T-10356

Project Ph-155

Refer to Field Inspection Report for Project Ph-155, "Mouth
of Columbia River to Altoona", July to November 1957. (in T-10649)

AXK

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10356

Project Ph-155

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

A small hand templet radial plot was run to supplement the above control extension. Nine lens photographs taken in 1951 and single lens field prints taken in 1955 were used. Satisfactory results were obtained.

Approved:



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

Respectfully submitted:



G. Edward Deal
Cartographer

COMPILATION REPORT

Map Manuscript T-10356

Project Ph-155

31. Delineation:

Most of the planimetry was compiled with the Kelsh Instrument. Graphic methods were used for areas outside the limits of the Kelsh models. Field inspection was adequate.

32. Control:

Identified horizontal control stations, and pass points located in stereoplanigraph bridge and by radial plot were adequate.

33. Supplemental Data:

Map of Astoria, Oregon. Scale 1" = 1500' Approx.

Composite Map, U. S. Naval Station, Tongue Point, Astoria, Oregon, Scale 1" = 450' Approx.

34. Contours and Drainage:

Contours are not applicable.

Drainage was compiled as field inspected with reference to the U.S.G.S. Astoria, Ore. - Wash. 7½ minute quadrangle.

35. Shoreline and Alongshore Details:

The mean high-water line and alongshore details were adequately field inspected and were compiled without difficulty.

Foreshore areas visible on the photographs were compiled and properly symbolized or labeled.

Approximate low-water lines were not visible on the photography.

36. Offshore Details:

Piling and ruins of piling lie offshore from Tongue Point.

Several wrecks shown on Chart 6151 are not visible on the photographs.

37. Landmarks and Aids to Navigation:

Forms 567 are submitted for one landmark and one aid to navigation.

38. Control for Future Surveys:

None.

39. Junctions:

On the north is the Columbia River and no junction of planimetry was required with T-10349. Satisfactory junctions were made on the west with T-10355, on the east with T-10357 and on the south with T-10362.

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 Astoria, Oreg. - Wash. 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, 19th Edition July 9, 1942, Revised May 23, 1960, Corrected through Jan. 7, 1961.

Items to be applied to nautical charts immediately.

None.

Items to be carried forward.

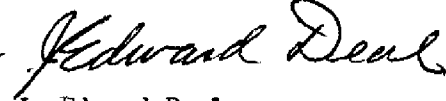
None.

Approved:

Respectfully submitted:



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



J. Edward Deal
Cartographer

Map Manuscript T-10356

49. Notes to the Hydrographer:

No recoverable topographic stations were located.

TONGUE POINT LIGHT 1957 was located with the Kelsh instrument.

The offshore features were located by sextant fix.

When locating photo-hydro signals use 9-lens photograph No. 34385 and field photographs 55 W 8627 and 8628 along with office ratio prints 55 W 9813 and 9814.

PHOTOGRAMMETRIC OFFICE REVIEW

T-10356

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 None 14. Rocks, shoals, etc. ☒ 15. Bridges None 16. Aids to navigation ☒ 17. Landmarks ☒ 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 ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 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

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

Astoria
Cathlamet Bay
Columbia River
Mill Creek
Mott Basin
Navy Heights
Port of Astoria Mooring Base
Spokane, Portland and Seattle
Tongue Neck
Tongue Point
Tongue Point Naval Base
Tongue Neck
Tongue Point Village


Geographic Names Section

1 February 1962

The positions given have been checked after listing by

Fred Matella *Chief of Party.*

USCOMM-DC 27126

9 Aug. 1961

NONFLOATING AIDS TO NAVIGATION FOR CHARTS

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

Fred Metalla *Chief of Party.*

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation 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

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. Haywood
A. K. Haywood

Approved:

R. C. Lande
Chief, Review and Edit Sec.

Marvin T. Hansen
Chief, Div. of Nautical Charts

J. E. Waugh
Chief, Div. of Photogrammetry

G. L. Mast 8/2/62
Chief, Div. of Coastal Surveys
Operations

NAUTICAL CHARTS BRANCH

SURVEY NO. T-110356

Record of Application to Charts

[illegible]

M-2168-1

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