**DESRIPTIVE REPORT**

**Type of Survey** Shoreline (Photogrammetric)

**Field No.** Ph-5905  **Office No.** T-11635

**LOCALITY**

- **State** Washington
- **General locality** Possession Sound
- **Locality** Mukilteo

**1960 - 1961**

**CHIEF OF PARTY**

Fred Natella

**LIBRARY & ARCHIVES**

**DATE** April 1964
DESCRIPTIVE REPORT - DATA RECORD

T - 11635

Project No. (II): Ph-5905

Quadrangle Name (IV):

Field Office (II): Mukilteo, Washington

Chief of Party: Fred Natella

Unit Chief: L. F. Van Scoy

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Fred Natella

Instructions dated (II) (III):

Supplement 1 10 Feb. 1960 II

5 May 1960 II & III  Copy filed in Division of

Photogrammetry (IV)

Method of Compilation (III):

Kelsh Instrument

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6000

Pantograph Scale 1:10,000

Scale Factor (III):

None

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Date registered (IV):

Applied to Chart No.

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 (FS) refer to mean high water
Elevations shown as (g) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): MUK, 1944

Lat.: 47° 57' 10.832" Long.: 122° 17' 38.442"

Adjusted X

Unadjusted

Plane Coordinates (IV):

State: Washington

Zone: North

Y = 351,024.07

X = 1,642,082.02

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): L. F. Van Scoy Date: April 1961

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): 4-26-61 and 4-27-61 by field inspection and Kelsh Instrument Compilation.

Projection and Grids ruled by (IV): R. A. C. Date: 10-11-60

Projection and Grids checked by (IV): J. D. C. Date: 10-14-60

Control plotted by (III): L. L. Graves Date: 7-19-61

Control checked by (III): D. N. Williams Date: 7-21-61

Radial Plot or Stereoscopic Control extension by (III):

Stereoscopic Instrument compilation (III):

Manuscript delineated by (III): J. L. Harris, Scribing Date: 3-5-62

C. C. Harris, Stick-up Date: 4-30-62

Photogrammetric Office Review by (III): J. L. Harris, rough draft Date: 10-25-61

J. E. Deal, Advance Date: 7-20-62

Elevations on Manuscript checked by (II) (III): Date:
DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS Single lens "S"

<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>60-S-2508</td>
<td>4-25-60</td>
<td>13:33</td>
<td>1:30,000</td>
<td>4.7' above M.L.L.W.</td>
</tr>
<tr>
<td>and 2509</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-S-2530</td>
<td></td>
<td>13:52</td>
<td></td>
<td>4.8'</td>
</tr>
<tr>
<td>thru 2532</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-W-2116</td>
<td>9-21-60</td>
<td>13:10</td>
<td></td>
<td>3.5'</td>
</tr>
</tbody>
</table>

Tide (III)

Reference Station: Seattle, Washington
Subordinate Station: Mukilteo, Washington

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): 4.6
Shoreline (More than 200 meters to opposite shore) (III): 3.0
Shoreline (Less than 200 meters to opposite shore) (III): None

Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 6
Number of BMs searched for (II): 4 tidal
Number of BMs recovered (II): 2
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): 3

Remarks:
FIELD INSPECTION REPORT
Map Manuscript T-11635
Project Ph-5905

Refer to the combined Field Inspection Report for Map Manuscripts T-11632 thru T-11639 by Leonard F. Van Scoy, dated April-May 1961, which is included in the descriptive report for T-11632 (1961).
PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11635

Project Ph-5905

<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mukilteo Light, house, 1924</td>
<td>P-285 1927</td>
<td>349,587.12</td>
<td>4587.12 (412.88)</td>
<td>1398.2 (125.8)</td>
</tr>
<tr>
<td>DO, Sub-Sta. &quot;A&quot;</td>
<td>Office Comp.</td>
<td>349,583.72</td>
<td>4583.72 (416.28)</td>
<td>1397.1 (126.9)</td>
</tr>
<tr>
<td>Sub-Sta. &quot;B&quot;</td>
<td>&quot;</td>
<td>349,521.32</td>
<td>4521.32 (478.68)</td>
<td>1378.1 (145.9)</td>
</tr>
<tr>
<td>MUK, 1944 Wash. N.</td>
<td>P-289</td>
<td>351,024.07</td>
<td>1024.07 (3975.93)</td>
<td>312.1 (1211.9)</td>
</tr>
</tbody>
</table>

1 FT. = 0.3048006 METER

COMPUTED BY: J.E.D. DATE: 5-4-61 CHECKED BY: C.H.B. DATE: 5-4-61
COMPILATION REPORT
Map Manuscript T-11635
Project Ph-5905

31. **Delineation:**
   The Kelsh Instrument was used for the compilation of planimetric details. Field inspection was adequate except for drainage.

32. **Control:**
   Horizontal Control was adequate.

33. **Supplemental Data:**
   None.

34. **Contours and Drainage:**
   Contours are not applicable.
   Drainage not field inspected was delineated by the compiler with reference to the U.S.G.S. Mukilteo, Wash., 7½ minute quadrangle.

35. **Shoreline and Alongshore Details:**
   The mean high-water line was spot located by field inspection and delineated by the compiler.
   
   The foreshore areas shown were compiled from photography taken when the predicted tide was 4.8 ft. above M.L.L.W.
   
   Shoal and approximate low-water lines could not be delineated.

36. **Offshore Details:**
   None.

37. **Landmarks and Aids:**
   Form 567 is submitted which verifies the triangulation position of an existing aid to navigation.
38. Control for Future Surveys:

Three objects were located for use as photo-hydro stations. They are listed under Item 49, Notes to the Hydrographer.

39. Junctions:

Satisfactory junctions were made with T-11636 on the east and T-11639 on the south. To the west and north is Possession Sound.

40. Horizontal and Vertical Accuracy:

Vertical Accuracy is not applicable.

There are no areas of the map manuscript believed to be of sub-normal horizontal accuracy.

46. Comparison with Existing Maps:

Comparison was made with the U.S.G.S. Mukilteo, Wash., 7½ minute quadrangle, Scale 1:24,000, Edition 1953.

47. Comparison with Nautical Charts:

Comparison was made with nautical chart No. 6450, 11th Edition, revised 9-5-60, hand corrected 4-15-61, Scale 1:80,000 at Lat. 47° 57'.

Comparison was made with nautical chart No. 6448, 7th Edition, 3-12-35, revised 10-5-59, Scale 1:40,000.
Items to be Applied to Nautical Charts Immediately:

None.

Items to be Carried Forward:

None.

Approved:                      Respectfully Submitted:

Fred Natella, CAPT, C&GS       J. Edward Deal
Portland District Officer      Cartographer
49. **Notes to the Hydrographer:**

Three objects were selected for photo-hydro stations by the field unit and located by Kelsh Instrument.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Field Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>3501</td>
<td>West gable white house</td>
<td>60-S-2509</td>
</tr>
<tr>
<td>3502</td>
<td>Dolphin</td>
<td>60-S-2532</td>
</tr>
<tr>
<td>3503</td>
<td>Lone pile at east end of piling (ruins)</td>
<td>60-S-2532</td>
</tr>
<tr>
<td>Compilation Record</td>
<td>Completion Date</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1. Alongshore area for hydro</td>
<td></td>
<td>Map complete before hydro. Not furnished. Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interior details added. Compilation complete.</td>
<td>4-30-62</td>
<td></td>
</tr>
</tbody>
</table>
PHOTOGRAMMETRIC OFFICE REVIEW
T-11635


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 ☑ 8. Bench marks ☑

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

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

MISCELLANEOUS

Reviewer
James R. Harris

Supervisor, Review Section or Unit
Edward Deal

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:
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. Deal.

<table>
<thead>
<tr>
<th>STATE</th>
<th>WASHINGTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>LIGHT</td>
<td>Mukilteo Light (MUKILTEO LIGHTHOUSE 1924)</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 6-36, Fig. 79. Positions of charted landmarks and non-floating 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*
48. Geographic Names:

Edgewater
Elliot Point
Darlington
Jap Gulch
Merrill and Ring Creek
Mukilteo
Mukilteo State Park
Possession Sound
Powder Mill Gulch

Geographic Names Section
30 January 1963
61. General Statement

There are nine (9) shoreline maps of Project PH-5905, Puget Sound, Washington. These maps were prepared primarily to provide basic maps, including the location of all nonfloating 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>
</tr>
</thead>
<tbody>
<tr>
<td>T-1388 b</td>
<td>1:10,000</td>
<td>1872</td>
</tr>
<tr>
<td>T-1389 a &amp; b</td>
<td>1:10,000</td>
<td>1872</td>
</tr>
<tr>
<td>T-1552</td>
<td>1:20,000</td>
<td>1884</td>
</tr>
<tr>
<td>T-1681</td>
<td>1:20,000</td>
<td>1885</td>
</tr>
<tr>
<td>T-1682</td>
<td>1:20,000</td>
<td>1885</td>
</tr>
<tr>
<td>T-4276</td>
<td>1:10,000</td>
<td>1927</td>
</tr>
</tbody>
</table>

There are cultural and shoreline differences due to time interval. 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>Maxwelton, Washington</td>
<td>1:24,000</td>
<td>1953</td>
</tr>
<tr>
<td>Mukileto, Washington</td>
<td>1:24,000</td>
<td>1953</td>
</tr>
<tr>
<td>Everett, Washington</td>
<td>1:24,000</td>
<td>1953</td>
</tr>
<tr>
<td>Hansville, Washington</td>
<td>1:24,000</td>
<td>1953</td>
</tr>
</tbody>
</table>

There are cultural and shoreline changes due to the difference in survey dates.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

<table>
<thead>
<tr>
<th>Chart</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>6448</td>
<td>1:40,000</td>
<td>Revised to Oct. 1959</td>
</tr>
<tr>
<td>6450</td>
<td>1:80,000</td>
<td>Revised to June 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 subject manuscripts.
66. Adequacy 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. Lande

Approved by:

Charles Taylor
Chief, Photogrammetric Branch

J. E. W. 4/64
Chief, Photogrammetry Division
**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>6441</td>
<td>3/10/69</td>
<td>O. Swenson</td>
<td>- Drag #4</td>
</tr>
<tr>
<td>18441</td>
<td>4/24/80</td>
<td>G. A. Lillian</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. Examinad. No corrections</td>
</tr>
<tr>
<td>18441</td>
<td>7/15/80</td>
<td>C. James</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 10 Exam 90 Corr</td>
</tr>
<tr>
<td>18441</td>
<td>7/15/80</td>
<td>C. James</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. Exam 90 Corr</td>
</tr>
<tr>
<td>18441</td>
<td>2/25/81</td>
<td>D. C. James</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 21</td>
</tr>
<tr>
<td>18445</td>
<td>2/25/81</td>
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<tr>
<td>18440</td>
<td>3/11/81</td>
<td>D. C. James</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 33</td>
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<tr>
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<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
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