DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Oregon

DESCRIPTIVE REPORT
Topographic | Hydrographic  Sheet No. 4229

LOCALITY
Coast
Nehalem River to
Cape Meares

1926

CHIEF OF PARTY
R.F. Luce
DESCRIPTIVE REPORT

To accompany Topographic Sheet "D", Tillamook Bay Entrance.

[All directions are from true north and distances are in statute miles]

INSTRUCTIONS

This work was called for under Instructions from the Director dated April 17, 1926.

LIMITS

This sheet represents the topography of the coast of Oregon from triangulation station MOUTH on the north to latitude 45° 30' on the south:

CONTROL AND ADJUSTMENTS

Third order traverse and triangulation signals furnished the control for the hydrography. Closures were within the limits of accuracy required and all adjustments made between control points in proportion to the distance from the point of departure. No adjustment was made south of triangulation station Kincheloe, as the southern end of the topography was not tied into a control point.

DESCRIPTION OF THE COAST

The coast from signal Mouth to Tillamook Bay is an unbroken sand beach backed by heavily timbered peaks and ridges. There is a low marshy country with several lakes between the beach and the hills. A few small streams flow into the ocean at various points. The sand ridge one hundred yards back of the high water line and about fifteen feet in
height, is marked by an unbroken line of cottages from signal LAST to signal POLE except for that last section between signals BROWN and LYLE. From signal POLE to the town of Bar View the narrow leaved trees become thicker and the sand dunes higher. A few houses in Watseco are the only ones along this part of the coast.

The Seattle, Spokane and Washington Railroad parallels the beach North of Tillamook Bay entrance, passing through the various beach towns.

The sand beach near Bar View becomes much wider and is covered with scattered drift logs. Low sand dunes occur all along this beach. They are often lightly covered with grass. Just north of the town of Bar View the hills rise to a height of 250 feet and are heavily timbered.

From Tillamook Bay entrance to signal DARK, a long, narrow strip of sand dunes known as KINCHELLE POINT separates the bay from the ocean. These dunes range from 100 to 200 feet in height and are covered with grass and narrow leaved shrubbery. The dunes rise abruptly from the high water line. BayOcean, a practically abandoned summer resort is the only town between the entrance to the bay and the lower limit of the sheet. There are a few cottages at various intervals along the tops of these dunes.

The town of BayOcean is largely on the bay side of the peninsula. The BayOcean hotel, a large, square, white frame building on the highest part of the sand ridge is conspicuous from seaward. There is also a natatorium on the beach. These buildings are no longer in use and are gradually decaying.

Below signal DARK the sand dunes continue to signal END but are backed by heavy timber.

From seaward, Kinchloe Point appears as a long line of unbroken sand dunes. In the distance, across these dunes, can be seen the heavily wooded
mountains east of Tillamook Bay. North of the bay these mountains approach close to the coast.

Tillamook Bay entrance and vicinity is thoroughly described in the new Coast Pilot.

The low water line at the entrance to Tillamook Bay was determined by the Corps of Engineers in June 1925, a blue print of which accompanies this report.

DANGERS TO NAVIGATION

There are no reefs or rocks along the section of the coast covered by this sheet except Twin Rocks 1/4 mile off shore two miles north of Tillamook Bar. There is deep water close to the base of these rocks. Twin Rocks, according to previous survey, are 88 feet in height. There is an arch in the southermost rock which shows plainly from the southwest.

The end of the submerged jetty at the Tillamook Bar is marked by a black can buoy.

LANDMARKS AND AIDS TO NAVIGATION

1. Whistling Buoy, vertically striped, 1.2 miles west of Coast Guard lookout station. Kincheloe Point, Twin Rocks and the sand dunes described elsewhere in this report are the most important landmarks on this sheet.

2. Black can buoy at the outer end of the submerged jetty.

3. Coast Guard Lookout Tower near the outer end of the jetty piling.

4. Inner channel buoys.

CHANNELS

The bar at the entrance to Tillamook Bay is carefully surveyed each
summer by the U. S. Engineers. The least depth in June 1926 was 16 feet at mean lower low water. While the STAR did some work at this bar, no attempt was made to duplicate the detailed work of the Engineers. Their survey was done in excellent weather with light swells. It is therefore recommended that the June, 1926, survey of the U.S. Engineers be adopted where there is any discrepancy between the two results. A blueprint of their recent survey is attached to descriptive report of launch hydrographic Sheet "D". The low water line is shown on the blueprint.

In entering the Bay, vessels should approach the bar from a point 1/3 mile north of the whistling buoy to avoid running too close to the south sand spit. After heading for the black can buoy and leaving it closely on the port hand, vessels should closely parallel the jetty until the inner channel buoys are reached.

The bar breaks in a moderate swell on the ebb tide. Considerable difficulty was experienced in crossing the bar in the latter part of September as there were several days when the heavy swells caused it to break even on a high flood tide. The bar is dangerous when breaking and should not be attempted at that time.

ANCHORAGES

The only protected anchorage or docking facilities within the limits of this sheet are those of Tillamook Bay, which are fully described in the Coast Pilot.

An extensive dredging operation by the U.S. Engineers is now going on in the inner channel near Garibaldi.

NEW NAMES

Twin Rocks. On the present charts, the rocks two miles north of
Tillamook Bar are called "Double Headed Rocks." These are known locally as Twin Rocks only. Owing to this fact, and to the simpler and more appropriate descriptive name, it is suggested that their designation be changed to Twin Rocks.

**TILLAMOOK BAR SURVEY**

No attempt is made to show the low water line at the entrance to Tillamook Bay on our sheets owing to the very detailed work of the U. S. Engineers in June 1926, a blueprint of which is attached to launch Hydrographic Sheet "D".
<table>
<thead>
<tr>
<th>Name</th>
<th>Latitude</th>
<th>D.M.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last</td>
<td>45 38</td>
<td>100'</td>
<td>123 56</td>
<td>600</td>
<td>Chimney of last plainly seen house in N. end of Manhattan. New unpainted house.</td>
</tr>
<tr>
<td>Brown</td>
<td>45 37</td>
<td>12'7'</td>
<td>123 56</td>
<td>682</td>
<td>Center of southernmost dark brown house in Manhattan. Small house.</td>
</tr>
<tr>
<td>Lyle</td>
<td>45 37</td>
<td>712'</td>
<td>123 56</td>
<td>727</td>
<td>S. Chimney of Lytle Hotel.</td>
</tr>
<tr>
<td>Chim</td>
<td>45 36</td>
<td>1769</td>
<td>123 56</td>
<td>841</td>
<td>Chimney at S. end of large frame building.</td>
</tr>
<tr>
<td>White</td>
<td>45 36</td>
<td>993</td>
<td>123 56</td>
<td>892</td>
<td>Center of small white bungalow, white fence in front of.</td>
</tr>
<tr>
<td>Pole</td>
<td>45 35</td>
<td>1493</td>
<td>123 56</td>
<td>1117</td>
<td>Prominent flag pole (white) on sand dune.</td>
</tr>
<tr>
<td>Wat</td>
<td>45 35</td>
<td>591</td>
<td>123 56</td>
<td>1140</td>
<td>Northernmost house seen in Watsaco, dark brown paint, center chimney.</td>
</tr>
<tr>
<td>Slot</td>
<td>45 34</td>
<td>1122</td>
<td>123 56</td>
<td>1229</td>
<td>U.S. Signal. Prominent white slats at edge of woods.</td>
</tr>
<tr>
<td>Look</td>
<td>45 34</td>
<td>353</td>
<td>123 57</td>
<td>94</td>
<td>U.S.C.G. Lookout tower on jetty, center.</td>
</tr>
<tr>
<td>Scow</td>
<td>45 33</td>
<td>172</td>
<td>123 56</td>
<td>1178</td>
<td>Highest part of nearly buried barge wreck on beach.</td>
</tr>
<tr>
<td>Gray</td>
<td>45 32</td>
<td>470</td>
<td>123 57</td>
<td>260</td>
<td>Brick chimney in center of northernmost house on dunes. Gray paint.</td>
</tr>
<tr>
<td>Dark</td>
<td>45 31</td>
<td>374</td>
<td>123 57</td>
<td>478</td>
<td>Brick chimney of dark brown, gabled house, southernmost of group.</td>
</tr>
<tr>
<td>View</td>
<td>45 20</td>
<td>1426</td>
<td>123 57</td>
<td>604</td>
<td>Signboard over west face entrance to &quot;West View&quot; frame house.</td>
</tr>
<tr>
<td>End</td>
<td>45 29</td>
<td>1764</td>
<td>123 57</td>
<td>930</td>
<td>Center of last house on beach, light roof conspicuous. Southernmost house.</td>
</tr>
</tbody>
</table>

Note: Above descriptions as seen from seaward.

Peak 'D' 45 34 1627 123 56 908 Heavily wooded. Elev. 750 ft.
Peak 'E' 45 24 1118 123 56 1148 Heavily wooded. Elev. 250 ft. Detached on tangent at N. entrance to Tillamook Bay.

Scaled by: J.W.H.
Checked by: R.L.D.
Landmarks for Charts

Topographic Sheet "D" Institute

The following landmarks are suitable for use on charts:

1. Twin Rocks. At last peak.


3. Jetty piling, Tillamook Lava. The piling, upon which the U.S. & G. Lookout is built, extends at present a short distance west of the tower. However, this west portion of the piling is rapidly disintegrating.

4. Peak "D". Of doubtful value for navigation, due to wooded background.

5. Peak "L". Very conspicuous from the north-westward as a detached hill on the tangent.

6. Kincheloe Hotel. A large square white frame structure. Should be visible for considerable distance at sea, especially in the afternoon, as a distinct white spot at the top of the highest sand dunes on Kincheloe Pt., elevation about 200 ft.

Note: The above landmarks are more fully described in list of positions, in Descriptive Reports on smooth launch, hydrographic sheet and on topographic sheet.
File with Desc Report

10-78

T4229

July 3, 1928.

To: Lieutenant (j.g.) K. C. Crosby,
Coast and Geodetic Survey,
Ship PIONEER,
Astoria, Oregon.

Through: Commanding Officer, Ship PIONEER,

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Discrepancy between topographic sheets.

There are forwarded herewith photostatic copies of topographic sheets 4336 and 4229. On the copy of T. 4336, which was surveyed by you, there are shown two positions of θ End. In an otherwise very complete descriptive report you gave no explanation of this discrepancy.

At your location of θ End you noted "from 5 point fix 1927". Hydrographic signal "Cone" located on R. 4745 by sextant outs is almost identical with your location of θ End. Information is desired whether this is the "5 point fix" referred to and, if not, whether θ Cone is the house used for θ End. You will note that even should the positions of θ End be adjusted, there is a discrepancy in the location of the high water line. Any information as to the relative accuracy of the two determinations or other conditions will be of value in adjusting these discrepancies.

On T. 4229 a rock or small islet is indicated between Pillar Rock and θ Pic. It was apparently located by acute outs. You are requested to make a statement as to the probability of the existence of such a rock which had been overlooked by you at the time of the survey. In the absence of such a statement, a rock will be charted in the position shown.

An early reply is requested.

(Signed) R. L. Faris

Acting Director.
POST-OFFICE ADDRESS: Marshfield, Oregon.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY Str. PIONEER,
Marshfield, Oregon.

July 14, 1928.

To: The Director,
U.S. Coast & Geodetic Survey,
Washington, D.C.

Through: The Commanding Officer,
Ship PIONEER.

From: Lieut. (j.g.) K. G. Crosby,
U.S. Coast & Geodetic Survey,
Ship PIONEER,
Marshfield, Oregon.

Subject: Discrepancy between topographic sheets.

Being in receipt of your letter of July 3, 1928,
reference number 10-rs, with respect to the discrepancy between
the topographic sheets T4336 and T4229 I report as follows.

The hydrographic signal "Cone" located by sextant
cuts on hydrographic sheet H4745 is identical with the signal
which I call "End" and which I located by plane table methods.
The location of the plane table was determined by a three-
point fix on previously located points which I had established, and on
triangulation points. This fix is separate and distinct from the
sextant fix used to establish the location of "Cone" on hydro-
graphic sheet H4745.

Signal "End" as determined by me is the gable of the
last house on the beach and is situated about 60 meters inshore
from the H. W. line. Storm water line, however, will be found
at the base of the bluff line or about 30 meters inshore from
the H. W. line.

In regard to the rock shown on topographic sheet
T4229 in the vicinity of the Northwest point of Cape Meares and
not shown on topographic sheet T4336, I beg to report that I did
not see this rock at the time of making the survey of this sec-
tion of the shoreline, and I do not believe that I overlooked
such a feature. Moreover, the launch party and topographic party
had a close co-operation and any details shown or not shown by the
topographer were carefully checked by the hydrographer in the
course of his work. No rock was noted by either party in this
location.

K. G. Crosby
Lieut. (j.g.) K. G. Crosby,
U. S. Coast & Geodetic Survey.

Approved and forwarded.

O. W. Swainson,
Commanding Officer.

July 23, 1928

Recommend that shoreline on T47.29 be
adjusted to shoreline on T43.36 and that
position of O End on T43.36 be used.

G.W. S
SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4229

Nehalem River to Cape Meares, Oregon

Surveyed in 1926

Instructions dated April 17, 1926 (PIONEER)

Chief of Party, R. F. Ince.

Surveyed and inked by F. W. Hough.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of the survey satisfy the requirements of the General Instructions.

3. The plan and extent of the survey satisfy the specific instructions except for the omission of the railroad along the coast north of Tillamook Bay entrance.

4. The junction with T. 4336 is faulty, there being a difference of 52 meters in the location of both and a difference of 80 meters in the shorelines at that point.

5. On T. 4229 is a small circle 610 meters, N. 15° E. true from Cape Meares Lighthouse that would be interpreted as a dry rock. This spot falls within the area of T. 4336 and H. 4745 but does not appear on either sheet nor on the old survey. The surveyor of T. 4336 states that neither he nor the hydrographic party saw the rock and he does not believe it exists. It has therefore been erased from the sheet by order of Chief of Field Records Section.
6. The character and scope of the surveying and field drafting are good.


Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (E. & T.)
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. 4229

State Oregon

General locality Tillamook Bay Entrance

Locality Nehalem River to Cape Meares

Chief of party H. F. Luce, H. & G. Engineer

Surveyed by Floyd W. Hough, Jr. H. & G. Engineer

Date of survey September, 1926

Scale 1:20,000

Heights in feet above High Water

Contour interval 100 feet

Inked by F. W. H. Lettered by F. W. H.

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet

Remarks: Topographic Sheet 0