

10351

Orig

Diag. Cht. Nos. 5902-2, 6002-2 & 6152.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>Planimetric (Photogrammetric)</u>	
Field No. <u>Ph-155</u>	Office No. <u>T-10351</u>
LOCALITY	
State <u>Oregon - Washington</u>	
General locality <u>Columbia River</u>	
Locality <u>Harrington Point</u>	
<u>1957.55-1958</u>	
CHIEF OF PARTY	
<u>V. Ralph Sobieralski, Chief of Party</u>	
<u>Lorne G. Taylor, Photogrammetric Office</u>	
LIBRARY & ARCHIVES	
DATE <u>MAY 1 1962</u>	

USCOMM-DC 5087

10351

DESCRIPTIVE REPORT - DATA RECORD

T - 10351

Project No. (II): Ph-155

Quadrangle Name (IV):

Field Office (II): Seaview, Washington

Chief of Party: V. Ralph Sobieralski

Unit Chief: R. B. Melby

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): Kelsh Stereoscopic 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):

3/5/62

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): ROCKY POINT 2, 1913

Lat.: 46° 15' 37.226"

Long.: 123° 36' 40.661"

Adjusted X
Unadjusted

Plane Coordinates (IV):

State: Washington Zone: South

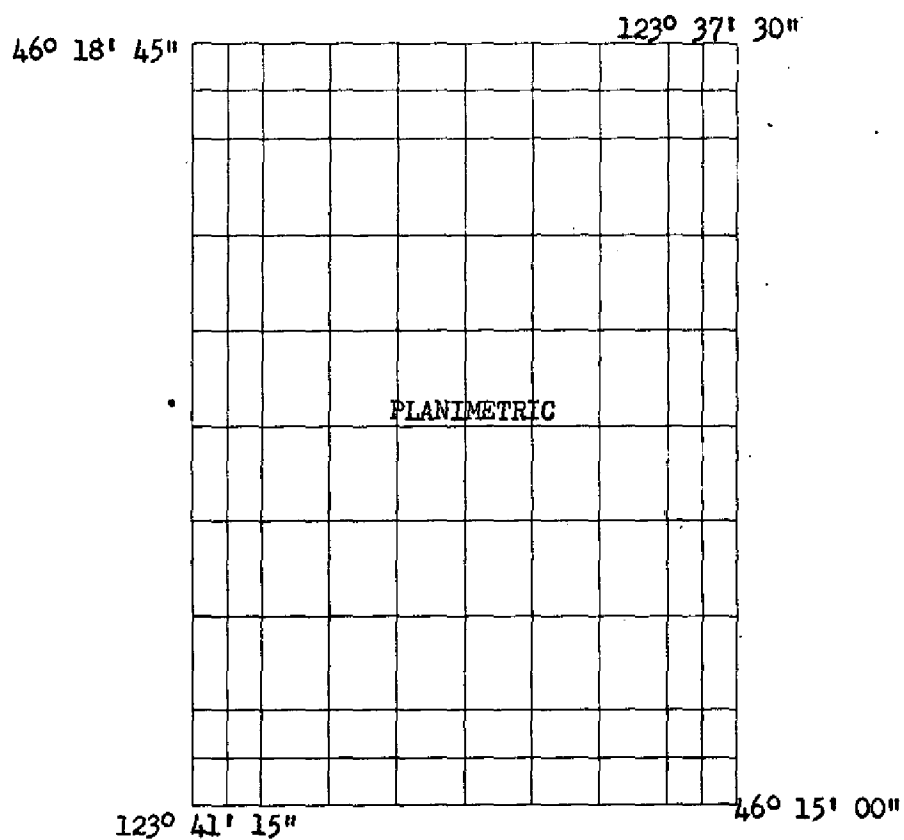
Y= 353,561.97

X= 1,213,234.05

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. H. Bishop & R. B. Melby Date: Nov. 1957

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. 1957 by field inspection and compilation by Kelsh Instrument.

Projection and Grids ruled by (IV): J. R. Haskins Date: 10-30-57

Projection and Grids checked by (IV): I. Y. Fitzgerald Date: 11-15-57

Control plotted by (III): E. T. Jenkins Date: 1-20-58

Control checked by (III): J. L. Harris Date: 1-21-58

Radial Plot or Stereoscopic Control extension by (III): J. D. Perrow, Jr. Stereo. Control Date: 1-28-58
J. L. Harris, Radial Plot Date: 2-13-59

Stereoscopic Instrument compilation (III): Planimetry D. N. Williams Date: 1-22-59
J. L. Harris Date: 2-13-59
Contours Date:

Manuscript delineated by (III): J. L. Harris, Scribing Date: 4-10-59
C. C. Harris, Stick-up Date: 6-14-60

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 Single lens "W"

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
55-W-8665 & 8666	6-6-55	11:50	1:10,000 ratio	2.7' above M.L.L.W.
55-W-8693 & 8694	"	12:10	"	"
55-W-9853 & 9854	9-24-55	12:48	1:25,000 contact	3.0' above M.L.L.W.
55-W-9885 & 9886	"	13:09	"	"

Tide (III)

Reference Station: Astoria, (Tongue Point) Oregon
Subordinate Station: Harrington Point, Wash.
Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
	6.5	8.2
	6.5	8.3

Washington Office Review by (IV):

Date: 2/23/62

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

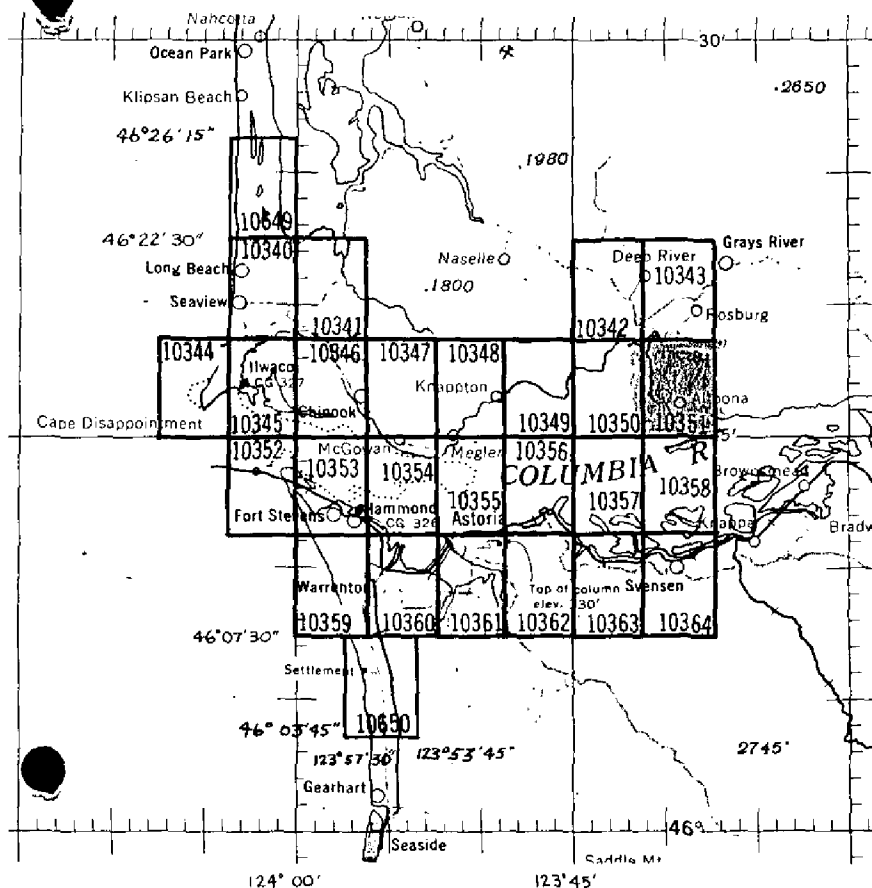
Date:

Land Area (Sq. Statute Miles) (III): 9
Shoreline (More than 200 meters to opposite shore) (III): 8
Shoreline (Less than 200 meters to opposite shore) (III): 0
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 24 Recovered: 11 Identified: 7
Number of BMs searched for (II): (Tidal) 5 Recovered: 5 Identified: 2
Number of Recoverable Photo Stations established (III): 4*
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

* Three are structures.

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	4	8
TOTAL	219	193

FIELD INSPECTION REPORT

Map Manuscript T-10351

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)

NKA

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-10351

Project Ph-155

Suggestions contained in the Stereoplanigraph Bridge Reports for Strips 5 and 6 were followed. These reports are included in the Descriptive Report for T-10346 (1957).

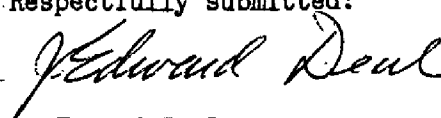
A small hand templet method radial plot was run using field photographs 55-W-8692 thru 8694 and 55-W-8664 thru 8666. Pass points were located which could also be identified on photographs 55-W-9853 thru 9855 and on 55-W-9885 and 9886. All of the compilation work was then done on the Kelsh Instrument.

Approved:



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

Respectfully submitted:



J. Edward Deal
Cartographer

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

MAP T. 10351..... PROJECT NO. Ph-155..... SCALE OF MAP 1:10,000..... SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
PILLAR ROCK LIGHT 1935	Wash.S. 69	N.A. 1927	352,540.65 1,219,612.21	2540.65 (2459.35) 4612.21 (387.79)		774.4 (749.6) 1405.8 (118.2)	
ROCKY PT. 2, 1913	Wash.S. 61	"	353,561.97 1,213,234.05	3561.97 (1438.03) 3234.05 (1765.95)		1085.7 (438.3) 985.7 (538.3)	
DO	Office	"	353,610.74	3610.74 (1389.26)		1100.6 (423.4)	
Sub Station	Comp.	"	1,213,221.34	3221.34 (1778.66)		981.9 (542.1)	
ALTOONA CANNERY MAIN BUILDING	Wash.S. 193	"	355,956.85	956.85 (4043.15)		291.6 (1232.4)	
SOUTH GABLE, 1913		"	1,202,429.93	2429.93 (2570.07)		740.6 (783.4)	
HARRINGTON POINT FRONT RANGE LIGHT 1947	Wash.S. 237	"	354,002.57 1,199,000.88	4002.57 (997.43) 4000.88 (999.12)		1220.0 (304.0) 1219.5 (304.5)	
PILLAR ROCK CHANNEL FRONT RANGE LIGHT, 1947	"	"	353,763.43 1,201,428.88	3763.43 (1236.57) 1428.88 (3571.12)		1147.1 (376.9) 435.5 (1088.5)	
HARRINGTON (USE) 1913	G-3423 P-335	"	46 16 02.200 123 40 03.344			67.9 (1784.7) 71.6 (1213.3)	
MILLER SANDS UPPER RANGE FRONT LIGHT, 1958	"	"	46 15 40.71 123 38 26.27			1257.0 (595.6) 562.6 (722.4)	
PILLAR ROCK LOWER RANGE, REAR, 1958	"	"	Same as Harrington Pt. Range Front Lt., 1947				
HARRINGTON POINT RANGE, REAR LIGHT (WASH), 1958	Field Comp.	"	46 16 02.15 123 39 11.83			66.4 (1786.2) 253.3 (1031.6)	
MILLER SANDS UPPER RANGE REAR LIGHT (WASH), 1958	"	"	46 15 51.91 123 37 40.40			1602.8 (249.8) 864.9 (419.6)	
PILLAR ROCK LOWER RANGE REAR LIGHT (WASH), 1958	"	"	46 15 40.71 123 38 26.27				

1 FT. = 3048006 METER

COMPUTED BY: J.E.D.

DATE 10-7-57

CHECKED BY: D.N.W.

DATE 10-16-57

CONW-DC-57843

COMPILATION REPORT

Map Manuscript T-10351

Project Ph-155

31. Delineation:

The Kelsh Instrument was used to compile the planimetry.

Field inspection was adequate.

32. Control:

The identified horizontal control stations and the pass points located by radial plot were adequate to control the orientation of the Kelsh models.

33. Supplemental Data:

Oregon Senate Bill No. 1 Chapter 94 O.L. 1957.

34. Contours and Drainage:

Contours are not applicable.

Drainage was spot field inspected. The drainage was discernable on the photographs and was compiled by office delineation using the U.S.G.S. Rosburg, Wash - Oreg. 7½ minute quadrangle as reference.

35. Shoreline and Alongshore Details:

Field inspection of these features was adequate and no difficulties were encountered.

Foreshore areas are shown.

Approximate low-water lines could not be determined from the photographs.

36. Offshore Details:

Offshore details include numerous piling and the approximate limits of mud flat islands which bare during low tides.

37. Landmarks and Aids:

There are no landmarks.

Form 567, which is in agreement with 1961 Pacific Coast Light List, is submitted for aids to navigation.

Refer to discrepancy overlay.

38. Control for Future Surveys:

Form 524 is submitted for one monumented recoverable topographic station. Three structures were also located. All are listed under Item 49, Notes to the Hydrographer.

39. Junctions:

Satisfactory junctions were made with T-10343 on the north, T-10350 on the west and T-10538 on the south. On the east a junction was made with T-9266, Project Ph-50 (1949). At this junction the shoreline and alongshore details on the north shore of the Columbia River of T-10351 supercede the shoreline and alongshore details of T-9266 between 131 meters east of Longitude $123^{\circ} 37' 30''$ and Longitude $123^{\circ} 40'$. Refer to the Discrepancy Overlay for T-10351 which is submitted.

40. Horizontal and Vertical Accuracy:

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

46. Comparison with Existing Maps:

// Comparison was made with U.S.G.S. $7\frac{1}{2}$ minute Rosburg, Wash -
Oreg. quadrangle, Scale 1:24,000, published 1949.

47. Comparison with Nautical Charts:

Comparison was made with Nautical Chart No. 6151, Scale 1:60,000, 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.

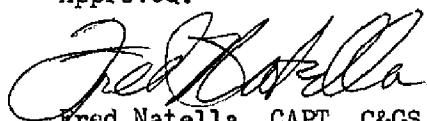
Items to be Applied to Nautical Charts Immediately:

None.

Items to be Carried Forward:

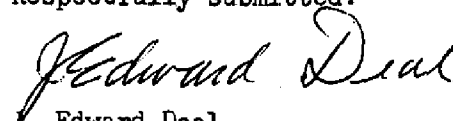
None.

Approved:



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

Respectfully submitted:



J. Edward Deal
Cartographer

49. Notes to the Hydrographer:

One recoverable topographic station was located by Kelsh instrument methods.

B-317-11 (USE)(1939), 1957

There are numerous fixed aids to navigation which have triangulation positions. These were recovered and identified during field inspection.

Three structures were located.

NORT, 1957 (northwest gable of barn)

Harrington Point South Dredging Range Front Daybeacon, 1957

Harrington Point South Dredging Range Rear Daybeacon, 1957

PHOTOGRAMMETRIC OFFICE REVIEW

T-10351

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 None 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges None 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 ☒ 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

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.

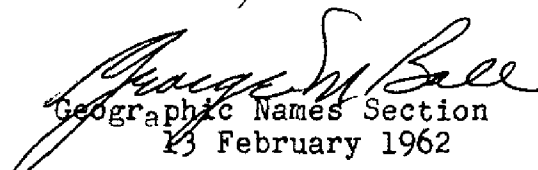
Compiler

Supervisor

43. Remarks:

48. Geographic Names:

Altoona
Altoona Hill
Carlson Landing
Clatsop County
Columbia River
Cottardi
Crooked Creek
Devils Elbow
Eden Valley
Grays Bay
Grays River
Harrington Point
Hitchcock Creek
Miller Sands Channel
Pigeon Bluff
Wahkiakum County


Geographic Names Section
23 February 1962

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

7-10351

TO BE CHARTED

STRIKE OUT TWO

NONFLOATING AIDS ~~ON CHARTED MARKS~~ FOR CHARTS

Portland, Oregon 6 Aug. 19 61

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

J. E. Deal

WASHINGTON & OREGON					POSITION					METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE *		LONGITUDE *		DATUM							
				°	'	°	'								
									D.M. METERS						
LIGHT	Harrington Point Range Front Light	1032	46 15	123 40	35.981 1111.0	03.325 71.2	B.A. Triangulation 1927	1947	X			6151			
LIGHT	Harrington Point Range Rear Light	1033	46 16	123 39	02.1486 66.3	11.6337 253.4	"	1958	X			"			
LIGHT	Miller Sands Upper Range Front Light	1036.5	46 15	123 38	40.711 1257.0	26.257 562.3	"	"	X			"			
LIGHT	Miller Sands Upper Range Rear Light	1036.6	46 15	123 37	21.9047 1603.6	40.3974 865.1	"	"	X			"			
LIGHT	Miller Rock Lower Range Front Light	1043	(Formerly Pillar Rock Channel Front Range Light, 1947 (Rebuilt in 1759))												
LIGHT	Miller Rock Lower Range Rear Light	1044	On same structure as #1032.												
				</											

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

REVIEW REPORT
T-10340 through T-10351 and T-10649
Planimetric
February 21, 1962

62. Comparison with Registered Topographic Surveys:

Survey	Scale	Date	Survey	Scale	Date
H-240	836,000	1850	1341b	10,000	1873
317	22,762	1850-51	1342a	10,000	1873
H-334	221,360	1852	1894	20,000	1889
H-402			1806	10,000	1887
1123	10,000	1868	H-1930	10,000	1889
1138	10,000	1869	4251	20,000	1926
1139a&b	10,000	1869	6724ab	10,000	1936
1234	10,000	1870	6725ab	10,000	1936
1249	10,000	1870	6521b	10,000	1936

The manuscripts listed in this report supersede those surveys listed above for construction of nautical charts.

63. Comparison with Maps of Other Agencies:

Comparison was made with all available maps during the photographic review. For specific details refer to the Compilation Report for each manuscript.

64. Comparison with Contemporary Hydrographic Surveys:

Hydrographic survey H-8416 (1958) covers the three most western sheets in the project T-10340, T-10344 and T-10649. Comparison between these three sheets and the hydro survey revealed no inconsistencies.

65. Comparison with Nautical Charts:

6002	1:180,789	10 Edition 1942	1/7/61
6151	1:40,000	34 Edition 1960	1/7/61

66. Adequacy of Results and Future Surveys:

These maps comply with instructions and meet National Standards of Map Accuracies except as detailed below.

Many offshore details such as fishtraps, lines of pile, etc. were shown on the manuscript and labeled P.D. (Position Doubtful). These features were not field inspected, being some distance offshore their accuracy may not be standard. They should be accurately positioned during hydrography.

Respectfully submitted:

A. K. Heywood
A. K. Heywood

Approved:

L. C. Lande
L. C. Lande, Chief
Review and Edit Section

Marvin T. Paulson
Chief, Nautical Chart Div.

J. E. Vaughn 5/21/62
Chief, Div. of Photogrammetry

Max B. Pitts
Chief, Coastal Surveys Div.
Operations

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10351

Record of Application to Charts *Review Feb 21, 1962*

[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.