FORM 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Washington

DESCRIPTIVE REPORT.

Topographic, Sheet No. 4224

LOCALITY:

Strait of Juan de Fuca

Port Townsend

Irondale and Port Hadlock

1886

CHIEF OF PARTY:

O.S. Reading
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. 4224
(Field Letter "C")

PORT TOWNSEND

Strait of Juan de Fuca,
Washington

November, 1926

Scale - 1 : 10,000
AUTHORITY

The Topography on this sheet was executed in accordance with Instructions to the Commanding Officer of the Motor Vessel NATOMA, dated August 10th, 1926.

LIMITS

The work on this sheet is a resurvey of changed portions of Port Townsend. It includes a revision of the entire waterfront of the town of Port Townsend, about a half mile of changed waterfront at Irondale and the revision of several docks at Port Hadlock.

CONTROL

Numerous old triangulation stations consisting of natural landmarks in Port Townsend were used for control. M. E. Base was recovered and used and three U. S. E. D. triangulation stations, SCOV, OLD PORT and KHN were recovered. From the latter three stations eight new control points were established at the head of the bay for use in Port Hadlock and Irondale.

METHODS

Three point fixes were used throughout the survey as plenty of objects were available for good fixes at all times.

IMPORTANT OBJECTS

The new landmarks located by triangulation are taken up in a separate report on prominent objects in Port Townsend by Mr. Reading.

CHANGES AROUND THE TOWN OF PORT TOWNSEND

Nearly all the docks along the Port Townsend waterfront were found to have been changed. At the present time there are no docks of any size between Point Hudson and the two large docks about one fourth mile to the southwestward. The latter two docks are in the same positions as formerly but are changed in shape. Both are in a good state of repair. The northernmost one is used for all ferry landings and the other is leased by the Coast Guard and is used by the Cutters and Rum Chasers.

The large dock shown on the chart as just to the south of the Coast Guard Dock is gone entirely.

The Standard Oil Dock which is the next large dock to the southward is about fifty meters longer than shown on the chart but is otherwise the same.

Just to the north of the Standard Oil dock is a short dock with a building on it. On the chart a large building is shown as extending from this dock to the Standard Oil dock. This building however is gone, the one on the dock only remaining.
CHANGES ABOUT THE TOWN OF PORT TOWNSEND

The next dock which is about one fourth mile to the southward is about the same in position and shape. It is however shown all in black on this sheet for it is entirely covered with roofs and buildings.

The high water mark in the vicinity has been built out over one hundred meters due to sand and gravel which has been dumped there. This material appears to have come from a cut made along the face of the bluff for one fourth mile or more to the south of the Standard Oil dock. This cut was evidently made in order to run the tracks of the Port Townsend and Southern Rail Road into town on a straight tangent. The new state highway also parallels the railroad track into town. A portion of this highway is shown extending across the marsh to the southward of town. The highway is under construction at the present time and has not been opened to traffic.

The next large dock to the southward is the one on which A Elevator Shaft is located. The position and shape of this dock are somewhat the same as shown. It is in a very dilapidated state. There is now a small dock about two hundred and fifty meters to the north of this which does not appear on the chart.

To the southward of the dock on which A Elevator Shaft appears are two docks distant about one hundred and three hundred meters respectively. These docks are for sawmills located there. Both are fairily new and are not shown on the chart.

The train ferry slip is shown considerably out of position on the chart. It is shown about fifty meters to the north of its true position. The Y is now completed instead of being merely started as shown on the chart. The Y and track are on a trestle which runs out to a dock. There is a large apron of fender piles on one side of the end of the dock with a large dolphin of about twenty piles at the outer end of the fender.

CHANGES AROUND IRONDALE

The long Booth Fisheries dock at Irondale was found to be the same size and shape as shown but is about twenty five meters south of its present charted position.

The shore line from here southward to appoint several hundred meters south of the dilapidated dock shown on the chart has changed owing to the rotting away of the old pile breakwater. The erosion of the shoreline varies from ten to fifty meters, being greater in the vicinity of the old wharf.

* Port Townsend * Puget Sound * (Off-ice by Engineer)
CHANGES AROUND PORT HADLOCK

There are now four small docks at Port Hadlock instead of the wide one shown as dilapidated. All four are in a good state of repair.

The long dock at the extreme southern end of the bay is in about the same position as shown formerly but is about one hundred and fifty meters shorter. It is dilapidated.

The tank shown on the sheet near the latter dock is evidently gone. A tank and an elevator shaft on large buildings near this dock were located by triangulation and the plotted position of the newly located tank misses the position of the one shown on the chart by about eighty meters being to the north and west.

The rear range light of the Port Townsend Canal as determined by triangulation differs from the charted position by about the same amount and in the same direction as the tanks mentioned above.

The object shown on the chart in Port Hadlock as a tower is gone and should be removed from the chart.

CHANGES AROUND KALA POINT

About one fourth mile to the westward of Kala Point two structures are shown on the chart. One appears to be a house above the high water mark and the other to be a dock or the ruins of a dock out in the water. Both of these structures should be removed from the chart as no evidence of them now appears.

DISTORTION OF PROJECTIONS

The weather was rainy at the time this projection was made and it was quite damp on the days on which it was used in the field. Although checked often no considerable shrinkage was noted while the projection was used in the field. However in inking sheet it was observed to have shrunk a considerable amount being about ten to eleven meters per minute of latitude on dry days and about three to four meters per minute on longitude.

Respectfully Submitted

Carl I. Aslaksen, Jr. H. & G. E.
C. & G. Survey

Examined Approved and Forwarded

C. S. Heading, H. & G. E.
C. & G. Survey
REPORT

REVISION OF LANDMARKS OF CHART 6405

PORT TOWNSEND    WASHINGTON

1926

Chief of Party:

O. S. Reading
REPORT ON THE REVISION OF PORT TOWNSEND LANDMARKS

November 1926

Motor Vessel NATOMA

O. S. READING, Temporarily Commanding

AUTHORITY

The revision of the landmarks for an anchorage chart of Port Townsend was made in accordance with the Directors Instructions to the Commanding Officer of the Motor Vessel NATOMA dated August 10th, 1926.

SURVEY OPERATIONS

Some of the most important landmarks in the immediate vicinity of the city of Port Townsend had been located by previous triangulation but additional objects were required for the control of the planetable wharf revision particularly in the southern part of the bay. As the work could be done at very little extra expense all prominent objects which were considered of possible use on an anchorage chart were cut in while locating those used in the planetable revision. The objects recommended for charting are shown with small circles on a tracing of chart 5405 which accompanies the report. Objects which are especially conspicuous and permanent are shown with heavier circles. The weather was generally unfavorable for photographs but such as could be obtained are forwarded with this report. A complete list with descriptions of all the objects recommended for consideration for charting follows:

Permanent and especially conspicuous objects.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Photographs</th>
<th>Suitability for landmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steeple</td>
<td>City Hall</td>
<td>2a, 6</td>
<td>Conspicuous for anchorage near town.</td>
</tr>
<tr>
<td>Light</td>
<td>Point Hudson</td>
<td></td>
<td>Not conspicuous in day time</td>
</tr>
<tr>
<td>Weather Mast</td>
<td>Skeleton Steel Tower</td>
<td>6</td>
<td>Not conspicuous except when signal is being shown.</td>
</tr>
<tr>
<td>Cupola</td>
<td>Harbore Hospital</td>
<td>1a, 2a, 6</td>
<td>Conspicuous, permanent</td>
</tr>
<tr>
<td>Highest East</td>
<td>Post Office &amp; peak or gable Custom House</td>
<td>1a, 2b</td>
<td>Conspicuous, permanent</td>
</tr>
<tr>
<td>Clock tower</td>
<td>Jefferson County Court House, red brick building</td>
<td>1b, 2b, 7</td>
<td>Best landmark in Port Townsend, lighted at night. Permanent</td>
</tr>
<tr>
<td>Belfry</td>
<td>Lincoln School</td>
<td>1b, 7, 9</td>
<td>Conspicuous at a distance from wharves. Permanent</td>
</tr>
<tr>
<td>Lid Steeple</td>
<td>St Johns Hospital</td>
<td>1b, 8</td>
<td>Very conspicuous white building south of town. Permanent</td>
</tr>
</tbody>
</table>
Objects less prominent or conspicuous but desirable from location or other reason.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Photographs</th>
<th>Estimated Duration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Tower</td>
<td>Fire Alarm, Frame structure</td>
<td>2a</td>
<td>20</td>
<td>Conspicuous from close in.</td>
</tr>
<tr>
<td>Wharf House</td>
<td>Standard Oil Wharf</td>
<td>2a</td>
<td>15</td>
<td>Desirable for use with range finder, show with house symbol, Fourth order location but checked thoroughly.</td>
</tr>
<tr>
<td>Elevator Shaft</td>
<td>Wharf House south of town</td>
<td>1b, 7</td>
<td>5 to 10</td>
<td>Conspicuous but building somewhat dilapidated. Short but easily identified.</td>
</tr>
<tr>
<td>Stack</td>
<td>Lumber Mill</td>
<td>1b</td>
<td>10 to 20</td>
<td>Desirable on account of its location.</td>
</tr>
<tr>
<td>Staff</td>
<td>Glenn Cove</td>
<td></td>
<td>10 to 15</td>
<td>Lost conspicuous of a number at the Old Fort.</td>
</tr>
<tr>
<td>Cable Front North</td>
<td>Old Fort Townsend</td>
<td></td>
<td>10 to 30</td>
<td>Lost conspicuous but somewhat dilapidated. Not particularly recommended on that account. Fairly conspicuous and likely to be permanent.</td>
</tr>
<tr>
<td>Ho</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator shaft</td>
<td>Irondale</td>
<td>3</td>
<td>20</td>
<td>Fairly conspicuous but somewhat dilapidated. Recommended on account of position.</td>
</tr>
<tr>
<td>Small Stack</td>
<td>Port Hadlock</td>
<td>4</td>
<td>10</td>
<td>Conspicuous. Plant is not operating.</td>
</tr>
<tr>
<td>Transformers</td>
<td>Kulisut Spit</td>
<td>6</td>
<td>10</td>
<td>Conspicuous though small. Useful for range finder.</td>
</tr>
</tbody>
</table>

Objects cut in but not recommended.

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Photographs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spire</td>
<td>Old Catholic Church</td>
<td>2a</td>
<td>2 to 5 Abandoned, dilapidated</td>
</tr>
<tr>
<td>Belfry</td>
<td>Presbyterian Church</td>
<td>2a</td>
<td>20 Position near Bell tower and Post Office.</td>
</tr>
<tr>
<td>Spire</td>
<td>Lutheran Church</td>
<td></td>
<td>20 Not conspicuous, not needed. Dilapidated.</td>
</tr>
<tr>
<td>Daymark</td>
<td>Walan Point</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Landmarks Chart 6405

Photo No 3
Irondale

Photo No 4

Elevation Shaft
Small Shack
Irondale
Photo No. 5  (Taken against sun)
Port Hadlock

Photo No. 6

[Diagram of Landmarks with labels: Landmarks, City Hall, Bridge, Hospital]
Landmarks Chart 6405

Photo No. 9

Photo No. 10

Presbyterian Church - Pulaski 1912
Decl. at T.R.
Report on 7/5/28 Sch. 423
Port Townsend, Brandon & Port Haddock, Wash.
Arrived in 1926
Instruction date August 10, 1926

C.P. O.S. Reading
Arrived v inked by C.D. Aslakson

1. The report conforms to the requirements of the C.D. The description is unusually comprehensive.

2. The plan and character of the survey conform to the requirements of the C.D. except for the omission of a magnetic anomaly.

3. The plan is sound of the survey permitting the requirements of the C.D. except that additional observations should have been shown.

4. The quantities with previous surveys and add.

5. No further surveying is required.

6. The character of survey of the surveying is good and the field drafting is excellent.


C.P. source notes.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4224

State . WASHINGTON ..............................

General locality . Juan de Fuca Strait ..............................

Locality . Port Townsend, Irondale and Port Hadlock ..............................

Chief of party . O. S. READING ..............................

Surveyed by . CARL L. ASLAKSON ..............................

Date of survey . November, 1926 ..............................

Scale . 1 - 10,000 ..............................

Heights in feet above ..............................

Contour interval . . . Feet.


Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations,


Remarks: