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

**U. S. DEPARTMENT OF COMMERCE**

**COAST AND GEODETIC SURVEY**

**DESCRIPTIVE REPORT**

**Type of Survey** Planimetric (Photogrammetric)

**Field No.** Ph-155  **Office No.** T-10351

**LOCALITY**

State: Oregon - Washington

General locality: Columbia River

Locality: Harrington Point

**1958**

**CHIEF OF PARTY**

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

**LIBRARY & ARCHIVES**

**DATE** MAY 1 1962

**USC 5067**
DESCRIPTIVE REPORT - DATA RECORD

T - 10351

Project No. (II): Ph-155

Field Office (II): Seaview, Washington

Chief of Party: V. Ralph Sobieralski

Unit Chief: R. B. Malby

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Lorne G. Taylor

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

Method of Compilation (III):
Kelsh Stereoscopic Instrument

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:5000

Paragraph 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): 3/3/62

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 (2) refer to mean high water
Elevations shown as (2) 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.
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: J. D. Perrow, Jr. Stereo. Control Date: 1-28-58

Control extension by (III): J. L. Harris, Radial Plot 2-13-59

Stereoscopic Instrument compilation (III): D. N. Williams Date: 1-22-59

Contours: J. L. Harris 2-13-59

Manuscript delineated by (III): J. L. Harris, Scribing Date: 4-10-59

C. C. Harris, Stick-up 6-14-60

Photogrammetric Office Review by (III): J. E. Deal Date: July 1960

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-W-8665</td>
<td>6-6-55</td>
<td>11:50</td>
<td>1:10,000 ratio</td>
<td>2.7' above M.L.L.W.</td>
</tr>
<tr>
<td>&amp; 8666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-W-8693</td>
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<td>12:10</td>
<td></td>
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<tr>
<td>&amp; 8694</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>55-W-9853</td>
<td>9-24-55</td>
<td>12:48</td>
<td>1:25,000 contact</td>
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<tr>
<td>&amp; 9854</td>
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<td></td>
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<tr>
<td>55-W-9885</td>
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<td>13:09</td>
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<tr>
<td>&amp; 9886</td>
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</table>

**Tide (III)**

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

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Diurnal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.5</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Washington Office Review by (IV): [Signature]
Date: 2/23/62

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

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
Number of BMS searched for (II): 5
Number of Recoverable Photo Stations established (II): 4
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

* Three are structures.
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-10699)
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 Keish Instrument.

Approved:  Respectfully submitted:

Fred Natella, CAPT, C&GS  J. Edward Deal
Portland District Officer  Cartographer
for
Lorne G. Taylor, CDR, C&GS
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR ( y )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Longitude or ( x )-COORDINATE</td>
<td>Forward (Back)</td>
<td></td>
</tr>
<tr>
<td>PILLAR ROCK LIGHT</td>
<td>Wash.S.</td>
<td>N.A.</td>
<td>352,540.65</td>
<td>2540.65 (2540.35)</td>
<td>774.4 (749.6)</td>
</tr>
<tr>
<td>1935</td>
<td></td>
<td>69</td>
<td>1,219,612.21</td>
<td>4612.21 (387.79)</td>
<td>1405.8 (118.2)</td>
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<tr>
<td>ROCKY PT. 2, 1913</td>
<td>Wash.S.</td>
<td></td>
<td>353,561.97</td>
<td>3561.97 (1438.03)</td>
<td>1085.7 (438.3)</td>
</tr>
<tr>
<td>DO</td>
<td>Office</td>
<td></td>
<td>353,610.74</td>
<td>3610.74 (1389.26)</td>
<td>1100.6 (423.4)</td>
</tr>
<tr>
<td>Sub Station</td>
<td>Comp.</td>
<td></td>
<td>1,213,222.34</td>
<td>3221.34 (1778.66)</td>
<td>981.9 (542.1)</td>
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<tr>
<td>ALTOONA CANNERY</td>
<td>Wash.S.</td>
<td></td>
<td>355,956.85</td>
<td>956.85 (4043.15)</td>
<td>291.9 (1232.4)</td>
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<tr>
<td>MAIN BUILDING</td>
<td></td>
<td></td>
<td>1,202,429.93</td>
<td>2429.93 (2570.07)</td>
<td>740.6 (783.4)</td>
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<tr>
<td>SOUTH GABLE, 1913</td>
<td>Wash.S.</td>
<td></td>
<td>354,002.57</td>
<td>4002.57 (997.43)</td>
<td>1220.0 (304.0)</td>
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<tr>
<td>HARRINGTON POINT</td>
<td>Wash.S.</td>
<td></td>
<td>1,199,000.88</td>
<td>4000.88 (999.12)</td>
<td>1229.5 (304.5)</td>
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<tr>
<td>FRONT RANGE LIGHT</td>
<td></td>
<td></td>
<td>353,763.43</td>
<td>3763.43 (1236.57)</td>
<td>1147.1 (376.9)</td>
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<tr>
<td>1947</td>
<td></td>
<td></td>
<td>1,201,428.88</td>
<td>1428.88 (3571.12)</td>
<td>435.5 (1088.5)</td>
</tr>
<tr>
<td>PILLAR ROCK CHANNEL</td>
<td>G-3423</td>
<td></td>
<td>46 16 02.200</td>
<td>67.9 (1784.7)</td>
<td></td>
</tr>
<tr>
<td>FRONT RANGE LIGHT, 1958</td>
<td>P-335</td>
<td></td>
<td>123 40 03.344</td>
<td>71.6 (1213.3)</td>
<td></td>
</tr>
<tr>
<td>MILLER SANDS UPPER</td>
<td></td>
<td></td>
<td>46 15 40.71</td>
<td>1257.0 (595.6)</td>
<td></td>
</tr>
<tr>
<td>RANGE, 1958</td>
<td></td>
<td></td>
<td>123 38 26.27</td>
<td>562.6 (722.4)</td>
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</tr>
<tr>
<td>HARRINGTON POINT RANGE</td>
<td>Field</td>
<td></td>
<td>46 16 02.15</td>
<td>66.4 (1786.2)</td>
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<tr>
<td>RANGE, REAR LIGHT (WASH)</td>
<td></td>
<td></td>
<td>123 39 11.83</td>
<td>253.3 (1031.6)</td>
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<tr>
<td>MILLER SANDS UPPER</td>
<td>Comp.</td>
<td></td>
<td>46 15 51.91</td>
<td>1602.8 (249.8)</td>
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<tr>
<td>RANGE REAR LIGHT (WASH)</td>
<td></td>
<td></td>
<td>123 37 40.40</td>
<td>864.9 (419.6)</td>
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</tr>
<tr>
<td>PILLAR ROCK LOWER RANGE</td>
<td>G-3423</td>
<td></td>
<td>46 15 40.71</td>
<td>123 38 26.27</td>
<td></td>
</tr>
<tr>
<td>RANGE, REAR, 1958</td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

1 FT. = 0.3048006 METER

COMPUTED BY: J.E.D.  DATE: 10-7-57  CHECKED BY: D.N.W.  DATE: 10-16-57
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 discernible 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 supersede the shoreline and alongshore details of T-9266 between 131 meters east of Longitude 123° 37' 30" and Longitude 123° 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.

41. **Comparison with Existing Maps:**

// Comparison was made with U.S.G.S. 7 ½ minute Rosburg, Wash - Oreg. quadrangle, Scale 1:24,000, published 1949.
47. **Comparison with Nautical Charts:**


Items to be Applied to Nautical Charts Immediately:

None.

Items to be Carried Forward:

None.

Approved: [Signature]

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

Respectfully submitted: [Signature]

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
PHOTOMMETRIC OFFICE REVIEW
T. 10351


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 No  8. Bench marks ✔

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines ✔  32. Public land lines No

MISCELLANEOUS

40. Reviewer
Edward Dunn
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

M-2623-12

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
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Portland, Oregon  6 Aug. 1961

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

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

<table>
<thead>
<tr>
<th>STATE</th>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Latitude °</th>
<th>Longitude °</th>
<th>Datum</th>
<th>Method of Location and Survey No.</th>
<th>Date of Location</th>
<th>Chart</th>
<th>Charts Affected</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>LIGHT</td>
<td>Harrington Point Range Front Light 1032</td>
<td>46 15 36.981 123 40 03.225</td>
<td>B.A. Triangulation 1927</td>
<td>1947</td>
<td>X</td>
<td>6151</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
<td>Harrington Point Range Rear Light 1033</td>
<td>46 16 02.148 123 39 11.6037</td>
<td>*</td>
<td>*</td>
<td>1952</td>
<td>X</td>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
<td>Miller Sands Upper Range Front Light</td>
<td>46 15 1357.0</td>
<td>123 39 26.257</td>
<td>*</td>
<td>*</td>
<td>X</td>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
<td>Miller Sands Upper Range Rear Light</td>
<td>46 15 51.0047</td>
<td>123 37 40.3774</td>
<td>*</td>
<td>*</td>
<td>X</td>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
<td>Miller Rock Lower Range Front Light 1040</td>
<td>(Formerly Pillar Rock Channel Front Range Light, 1947 (Rebuilt in 1959))</td>
<td>1603.6</td>
<td>860.3</td>
<td>*</td>
<td>*</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LIGHT</td>
<td>Miller Rock Lower Range Rear Light</td>
<td>1043</td>
<td>On same structure as 41032.</td>
<td>*</td>
<td>*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The Portland District, C. of E. have not located this light since it was rebuilt in 1959.

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.
62. **Comparison with Registered Topographic Surveys:**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-240</td>
<td>836,000</td>
<td>1850</td>
<td>1341b</td>
<td>10,000</td>
<td>1873</td>
</tr>
<tr>
<td>317</td>
<td>22,762</td>
<td>1850-51</td>
<td>1342a</td>
<td>10,000</td>
<td>1873</td>
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<tr>
<td>H-334</td>
<td>221,360</td>
<td>1852</td>
<td>1894</td>
<td>20,000</td>
<td>1889</td>
</tr>
<tr>
<td>H-402</td>
<td></td>
<td></td>
<td>1806</td>
<td>10,000</td>
<td>1887</td>
</tr>
<tr>
<td>1123</td>
<td>10,000</td>
<td>1868</td>
<td>H-1930</td>
<td>10,000</td>
<td>1889</td>
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<tr>
<td>1138</td>
<td>10,000</td>
<td>1869</td>
<td>4251</td>
<td>20,000</td>
<td>1926</td>
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<td>1139abb</td>
<td>10,000</td>
<td>1869</td>
<td>6724ab</td>
<td>10,000</td>
<td>1936</td>
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<td>10,000</td>
<td>1870</td>
<td>6725ab</td>
<td>10,000</td>
<td>1936</td>
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<td>1249</td>
<td>10,000</td>
<td>1870</td>
<td>6521b</td>
<td>10,000</td>
<td>1936</td>
</tr>
</tbody>
</table>

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:**

<table>
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<tr>
<th>Catalog</th>
<th>Edition</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>6002</td>
<td>1180,789</td>
<td>1/7/61</td>
</tr>
<tr>
<td>6151</td>
<td>1,400,000</td>
<td>1/7/61</td>
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</table>

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

Approved:

L. C. Lande, Chief
Review and Edit Section

L. C. Lande

Chief, Nautical Chart Div.

Marvin W. Patton

Chief, Div. of Photogrammetry

J. W. Waugh 5/2/62

Chief, Operations

May 1962
<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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<tr>
<td>6-4-62</td>
<td>6152</td>
<td>S.W. Bailey</td>
<td>Before After Verification and Review Party added</td>
</tr>
<tr>
<td>11/4/63</td>
<td>6152</td>
<td>Harold V. Howard</td>
<td>Before After Verification and Review Application Adequate</td>
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<tr>
<td>9/27/74</td>
<td>6151</td>
<td>J. Green</td>
<td>Before After Verification and Review Shoreline Applied</td>
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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.