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

**Field No.**: Ph-5905  **Office No.**: T-11634

**Locality**
- **State**: Washington
- **General locality**: Possession Sound
- **Locality**: Clinton

**1960-1961**

**Chief of Party**: Fred Natella

**Library & Archives**

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

T-11634

Project No. (II): Ph-5905
Quadrangle Name (IV):  

Field Office (II): Mukilteo, Washington
Chief of Party: Fred Natella
Photogrammetric Office (III): Portland, Oregon
Unit Chief: L. F. Van Scoy
Officer-in-Charge: Fred Natella

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

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

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 (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): RIDGE 1924

Lat.: 47° 57' 35.814"
Long.: 122° 20' 54.103"
Adjusted X
Unadjusted

Plane Coordinates (IV):
State: Washington Zone: North
Y = 353,812.38  
x = 1,628,815.80

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)
(l) (II) (III)
Field Inspection by (II):  L. F. Van Scy & R. B. Melby  
Date:  July 1960 & April 1961

Planetable contouring by (II):  
Date:

Completion Surveys by (II):  
Date:

Mean High Water Location (III) (State date and method of location):  
July 11, 1960 for north part and April 1961 for south part by field inspection and refinement during compilation. Part was located by sextant fixes shown on reverse side of field photo 60-S-2156.

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):  J. L. Harris  
Date:  7-21-61

Control checked by (III):  L. L. Graves  
Date:  7-21-61

Radial Plot or Stereoscopic Control extension by (III):  J. D. Perrow, Jr.  
Date:  July 1961

Stereoscopic Instrument compilation (III):  
Planimetry  D. N. Williams  
Date:  8-4-61

Manuscript delineated by (III):  C. C. Harris, Scribing  
Date:  2-1-62

C. C. Harris, Stick-up  
Date:  4-24-62

Photogrammetric Office Review by (III):  J. L. Harris, rough draft  
Date:  10-24-61

J. E. Deal, advance  
Date:  7-19-62

Elevations on Manuscript checked by (II) (III):  
Date:
### Descriptive Report - Data Record

**Camera (kind or source) (III):** C&GS Camera "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-2156</td>
<td>9-21-60</td>
<td>13:40</td>
<td>1:30,000</td>
<td>5.8' above M.L.L.W.</td>
</tr>
<tr>
<td>thru 2158</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-S-2795</td>
<td>4-27-60</td>
<td>9:31</td>
<td></td>
<td>1.7'</td>
</tr>
</tbody>
</table>

#### Tide (III)

- **Reference Station:** Seattle, Washington
- **Subordinate Station:** Everett, Washington

<table>
<thead>
<tr>
<th></th>
<th>Diurnal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ratio of Ranges</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.6</td>
</tr>
</tbody>
</table>

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

- **Land Area (Sq. Statute Miles) (III):** 4.6
- **Shoreline (More than 200 meters to opposite shore) (III):** 3
- **Shoreline (Less than 200 meters to opposite shore) (III):** None
- **Control Leveling - Miles (II):**
- **Number of Triangulation Stations searched for (II):** 3
  - Recovered: 1
  - Identified: None
- **Number of BMs searched for (II):** 6 Tidal
  - Recovered: 5
  - Identified: 1
- **Number of Recoverable Photo Stations established (III):** None
- **Number of Temporary Photo Hydro Stations established (III):** 1

**Remarks:**
FIELD INSPECTION REPORT
Map Manuscript T-11634
Project Ph-5905

Refer to the combined Field Inspection Report for map manuscripts T-11632 thru T-11639 by Leonard F. Van Scy, dated April - May 1961, which is included in the Descriptive Report for T-11632 (1961).
PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-11634

Project Ph-5905

Refer to the Photogrammetric Plot Report, Projects Ph-5905 and Ph-6101, Puget Sound, Washington (Strip 14) dated July 1961 by John D. Perrow, Jr., which is included in the Descriptive Report for T-11633.
<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>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIDGE, 1924</td>
<td>Wash.N. P-285 1927</td>
<td>N.A.</td>
<td>353,812.38</td>
<td>3812.38 (1187.62)</td>
<td>1162.0 (362.0)</td>
<td>3815.80 (1184.20)</td>
</tr>
</tbody>
</table>
COMPILATION REPORT
Map Manuscript T-11634
Project Ph-5905

31. Delineation:

The Kelsh Stereoscopic Instrument was used to compile the planimetry. A small portion of the shoreline was located by sextant fixes (see Field Photograph 60-S-2156).

Field inspection was satisfactory except for drainage. Photography available for field inspection did not cover the entire shoreline of the manuscript and it was necessary to delineate planimetric details by planetable locations and from the extreme eastern edges of the models. Comparison was made by use of the vertical projector with a flight of photography (61-S704 thru 709) and no changes in the original compilation could be justified by office inspection.

32. Control:

Pass points located in the stereoplanigraph bridge were adequate. No triangulation stations were identified within the area of the manuscript.

33. Supplemental Data:

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

34. Contours and Drainage:

Contours are not applicable.

8 Drainage was partly field inspected. Additional drainage was delineated by the compiler with reference to the U.S.G.S. Mukilteo, Washington, quadrangle.

35. Shoreline and Alongshore Details:

The mean high-water line and alongshore details were adequately field inspected except when the shoreline was located by sextant fixes. At this place no alongshore features or foreshore area delineation was furnished or available. Supplemental photography made in 1961 verified the field inspection delineation.
Shoal areas visible on photograph 60-S-2795 taken at a predicted tide of 1.7 ft. are shown. All other photography was taken at a predicted tide of 5.8 ft. Foreshore areas and alongshore features as field inspected were compiled from these photographs.

No approximate low-water lines are shown.

36. **Offshore Details:**

One rock awash just offshore from the high-water line is shown.

37. **Landmarks and Aids:**

None.

38. **Control for Future Surveys:**

One photo-hydro station was selected by the field unit and was located by Kelsh Instrument. It is listed under Item 49, Notes to the Hydrographer.

39. **Junctions:**

Satisfactory junctions were made with T-11627 on the north, T-11633 on the west, and T-11639 on the south. Possession Sound is to the east.

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 the U.S.G.S. Mukilteo, Washington, 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:  
Fred Natella, CAPT, C&GS  
Portland District Officer

Respectfully submitted:  
J. Edward Deal  
Cartographer
49. **Notes to the Hydrographer:**

One photo-hydro station was located by Kelsh Instrument:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>3401</td>
<td>Easterly gable on large building</td>
<td>60-S-2794</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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interior details added</td>
<td>4-24-62</td>
<td></td>
</tr>
<tr>
<td>Compilation complete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PHOTOGRAMMETRIC OFFICE REVIEW
T. 11634

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) None  
7. Photo hydro stations  
8. Bench marks  
9. Plotting of sextant fixes  
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 None  
17. Landmarks None  
18. Other alongshore physical features  
19. Other alongshore cultural features  

PHYSICAL FEATURES
20. Water features  
21. Natural ground cover  
22. Planetary contours None  
23. Stereoscopic instrument contours None  
24. Contours in general None  
25. Spot elevations  
26. Other physical features  

CULTURAL FEATURES
27. Roads  
28. Buildings None  
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 None  
37. Descriptive Report  
38. Field inspection photographs  
39. Forms  
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.

Compiler
Supervisor

43. Remarks:
48. Geographic Names:

Clinton
Columbia Beach
Glendale
Possession Sound
Randall Point
Whidbey Island

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>Map</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

Maxwelton, Washington 1:24,000 1953  
Mukileto, Washington 1:24,000 1953  
Everett, Washington 1:24,000 1953  
Hansville, Washington 1:24,000 1953

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:

Chief, Photogrammetric Branch

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>18441</td>
<td>4/24/80</td>
<td>R. C. Lillis</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 49</td>
</tr>
</tbody>
</table>
| 18443 | 7/14/80    | R. L. Potter | Full Part Before After Verification Review Inspection Signed Via Drawing No.  
| 18483 | 2/25/81    | D. C. Larson | Full Part Before After Verification Review Inspection Signed Via Drawing No. 21 |
| 18445 | 2/25/81    | D. C. Larson | Full Part Before After Verification Review Inspection Signed Via Drawing No. 17 |
| 18440 | 3/12/81    | D. C. Larson | Full Part Before After Verification Review Inspection Signed Via Drawing No. 33 |

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**FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-275.**