DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: Washington

DESCRIPTIVE REPORT
Topographic Sheet No. N - 1935
Hydrographic

LOCALITY
Puget Sound
Hale Passage (west half) Washington
Bay and Fox Island (east half)

1935

CHIEF OF PARTY
Jack Senior.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. M - 1935

REGISTER NO.

State... Washington

General locality... Puget Sound

Locality... Hale Passage, Haro Strait

Scale 1:10,000 Date of survey... June 1935

Vessel... U.S.C. & G.S.S. EXPLORER

Chief of Party... Jack Senior

Surveyed by... Edwin C. Baum

Inked by... Edwin C. Baum

Heights in feet above M.H.W. to ground or tops of trees

Contour... Approximate contour, 50-foot interval

Instructions dated... March 29, 1934

Remarks:

...
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "N - 1935"

PUGET SOUND - WASHINGTON.

- o -

JACK SENIOR, CHIEF OF PARTY, C. & G. S.

- o -
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "N - 1935",
PUGET SOUND - WASHINGTON.

AUTHORITY:
The survey was executed in accordance with the Director's Instructions, dated March 29, 1934. Project H.T. - 171.

LIMITS:
The area surveyed includes the western half of Hale Passage, the western half of Fox Island and all of Horsehead Bay.

GENERAL DESCRIPTION:
Hale Passage approximately one half mile wide lying in a generally northwest and southeasterly direction separates Fox Island to the southward from the mainland.

Horsehead Bay, one mile in length and about one sixth mile in width, lying in a north and south direction is located immediately north of Hale Passage in Carr Inlet.

A narrow neck of land two hundred meters across and fifteen feet elevation separates Horsehead Bay and Hale Passage.

The entire area of this survey is heavily wooded with the exception of a few farms along the shores of Hale Passage.

The topography in general rises abruptly from the beach to form rounded hills of varying heights.

Mainly, along the shoreline bordering on Carr Inlet are found dirt eroding bluffs of varying heights.

Houses are to be found scattered all along the shoreline of this survey.

CONTROL:
Triangulation control points executed during the season of 1935 and based on North American 1927 datum were used.

SURVEY METHODS:
Standard planetable survey methods were used. Topographic signals were cut in from triangulation stations on the opposite shore.
and checked by traversing between control points.

No errors were found.

All off-lying features were rodded in.

CONTOURS:

Due to the wooded nature of the country, the elevation and contours could not be determined as accurately as in open country. See descriptive report for sheet "G - 1935", for further explanation.

TOWNS:

Arietta has a dock in good condition, one store and several houses. Population about ten people.

Warren consists of a dock in good condition, one store and several houses.

Cromwell consists of a dock in good condition, and several houses.

Sylven consists of a dock in good condition, one store and several houses.

Anchorage consists of a dock in fair condition and several houses.

COMPARISON WITH CHART NO. 6460:

Inspection shows no changes.

Insufficient contours on this section of chart prohibit a comparison.

LOW WATER LINE:

The low water line was transferred from smooth hydrographic sheets Nos. 8 and 9, 1935.

ROCKS:

The rock shown immediately east of a small island (locally known as Towhead Island) in Hale Passage on chart No. 6460 was verified and found to be "Awash at mean lower low water".
Two boulders were rodded in, both inshore from Towhead Island. The heights were obtained by the hydrographic party.

A few boulders were found along the beach just to the west of the dock at Arletta.

**TOPOGRAPHIC SIGNALS:**

Except as noted on sheet, all topographic signals outside the highwater line are targets attached to stumps, fallen trees, etc., and are not of a permanent nature.

**DOCK:**

A small dock located near east entrance of Horsehead Bay is in good condition. The dock is three feet wide throughout its length. The offshore end is enlarged to accommodate fair size crafts. A float for small boats is maintained on north side of dock as shown.
<table>
<thead>
<tr>
<th>Chart name.</th>
<th>Local Name.</th>
<th>Source from which information was obtained.</th>
<th>Recommended name.</th>
</tr>
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<tbody>
<tr>
<td>Carr Inlet</td>
<td>Henderson Bay</td>
<td>Locally known as Henderson Bay and named as such on most local maps. Most navigators using Coast Survey charts use chart name.</td>
<td>No recommendation.</td>
</tr>
<tr>
<td>Hale Passage</td>
<td>Hale Passage</td>
<td>Well established name.</td>
<td>Hale Passage.</td>
</tr>
<tr>
<td>Horsehead Bay</td>
<td>Horsehead Bay</td>
<td>Well established name.</td>
<td>Horsehead Bay.</td>
</tr>
<tr>
<td>Fox Island</td>
<td>Fox Island</td>
<td>Well established name.</td>
<td>Fox Island.</td>
</tr>
<tr>
<td>Grave Island</td>
<td>Koskes Island</td>
<td>Locally known as Koskes Island after first inhabitant.</td>
<td>Koskes Island.</td>
</tr>
<tr>
<td>Towhead Island</td>
<td>Towhead Island</td>
<td>Locally known as Towhead Island. The general shape and grass top give the appearance of a &quot;Towhead&quot;.</td>
<td>Towhead Island.</td>
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<tr>
<td>Arletta</td>
<td>Arletta</td>
<td>Well established name.</td>
<td>Arletta.</td>
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<tr>
<td>Sunny Bay</td>
<td>Sunny Bay</td>
<td>Name on dock, road maps, and local inquiry.</td>
<td>Sunny Bay.</td>
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<tr>
<td>Cromwell</td>
<td>Cromwell</td>
<td>Well established name.</td>
<td>Cromwell.</td>
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<tr>
<td>Shaw Bay</td>
<td>Shaw Bay</td>
<td>Named after one of the first inhabitants.</td>
<td>Shaw Bay.</td>
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<tr>
<td>Chart name</td>
<td>Local name</td>
<td>Source from which information was obtained</td>
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<tr>
<td>Moores Point</td>
<td></td>
<td>Named after first owner of spit.</td>
<td>Moores Point.</td>
</tr>
<tr>
<td>Marlocaan</td>
<td>PT</td>
<td>The City Engineer of Tacoma who lives at this point in summer, named this point several years ago. It had no name previously.</td>
<td>Marlocaan. PT</td>
</tr>
<tr>
<td>Sand Spit</td>
<td></td>
<td>This spit is locally known by thousands of fishermen as the Sand Spit.</td>
<td>Sand Spit.</td>
</tr>
<tr>
<td>Echo Bay</td>
<td></td>
<td>This bay was named by the early settlers and is locally known as Echo Bay.</td>
<td>Echo Bay.</td>
</tr>
<tr>
<td>Ktners Point</td>
<td></td>
<td>Named after first settler of point. His heirs still own point. Locally known as Ktners Point.</td>
<td>Ktners Point.</td>
</tr>
<tr>
<td>Green Point</td>
<td>Green Point</td>
<td>Well established name.</td>
<td>Green Point.</td>
</tr>
<tr>
<td>Horsehead Spit</td>
<td></td>
<td>Locally known as Horsehead Spit.</td>
<td>Horsehead Spit.</td>
</tr>
<tr>
<td>Sylvan</td>
<td>Sylvan</td>
<td>Well established name.</td>
<td>Sylvan.</td>
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Respectfully submitted,

Edwin C. Baum,
Jr. H. & G. Engr., C. & G. S.,
U.S.C. & G.S.S. EXPLORER.

APPROVED AND FORWARDED:

Jack Senior,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.
<table>
<thead>
<tr>
<th>Remarks</th>
<th>Decisions</th>
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<tr>
<td>Sometimes known locally as &quot;Windmill Bay&quot;</td>
<td>Com injected</td>
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<tr>
<td>was property of opal lishing company</td>
<td>Narlocan ??</td>
</tr>
<tr>
<td>&quot;two rocks&quot;</td>
<td>Sand Spit</td>
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<tr>
<td>directly to SW lighthouse point</td>
<td>Grave Island</td>
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<td>also see 76476</td>
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M 294
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<td>Moores Pt.</td>
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<td>Horsehead Spit</td>
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</table>

Names underlined in red approved by C.R. on 5/29/36
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRiptIVE REPORT
PHOTOSTAT OF

No. H
No. T 6448

received APR 17 1936
registered MAY 18 1933
verified reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO

82

C. K. Green
REVIEW OF TOPOGRAPHIC SURVEY No. 6448

Title (Par. 56) Hole Passage, Washington

Chief of Party Jack Senior Surveyed by E.C. Baum Inked by E.C. Baum

Ship Explorer Instructions dated March 28, 1924 Surveyed in June, 1935

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)
   No closures listed

4. The amount of vertical control that the Manual specifies for -contours-fermlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
   See also Descriptive Report for 76441(1935)

5. The delineation of -contours-fermlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None submitted

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) Low water line transferred from hydrographic survey
   See DR page 2

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
   See reverse side

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountains. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
Paragraph 9

T1671-T1678 (1877-8)

These surveys are on a scale of 1:20,000 whereas the present survey is on 1:10,000. Due to this difference in scale the present survey is much more in detail. Moores Point and Sand Spit at the Western end of Hale Passage have changed but very little other than the points themselves are somewhat more narrow. The entire present survey is full of man-made changes such as docks.

T1671-a (1910)

This revision survey of 1871 does not show any details not incorporated on the present survey. A comparison of the present survey with Chart 6460 does not show any major changes. Differences in detail are due to man-made changes.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 68.) Nunc submitted

16. A list of landmarks for charts was furnished on Form 587 and plotting checked. (Par. 16d, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) Meridians shown — all check declination shown on chart. No note of having checked declinatory.

18. The geographic datum of the sheet is N.A.1887(Adjusted) and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate. 
   Joints T-6452(1935) on the North
   Joints T-6447(1935) on the South
   Joints T-6446(1935) on the East

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by Cha. R. Bush. June 29, 1936

Examined and approved:

C. F. Green
Chief, Section of Field Records

Fred L. Peacock
Chief, Section of Field Work

L. O. Colbert
Chief, Division of Charts

Fred
Chief, Division of Hyd. and Top.