Type of Survey: Shoreline (Photogrammetric)

Field No.: Ph-5905  Office No.: T-11599

State: Washington
General locality: Camano Island
Locality: Skagit Bay

DATE: July 1964

CHIEF OF PARTY
Lorne G. Taylor and Fred Natella
DESCRIPTIVE REPORT - DATA RECORD

T - 11599

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

Photogrammetric Office (III): Portland, Oregon  Unit Chief: J. C. Lajoye & W. V. Hull
Instructions dated (II) (III): 10 Feb. 1960 II  Officer-in-Charge: Lorne G. Taylor
Supplement 1: 5 May 1960 II & III  & Fred Natella
Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic
Manuscript Scale (III): 1:10,000
Stereoscopic Plotting Instrument Scale (III): 
Scale Factor (III): None

Date received in Washington Office (IV): FEB 1 1962
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 (F) refer to mean high water
Elevations shown as (L) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): SPIT 2 1924
Lat.: 48° 15' 32.816"  Long.: 122° 25' 19.925"
Adjusted X
Unadjusted

Plane Coordinates (IV): State: Washington Zone: North
Y = 463,284.94  X = 1,612,980.52

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)
Field Inspection by (II):

L. F. Van Scy & R. B. Melby

Date: July & Aug. 1960

Plane table contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 7-12-60 and 7-13-60 by field inspection and graphic compilation.

Projection and Grids ruled by (IV):

Souders

Date: 6-30-60

Projection and Grids checked by (IV):

J. Keefer

Date: 8-18-60

Control plotted by (III):

C. C. Harris

Date: 10-4-60

Control checked by (III):

L. L. Graves

Date: 10-10-60

Radial Plot or Stereoscopic

Control extension by (III):

J. L. Harris

Date: 4-12-61

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III):

C. H. Bishop, Rough Draft

Date: 5-10-61

J. L. Harris, Scribing

10-9-61

C. C. Harris, Stick-up

12-20-61

Photogrammetric Office Review by (III):

C. C. Harris, Rough Draft

Date: 6-12-61

J. E. Deal, Advance

12-28-61

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

Date:
Camera (kind or source) (III): C&GS Single lens "L" and 9 lens.

<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>60012 thru</td>
<td>9-9-59</td>
<td>08:59</td>
<td>1:10,000</td>
<td>8.9 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>60014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60087</td>
<td>09:49</td>
<td></td>
<td></td>
<td>9.2 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>60-1-9570</td>
<td>4-16-60</td>
<td>13:50</td>
<td>1:30,000</td>
<td>0.8 ft. below M.L.L.W.</td>
</tr>
<tr>
<td>thru 9573</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)

<table>
<thead>
<tr>
<th>Reference Station</th>
<th>Seattle, Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subordinate Station</td>
<td>Coupeville, Washington</td>
</tr>
</tbody>
</table>

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

Land Area (Sqr. Statute Miles) (III): 2.6

Shoreline (More than 200 meters to opposite shore) (III): 3.5

Shoreline (Less than 200 meters to opposite shore) (III): 0.5

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 4

Recovered: 1

Identified: 1

Number of BMs searched for (II): None

Number of Recoverable Photo Stations established (III): 1

Number of Temporary Photo Hydro Stations established (III): None

Remarks:
FIELD INSPECTION REPORT

Map Manuscript T-11599

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 F11584
PHOTOGRAMMETRIC PLOT REPORT
Map Manuscript T-11599
Project Ph-5905

Refer to combined photogrammetric plot report for map manuscripts T-11598 thru T-11600, T-11606 thru T-11610 and T-11616 which is included in the Descriptive Report for T-11598 (1960).
<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>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPIT 2, 1924</td>
<td>Wash.N. Pg. 292</td>
<td>N.A. 1927</td>
<td>463,284.94</td>
<td>3284.94 (1715.06)</td>
<td>1001.2 (522.8)</td>
<td>908.5 (615.5)</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>Office</td>
<td></td>
<td>463,174.93</td>
<td>3174.93 (1825.07)</td>
<td>967.7 (556.3)</td>
<td>861.6 (662.4)</td>
<td></td>
</tr>
<tr>
<td>Sub Station &quot;A&quot;</td>
<td>Comp.</td>
<td></td>
<td>1,612,826.71</td>
<td>2826.71 (2173.29)</td>
<td>861.6 (662.4)</td>
<td>861.6 (662.4)</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td></td>
<td></td>
<td>463,582.85</td>
<td>3582.85 (1417.15)</td>
<td>1092.1 (431.9)</td>
<td>796.8 (727.2)</td>
<td></td>
</tr>
<tr>
<td>Sub Station &quot;B&quot;</td>
<td></td>
<td></td>
<td>1,612,614.21</td>
<td>2614.21 (2385.79)</td>
<td>796.8 (727.2)</td>
<td>796.8 (727.2)</td>
<td></td>
</tr>
</tbody>
</table>

1 FT = 0.3048006 METER

COMPUTED BY: C.H.B. DATE: 9-14-60
CHECKED BY: J.L.H. DATE: 9-20-60
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. L. Harris

<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>Skagit River Jetty Light</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 consigned for the charts of the area and not by individual field survey sheet. Information under each column heading should be given. *Tabulate seconds and meters
COMPILATION REPORT
Map Manuscript T-11599
Project Ph-5905

Items 31 thru 36:

Refer to the Descriptive Report for T-11598 (1960).

All facts are alike for T-11599 except that under Item 32 one triangulation station was recovered and identified.

37. Landmarks and Aids:

Form 567 is submitted for one fixed aid to navigation which was not considered to be a permanent structure and it was located by graphic methods.

38. Control for Future Surveys:

None other than mentioned in Item 37.

39. Junctions:

Satisfactory junctions were made with T-11592 on the north, T-11598 on the west, T-11600 on the east and T-11607 on the south.

Items 40, 46 and 47:

Same as T-11598 except for under Item 47, Comparison with Nautical Charts. On the manuscript just north of Tom Moore Slough a "Pile trestle in ruins" is shown. On Nautical Chart No. 6450 this feature is shown as a "dike". Upon request of this
office the field inspector made a special visit to the structure and he verified that the feature is correctly shown on the manuscript.

Approved:         Respectfully submitted:

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

Refer to facts relative to tidal flats in Skagit Bay which are included in the Descriptive Report for T-11598 (1960).

One aid to navigation was located by graphic methods:

**SKAGIT RIVER JETTY LIGHT, 1960**

The scaled position is listed on Form 567 which is submitted.
<table>
<thead>
<tr>
<th>COMPILATION RECORD</th>
<th>COMPLETION DATE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Interior details added. Compilation complete.</td>
<td>12-28-61</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### Horizontal Control Stations of Third-Order or Higher Accuracy
- X

### Recoverable Horizontal Stations of Less than Third-Order Accuracy (Topographic Station)
- None

### Bench Marks
- None

### Plotting of Sextant Fixes
- None

### Photogrammetric Plot Report
- X

### Plot Points
- X

### Alongshore Areas (Nautical Chart Data)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Aids to Navigation
- X

### Landmarks
- None

### Other Alongshore Physical Features
- None

### Other Alongshore Cultural Features
- X

### Physical Features

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>None</td>
</tr>
</tbody>
</table>

### Stereoscopic Instrument Contours
- None

### Contours in General
- None

### Spot Elevations
- None

### Other Physical Features

### Cultural Features

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>None</td>
<td>X</td>
</tr>
</tbody>
</table>

### Boundaries

<table>
<thead>
<tr>
<th>31. Boundary Lines</th>
<th>32. Public Land Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Miscellaneous

<table>
<thead>
<tr>
<th>33. Geographic Names</th>
<th>34. Junctions</th>
<th>35. Legibility of the Manuscript</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### Discrepancy Overlay
- None

### Descriptive Report
- X

### Field Inspection Photographs
- X

### Forms
- None

### Reviewer
- lesite L. Harris

### Supervisor, Review Section or Unit
- Edward Dene

### 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

### Remarks

48. Geographic Names:

Boom Slough
Camano Island
Deerwater Slough
Douglas Slough
Tsnhis Slough
Skagit Bay
Tom Moore Slough
West Pass

Geographic Names Section
27 February 1963
Review Report
Shoreline Surveys
T-11594 through T-11600
April 1964

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>Map</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1253</td>
<td>1:10,000</td>
<td>1871</td>
</tr>
<tr>
<td>T-2011</td>
<td>1:20,000</td>
<td>1888</td>
</tr>
<tr>
<td>T-2156</td>
<td>1:20,000</td>
<td>1889</td>
</tr>
<tr>
<td>T-6685a</td>
<td>1:10,000</td>
<td>1939</td>
</tr>
<tr>
<td>T-6766</td>
<td>1:10,000</td>
<td>1940</td>
</tr>
<tr>
<td>T-6769</td>
<td>1:10,000</td>
<td>1940</td>
</tr>
</tbody>
</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>Map</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deception Pass</td>
<td>1:62,500</td>
<td>1951</td>
</tr>
<tr>
<td>Utso Lady</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
<tr>
<td>Conway</td>
<td>1:24,000</td>
<td>1956</td>
</tr>
</tbody>
</table>

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

64. Comparison with Contemporary Hydrographic Surveys

<table>
<thead>
<tr>
<th>Map</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-8542</td>
<td>1:10,000</td>
<td>1960</td>
</tr>
<tr>
<td>H-8543</td>
<td>1:10,000</td>
<td>1960</td>
</tr>
</tbody>
</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>
<th>Map</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>6404</td>
<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 manuscripts.
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:

[Signature]
L. O. Lande

Approved by:

[Signature]
Chief, Photogrammetric Branch

[Signature]
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>184-5C</td>
<td>12-28-64</td>
<td>A.J. Hoffman</td>
<td>18423</td>
</tr>
<tr>
<td>6300</td>
<td>8-18-64</td>
<td>E.R. Johnson</td>
<td></td>
</tr>
<tr>
<td>18441</td>
<td>3-27-80</td>
<td>R.A. Lillis</td>
<td>18423</td>
</tr>
<tr>
<td>18440</td>
<td>3/12/81</td>
<td>D.C. Larson</td>
<td></td>
</tr>
</tbody>
</table>

For Part Before After Verification Review Inspection Signed Via Drawing No.

For Full Part Before After Verification Review Inspection Signed Via Drawing No.

For Full Part Before After Verification Review Inspection Signed Via Drawing No. 49

For Full Part Before After Verification Review Inspection Signed Via Drawing No. 21

For Full Part Before After Verification Review Inspection Signed Via Drawing No. 33

For Full Part Before After Verification Review Inspection Signed Via Drawing No.

For Full Part Before After Verification Review Inspection Signed Via Drawing No.

For Full Part Before After Verification Review Inspection Signed Via Drawing No.