

10352

Original

Diag. Cht. Nos. 5902-2 and 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-10352
LOCALITY	
State	Oregon
General locality	Columbia River
Locality	Clatsop Spit
19.57	
CHIEF OF PARTY	
V. Ralph Sobieralski, Chief of Party	
Lorne G. Taylor, Photogrammetric Office	
LIBRARY & ARCHIVES	
DATE	MAY 1 1967

USCOMM-DC 5087

10352

DESCRIPTIVE REPORT - DATA RECORD

T - 10352

Project No. (II): Ph-155

Quadrangle Name (IV):

Field Office (II): Astoria, Oregon

Chief of Party: V. Ralph Sobieralski

Unit Chief: C. D. Upham

Photogrammetric Office (III): Portland, Oregon

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

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

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:
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): EAST JETTY 2 (USE) 1956

Lat.: 46° 13' 31.984"

Long.: 124° 00' 26.062"

Adjusted X
Unadjusted

Plane Coordinates (IV):

State: Oregon

Zone: North

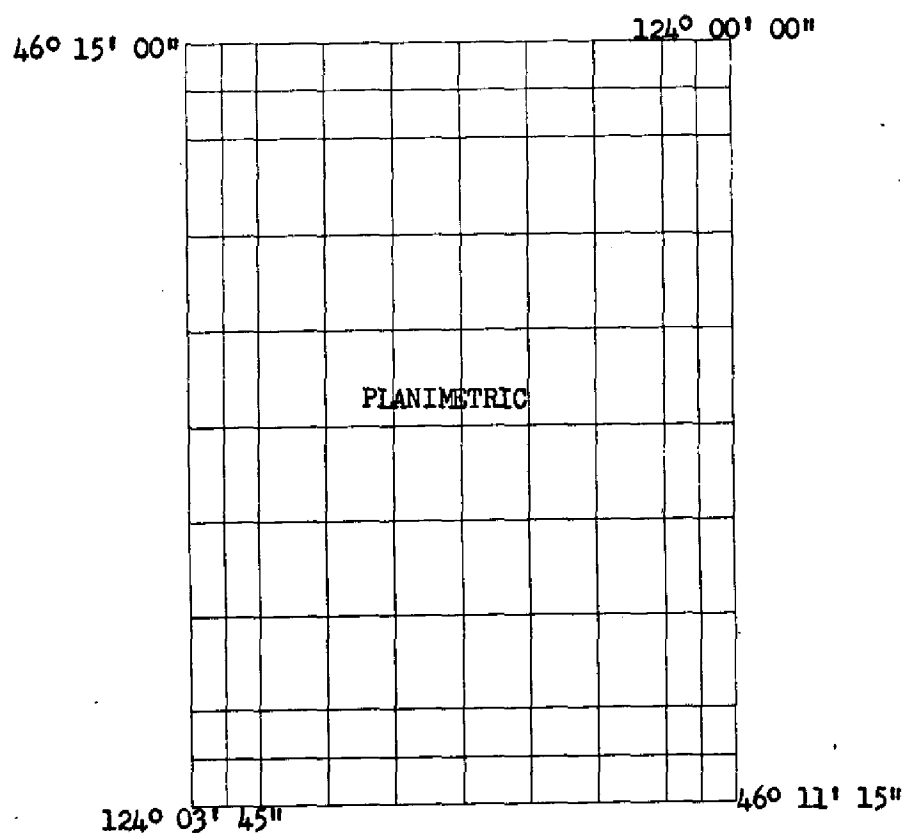
Y= 952,218.14

X= 1,112,478.28

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)
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): C. D. Upham & W. P. James

Date: Sept. 1957

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): Sept. 1957 by field inspection and compilation by radial plot. Mean High Water location around South Jetty is from U. S. Engineer photogrammetric topography from Aerial photographs dated 12 June 1956.

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

Date: 9-6-57

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

Date: 9-6-57

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

Date: 11-19-57

Control checked by (III): L. L. Graves

Date: 11-19-57

Radial Plot or Stereoscopic
Control extension by (III): J. E. Deal & D. N. Williams

Date: 12-13-57

Planimetry D. N. Williams
Stereoscopic Instrument compilation (III):
Contours

Date: 1-24-58

Date:

Manuscript delineated by (III): D. N. Williams, Scribing
C. C. Harris, Stick-up

Date: 2-23-60
6-25-60

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

Date: July 1960

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

5.

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Camera (kind or source) (III): USC&GS 9 lens
USC&GS Single lens L

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
34349 & 34350	10-25-51	11:03	1:10,000	3.0' above M.L.L.W.
57-L-1816	8-18-57	14:44	1:25,000	5.4' " "

Tide (III)

Reference Station: Astoria, Oregon
Subordinate Station: Entrance, N. Jetty, Columbia River
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	6.5	8.2
	6.0	7.6

Washington Office Review by (IV):

Date: 2/23/02

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

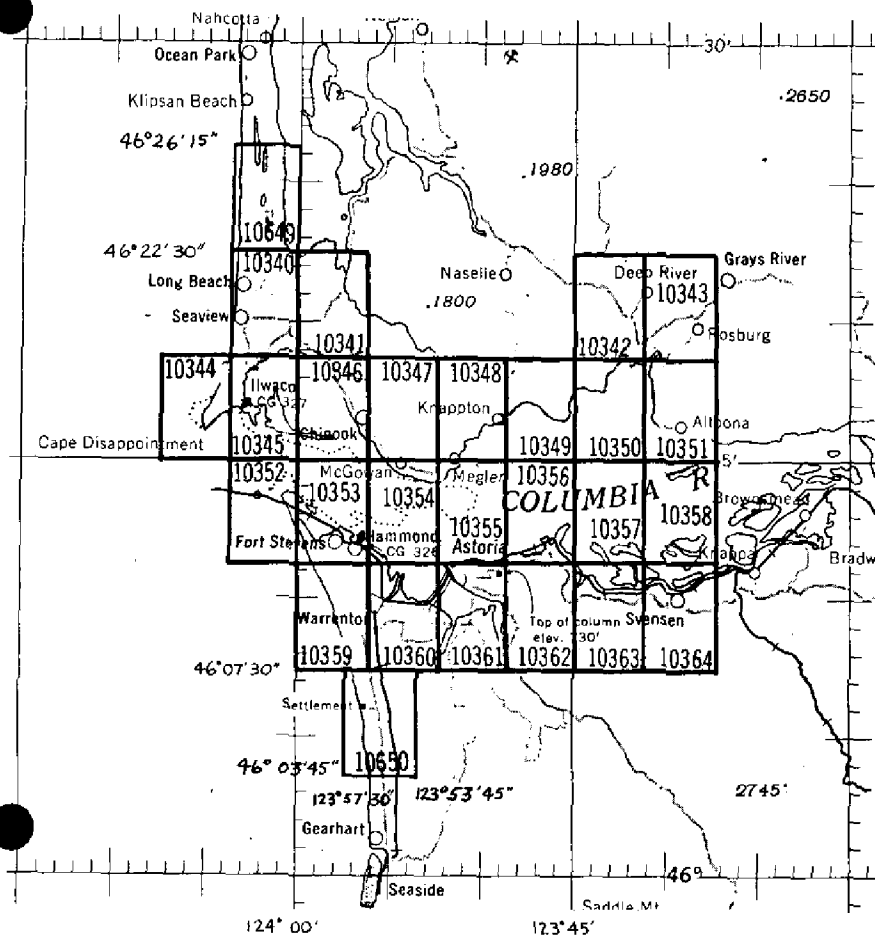
Proof Edit by (IV):

Date:

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

Remarks:

PLANIMETRIC PROJECT PH-155 MOUTH OF COLUMBIA RIVER, WASH. OREGON



OFFICIAL MILEAGE FOR COST ACCOUNT

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>
TOTAL	219	193

FIELD INSPECTION REPORT

Map Manuscript T-10352

Project Ph-155

Refer to Field Inspection Report for Project Ph-155, "Mouth
of Columbia River to Altoona", July 1957 to November 1957. (1A T-10352)

AKH

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10352

Project Ph-155


A Stereoplanigraph Bridge was not run for the area of this manuscript.

In order to extend the horizontal control a special radial plot was run using nine lens photographs which were taken on October 25, 1951. These photographs spanned the mouth of the Columbia River and identified horizontal control stations on both shores were utilized. Two U. S. Engineers stations located on the south jetty were used to supplement the C&GS control. Hand templets were used and a very satisfactory radial plot was accomplished.

Approved:

Fred Natella, CAPT, C&GS
Portland District Officer

Respectfully submitted:


J. Edward Deal
Cartographer

COMPILATION REPORT

Map Manuscript T-10352

Project Ph-155

31. Delineation:

Pass points common to both the nine lens photography taken in 1951 and the single lens photography of 1955 were located by the radial line method using the nine lens photographs. Compilation was accomplished from data furnished by the field unit on 1955 photography. Both sets of photographs were utilized when compiling details.

Refer to Item 35, Shoreline and Alongshore Details for description of compilation methods for the "South Jetty".

32. Control:

Horizontal control was adequate.

33. Supplemental Data:

a. Photostats of topographic survey of South Jetty, Mouth of Columbia River, by U. S. Engineers, Photography dated 12 June 1956.

34. Contours and Drainage:

Contours are not applicable.

The only drainage within the land area of this manuscript is a small marsh area which was field inspected.

35. Shoreline and Alongshore Details:

The mean high water line around South Jetty was compiled from a topographic survey of this feature by the U. S. Engineers, who compiled it at a scale of 1 inch equals 200 feet from aerial photographs dated 12 June 1956. The datum of this survey was mean lower low water and the contour interval two feet. The 7.6 foot contour (mean high water) was interpolated and transferred to the 1:10,000 scale manuscript by means of a vertical projector, using the following points as control:

U.S.E. Picture Point at "S" Curve on Jetty 1957
TRESTLE (USE) 1956
U.S.E. Picture Point on Jetty 1957

Other features were adequately field inspected and no trouble was encountered during the compilation work.

The low-water line could not be determined from the photographs and was not mapped.

36. Offshore Features:

Two submerged wrecks shown on Nautical Chart No. 6151 in the Columbia River northwest of Clatsop Spit were not observed during field inspection and were not visible on the photographs.

37. Landmarks and Aids:

Form 567 is submitted for one landmark. There are no fixed aids to navigation within the area of this manuscript.

38. Control for Future Surveys:

Two objects are shown as recoverable topographic stations. These are:

U.S.E. Picture Point at "S" Curve on Jetty 1957
U.S.E. Picture Point on Jetty 1957

39. Junctions:

Satisfactory junctions were made with T-10345 on the north and T-10353 on the east. The Pacific Ocean is to the west and south.

40. Horizontal and Vertical Accuracy:

Vertical accuracy is not applicable.

There are no areas that are believed to be of sub-normal horizontal accuracy.

46. Comparison with Existing Maps:

Comparison was made with U.S.G.S. 7½ minute quadrangle, Clatsop Spit, Oregon, Scale 1:24,000, published in 1951.

47. Comparison with Nautical Charts:

Comparison was made with Nautical Chart No. 6151, Scale 1:40,000, 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.

Items to be carried forward.

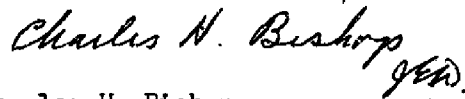
None.

Approved:



Fred Natella, CAPT, C&GS
Portland District Officer

Respectfully submitted:



Charles H. Bishop
Surveying Technician

Map Manuscript T-10352

49. Notes to the Hydrographer:

No recoverable topographic stations were located in the area of this map manuscript.

There are two picture points (U.S.B.) shown on the south jetty which were located by observations and Oreg. North Zone State coordinates were computed. These held satisfactorily along with C&GS horizontal control in a control extension over a large area which utilized 1951 nine lens and 1955 single lens photography. These two points are indicated on Field Photograph 55 W 8640. It may be possible to use these two points for hydrographic control.

The mean high-water line for the jetty was transferred to the map manuscript from a Balplex topographic compilation, Scale 1"=200', and contour interval 2 feet made in 1957 by the Portland District U. S. Engineers Office. The U. S. Engineer picture point at the "S" curve of the jetty was not held in this compilation but the compilation was satisfactorily adjusted to the compilation for T-10352.

When locating additional photo-hydro control 9-lens photographs No's. 34349 and 34350 should be used along with all available single lens photographs.

PHOTOGRAMMETRIC OFFICE REVIEW

T-10352

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 None 9. Plotting of sextant fixes None 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 None 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 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_____
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

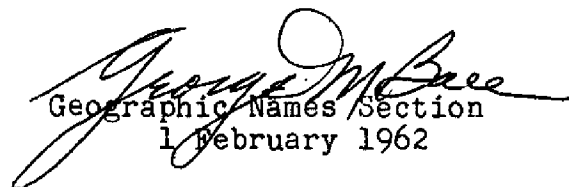
43. Remarks:

M-2623-12

T-10352

48. Geographic Names:

Clatsop Spit
Columbia River
South Jetty


Geographic Names Section
1 February 1962

U. S. GOVERNMENT PRINTING OFFICE: 1949 O - 853418

STRIKE OUT ONE

MONTHLY CHARTING AND/OR LANDMARKS FOR CHARTS

Portland, Oregon

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

The positions given have been checked after listing by Charles H. Bishop

Fred Natella *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, 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.

STRIKE OUT ONE

25 July, 19 61

NOT REPRODUCIBLE

The positions given have been checked after listing by **Charles H. Bishop**

Fred Natella *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, 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.

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 snag 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. Heywood
A. K. Heywood

Approved:

L. A. Londe
Chief, Review and Edit Sec.

M. J. Hansen
Chief, Div. of Nautical Charts

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

G. B. Mast 8/13/62
Chief, Div. of Coastal Surveys
Operations

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10352

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.