# Descriptive Report

**Type of Survey:** Shoreline (Photogrammetric)

**Field No.:** Ph-5995  **Office No.:** T-11595

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## Locality

- **State:** Washington
- **General locality:** Puget Sound
- **Locality:** Oak Harbor

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**Chief of Party:**
Lorne G. Taylor and Fred Natella

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**Library & Archives**

**Date:** July 1964
DESCRIPTIVE REPORT - DATA RECORD

Project No. (II): Ph-5905

Field Office (II): Mt. Vernon, Washington
Photogrammetric Office (III): Portland, Oregon

Chief of Party: Lorne G. Taylor
Sub Unit: John C. Lajoie & Wesley V. Hay
Officer-in-Charge: Lorne G. Taylor & Fred Natella

Copy filed in Division of Photogrammetry (IV)

Instructions dated (II) (III): 10 Feb. 1960 II
Supplement 1  5 May 1960 II & III

Method of Compilation (III): Kelsh Stereoscopic Instrument

Manuscript Scale (III): 1:10,000
Stereo Plotting Instrument Scale (III): 1:6000
Kelsh Pantograph Scale 1:10,000

Scale Factor (III): None

Date received in Washington Office (IV): March 3, 1961
Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):
Mean sea level except as follows: X
Elevations shown as (2) refer to mean high water
Elevations shown as (S) refer to sounding datum
i.e., mean low water or meanlower low water

Reference Station (III): BASE (NAS) 1951

Lat.: 48° 16' 57.886" Long.: 122° 37' 33.400"

Adjusted X
Unadjusted

Plane Coordinates (IV):
State: Washington Zone: North

Y= 472,993.20  X= 1,563,561.66

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):
Wesley V. Hull, Shoreline
Wesley V. Hull, Interior
Date: 6-2 & 6-9-60
June 1960

Planetable contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location): 6-2 and 6-9-60 by field inspection and Kelsh Instrument Compilation.

Projection and Grids ruled by (IV):
J. E. T.
Date: 5-4-60

Projection and Grids checked by (IV):
W. S.
Date: 5-4-60

Control plotted by (III):
J. E. Deal
C. C. Harris
Date: 6-14 & 24-60
10-13-60

Control checked by (III):
D. N. Williams
J. E. Deal
Date: 6-15 & 25-60
10-14-60

Radial Plot or Stereoscopic Control extension by (III):
C. A. Kuncis
Date: June 1960

Stereoscopic Instrument compilation (III):
Planimetry
D. N. Williams
Date: 9-23-60
Contours

Manuscript delineated by (III):
L. L. Graves, Scribing
C. C. Harris, Stick-up
Date: 10-27-60
12-8-60

Photogrammetric Office Review by (III):
C. C. Harris, Rough Draft
J. E. Deal, Advance
Date: 10-12-60
2-13-61

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

COMM: DC-57842
DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): U.S.C. & G.S. SINGLE LENZ "S"

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tbody>
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<td>60-S-2647</td>
<td>4-26-60</td>
<td>10:30</td>
<td>1:30,000</td>
<td>0.1 ft. above M.L.L.W.</td>
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<td>&amp; 2648</td>
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<tr>
<td>60-S-2720</td>
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<td>thru 2723</td>
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<td>&amp; 2746</td>
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Tide (III)

Reference Station: Seattle, Washington
Subordinate Station: Coupeville, Penn Cove, Washington

<table>
<thead>
<tr>
<th>Ratio of Spring Range</th>
<th>Mean Range</th>
<th>Diurnal</th>
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<tbody>
<tr>
<td>7.6</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>7.8</td>
<td>11.5</td>
<td></td>
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</tbody>
</table>

Washington Office Review by (IV):
Final Drafting by (IV):
Drafting verified for reproduction by (IV):
Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 11
Shoreline (More than 200 meters to opposite shore) (III): 6
Shoreline (Less than 200 meters to opposite shore) (III): None
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 34
Number of BMs searched for (II): 1
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): 4

Remarks:
FIELD INSPECTION REPORT

Map Manuscript T-11595

Project Ph-5905

Refer to the Field Inspection Report for the entire Project Ph-5905 by Wesley V. Hull, February 1960 to September 1960.

Filed with Desc. Report T/11594
PHOTOGRAHMETRIC PLOT REPORT

Map Manuscript T-11595

Project Ph-5905

Refer to the combined Photogrammetric Plot Report (Stereoplanigraph Bridge) for Strips 1, 3, 4, 5, 6, 7, 8, 9, 10 and 11 by Willard A. Kuncis, July 1960.

Filed with Desc. Report T-11584
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR ( \phi )-COORDINATE</th>
<th>LONGITUDE OR ( \lambda )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1, 1952</td>
<td>Wash. N. Pg. 277</td>
<td>482,485.22</td>
<td>2485.22 (2514.78)</td>
<td>757.5 (766.5)</td>
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<td>Sub Station</td>
<td>Wash. Office Comp.</td>
<td>482,449.0</td>
<td>2449.0 (2551.0)</td>
<td>746.5 (777.5)</td>
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<tr>
<td>OAK HARBOR WATER TANK, 1944</td>
<td>Wash. N. Pg. 275</td>
<td>476,228.86</td>
<td>1228.86 (3771.14)</td>
<td>374.6 (1149.4)</td>
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<td>GREEN (barn ventilator), 1944</td>
<td>&quot;</td>
<td>469,377.69</td>
<td>1377.49 (672.51)</td>
<td>1334.3 (189.7)</td>
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<td></td>
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<tr>
<td>OAK HARBOR LIGHT 1, 1951</td>
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<td>467,785.65</td>
<td>2785.65 (2214.35)</td>
<td>849.1 (674.9)</td>
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<tr>
<td>OAK HARBOR LIGHT 3, 1951</td>
<td>&quot;</td>
<td>471,328.70</td>
<td>1328.70 (3671.30)</td>
<td>405.0 (1119.0)</td>
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<td></td>
<td></td>
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<tr>
<td>KELP, 1944</td>
<td>&quot;</td>
<td>464,956.88</td>
<td>4956.88 (431.12)</td>
<td>1510.9 (782.1)</td>
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<tr>
<td>OAK HARBOR, HOUSE, South Gable</td>
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<td>473,481</td>
<td>3481 (1519)</td>
<td>1061.0 (463.0)</td>
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<tr>
<td>BLOWERS BLUFF KLOOTCHMAN ROCK,</td>
<td>&quot;</td>
<td>461,291.68</td>
<td>1291.68 (3708.32)</td>
<td>393.7 (1130.3)</td>
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<td></td>
<td></td>
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<tr>
<td>MAYOR 3, 1954</td>
<td>&quot;</td>
<td>467,623.63</td>
<td>2623.63 (2376.37)</td>
<td>799.7 (726.3)</td>
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<td></td>
</tr>
<tr>
<td>WHIDBEE ISLAND NAS, OAK HARBOR</td>
<td>&quot;</td>
<td>475,344.00</td>
<td>344 (4656)</td>
<td>104.9 (1149.1)</td>
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<td></td>
<td></td>
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<tr>
<td>ADMINISTRATION BLDG. FLAGPOLE,</td>
<td>Pg. 276</td>
<td>1,562,374.00</td>
<td>2374 (2626)</td>
<td>723.6 (800.4)</td>
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<td></td>
<td></td>
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</table>

1 FT. = 0.3048006 METER

COMPUTED BY: J.L.H. DATE: 6-13-60

CHECKED BY: J.L.H. DATE: 6-14-60

COMM-DC-57643
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<th>LONGITUDE OR ( \lambda )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS (FORWARD)</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS (BACK)</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (FORWARD)</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK)</th>
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<tr>
<td>BASE (NAS) 1951</td>
<td>Wash. N.</td>
<td>N.A. 1927</td>
<td>472,993.20</td>
<td>1,553,561.66</td>
<td>2993.20 (2906.80)</td>
<td>3561.66 (1383.34)</td>
<td>912.3 (611.7)</td>
<td>1083.6 (428.4)</td>
<td>668.7 (855.3)</td>
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<td>C-4, 1952</td>
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<td>482,194.04</td>
<td>1,553,607.93</td>
<td>2194.04 (2805.96)</td>
<td>3607.93 (1392.07)</td>
<td>668.7 (855.3)</td>
<td>1499.7 (428.3)</td>
<td>109.7 (790.4)</td>
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<td>C-5, 1952</td>
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<td>482,406.97</td>
<td>1,554,413.78</td>
<td>2406.97 (2593.03)</td>
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<td>733.6 (790.4)</td>
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<td>C-8, 1952</td>
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<td>480,305.39</td>
<td>1,556,289.90</td>
<td>305.39 (4694.61)</td>
<td>1289.90 (3710.10)</td>
<td>93.1 (1430.9)</td>
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<td>C-9 (City) 1952</td>
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<td>478,973.07</td>
<td>1,556,274.63</td>
<td>3973.07 (1026.93)</td>
<td>1274.63 (3725.37)</td>
<td>937.2 (586.8)</td>
<td>388.5 (1135.5)</td>
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<td>CORAL (NAS) 1951</td>
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<td>475,369.98</td>
<td>1,563,074.71</td>
<td>369.98 (4630.02)</td>
<td>3074.71 (1925.29)</td>
<td>112.8 (1411.2)</td>
<td>937.2 (586.8)</td>
<td>388.5 (1135.5)</td>
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<td>DOME 1951</td>
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<td>477,358.36</td>
<td>1,562,779.05</td>
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<td>2779.05 (2220.95)</td>
<td>718.8 (805.2)</td>
<td>847.1 (676.9)</td>
<td>718.8 (805.2)</td>
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<td>NAVY 1951</td>
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<td>468,371.09</td>
<td>1,561,673.83</td>
<td>3371.09 (1628.91)</td>
<td>1673.83 (3326.17)</td>
<td>1027.5 (496.5)</td>
<td>510.2 (1013.8)</td>
<td>510.2 (1013.8)</td>
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<tr>
<td>OH24 (USE) 1952</td>
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<td>482,393.73</td>
<td>1,556,619.24</td>
<td>2303.73 (2696.27)</td>
<td>1619.24 (3380.76)</td>
<td>702.2 (821.8)</td>
<td>493.5 (1030.5)</td>
<td>702.2 (821.8)</td>
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<tr>
<td>WHIDBEY ISLAND NAS, OAK HARBOR PATROL Transmitting Mast 1954</td>
<td></td>
<td>Pg.275</td>
<td>471,952.41</td>
<td>1,563,019.28</td>
<td>1952.41 (3047.59)</td>
<td>3019.28 (1980.72)</td>
<td>595.1 (928.9)</td>
<td>920.3 (603.7)</td>
<td>920.3 (603.7)</td>
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<tr>
<td>MAYOR 4, 1960</td>
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<td>Office Comp.</td>
<td>467,707.65</td>
<td>1,562,565.06</td>
<td>2707.65 (2292.35)</td>
<td>2565.06 (2434.94)</td>
<td>825.3 (698.7)</td>
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<td>781.8 (742.2)</td>
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<tr>
<td>NAVY 2, 1960</td>
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<td></td>
<td>468,413.51</td>
<td>1,561,693.29</td>
<td>3413.51 (1586.49)</td>
<td>1693.29 (3306.7)</td>
<td>1040.4 (483.6)</td>
<td>516.1 (1007.9)</td>
<td>516.1 (1007.9)</td>
</tr>
</tbody>
</table>

COMPILATION REPORT

Map Manuscript T-11595

Project Ph-5905

Items 31 and 32:

Refer to Descriptive Report for T-11597 (1960).

33. Supplemental Data:

Map of Island County, Washington, Scale 1 inch = 1 mile, compiled by Island County Engineer, March 1958.

Map of U. S. Naval Air Station, Whidbey Island, Washington, dated 1 Dec. 1953, Scale 1 inch = 1000 feet.

34. Contours and Drainage:

Contours are not applicable. One drainage area was identified by field inspection. The U.S.G.S. 15 minute Deception Pass, Washington quadrangle does not show any additional drainage.

Items 35 and 36:

Refer to Descriptive Report for T-11597 (1960).

37. Landmarks and Aids:

Forms 567 are submitted for one landmark and two aids to navigation. These were previously located by triangulation methods.

38. Control for Future Surveys:

Four photo-hydro stations were located by Kelsh Instrument. They are listed under Item 49, Notes to the Hydrographer.
39. Junctions:

Satisfactory junctions were made with T-11588 on the north, T-11594 on the west, T-11596 on the east and T-11603 on the south.

40. Horizontal and Vertical Accuracy:

Refer to Descriptive Report for T-11597 (1960).

46. Comparison with Existing Maps:


47. Comparison with Nautical Charts:

Comparison was made with Nautical Chart No. 6404, Scale 1:10,000, 1st edition Aug. 1943, corrected through Sept. 26, 1959, and with Nautical Chart No. 6450, Scale 1:80,000, 11th edition, corrected 7-27-59.

Items to be Applied to Nautical Charts Immediately.

None.

Items to be Carried Forward.

None.

Approved:

Edward Deal

Respectfully submitted:

Frederick Natella
CAPT, C&GS
Portland District Officer

J. Edward Deal
Cartographer
C&GS
49. **Notes to the Hydrographer:**

Four photo-hydro stations were located by Kelsh Instrument.

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Field Photo. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9501</td>
<td>End of piling</td>
<td>60-S-2721</td>
</tr>
<tr>
<td>9502</td>
<td>North ventilator of 2 atop dingey yellow building</td>
<td>60-S-2721</td>
</tr>
<tr>
<td>9503</td>
<td>East gable of building on pier</td>
<td>60-S-2722</td>
</tr>
<tr>
<td>9504</td>
<td>West gable of building on pier</td>
<td>60-S-2722</td>
</tr>
</tbody>
</table>
Coast and Geodetic Survey
Photogrammetric Unit
405 Custom House
Portland 9, Oregon

Dear Sir;

The enclosed sketch you sent us is correct. All the buildings shown are being used for class rooms.

Sincerely,

Gary Patrick, Principal
Olympic View Elementary School
PHOTOGRAMMETRIC OFFICE REVIEW
T. 11595


CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy  X  6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)  None  7. Photo hydro stations  X  8. Bench marks  X

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines  None  32. Public land lines  None

MISCELLANEOUS
40. ________________  Reviewer
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.

______________________________  Supervisor

43. Remarks:

J. Edward Deal
48. **Geographic Names:**

- Blowefs Bluff
- Mayor Point
- Oak Harbor (settlement)
- Oak Harbor
- Saratoga Passage
- Scenic Heights
- Whidbey Island

[Signature]

Geographic Names Section
27 February 1963
61. **General Statement**

These are seven (7) shoreline maps of project PH 5905, Puget Sound, Washington. These maps were prepared primarily to provide basic maps, including the location of all non-floating aids and landmarks for use in revising our nautical charts, and for control of proposed hydrographic surveys.

62. **Comparison with Registered Topographic Surveys**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
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<tbody>
<tr>
<td>T-1253</td>
<td>1:10,000</td>
<td>1871</td>
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<tr>
<td>T-2011</td>
<td>1:20,000</td>
<td>1888</td>
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<td>T-2156</td>
<td>1:20,000</td>
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<td>T-6685a</td>
<td>1:10,000</td>
<td>1939</td>
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<td>T-6768</td>
<td>1:10,000</td>
<td>1940</td>
</tr>
<tr>
<td>T-6769</td>
<td>1:10,000</td>
<td>1940</td>
</tr>
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</table>

Cultural and shoreline changes have been continuous with extensive cultural changes in Oak and Crescent Harbors on Whidbey Island. These maps are to supersede the above surveys of common area for nautical charting.

63. **Comparison with Maps of Other Agencies**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deception Pass</td>
<td>1:62,500</td>
<td>1951</td>
</tr>
<tr>
<td>Utisolady</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
<tr>
<td>Conway</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
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</table>

There are some cultural and shoreline differences but in general the agreement is good.

64. **Comparison with Contemporary Hydrographic Surveys**

<table>
<thead>
<tr>
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<th>Scale</th>
<th>Date</th>
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</thead>
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<td>1:10,000</td>
<td>1960</td>
</tr>
<tr>
<td>H-8543</td>
<td>1:10,000</td>
<td>1960</td>
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</table>

Shoreline and control of the subject surveys was furnished prior to the hydrographic surveys and apparently no differences exist.

65. **Comparison with Nautical Charts**

<table>
<thead>
<tr>
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<th>Scale</th>
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</thead>
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<td>1:10,000</td>
<td>1952 (revised to Mar. 1961)</td>
</tr>
<tr>
<td>6450</td>
<td>1:80,000</td>
<td>1961 (revised to Oct. 1963)</td>
</tr>
<tr>
<td>184 S.C.</td>
<td>1:80,000</td>
<td>1963</td>
</tr>
</tbody>
</table>

There are no differences of importance between the charts and the manuscript.
66. Accuracy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for nautical charting.

Reviewed by:

L. C. Londe

Approved by:

Charles H. Lewis
Chief, Photogrammetric Branch

Tom Waugh
Chief, Photogrammetry Division
7/10/64
**INSTRUCTIONS**

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6404</td>
<td>12/9/64</td>
<td>A. L.</td>
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