

7817

Daig. Cht. No. 6152

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of SurveyHYDROGRAPHIC

Field No. HO-1350 Office No. H-7817

LOCALITY

State OREGON-WASHINGTON

General locality LOWER COLUMBIA RIVER

Locality JIM CROW POINT TO HARRINGTON POINT

1945

CHIEF OF PARTY

W. H. Bainbridge

LIBRARY & ARCHIVES

DATE DECEMBER 7, 1951

7817

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-7817

Field No. HO-1350

State Oregon - Washington ✓

General locality Lower Columbia River ✓

Locality Jim Crow Pt. to Harrington Pt. ✓

Scale 1 : 10,000 ✓ Date of survey 4 August to 1 September 1950 ✓

Instructions dated 24 May 1949, 24 March 1950

Vessel Ship HODGSON

Chief of party W.H. Bainbridge ✓

Surveyed by Paul Taylor, R.F. Lanier, A.M. Legako ✓

Soundings taken by ~~fathometer, graphic recorder, hand lead, wire~~ graphic recorder

Fathograms scaled by Ship Personnel

Fathograms checked by Ship Personnel

Protracted by Clarence E. Pederson ✓

Soundings penciled by Clarence E. Pederson ✓

Soundings in ~~fathoms~~ feet at ~~MLLW~~ MLLW Columbia River Datum ✓
(M.L.L.W. during lowest river stages)

REMARKS: and are true depths

DESCRIPTIVE REPORT

to accompany

Hydrographic Survey Sheets H-7815, H-7816, H-7817 & H-7862

Columbia River

Project CS-339

Scale 1:10,000

Ship HODGSON

W. H. Bainbridge
Chief of Party

A. Project:

This survey was made in accordance with instructions dated 24 May 1949, 24 March 1950, and 21 September 1950, and letter from Acting Director dated 16 June 1949, Subject: Bar Check.

These instructions cover new basic hydrographic surveys in the Columbia River from Vancouver to Cathlamet Bay.

B. Survey Limits and Dates:

Sheet H-7815 joins Sheet H-7720 (1949) at the southeastern end of Hunting Island and 1 mile southeast of Bugby Hole and extends to Skamokawa, Washington and 1 mile northeast of Clifton, Oregon. Hydrography was begun on 29 May 1950 and ended 29 June 1950. In a small area off Skamokawa which was used as a dredge spoilage after hydrography was completed was resurveyed on 31 August 1950.

Sheet H-7816 joins Sheet H-7815 and extends to Jim Crow Pt., Washington. Hydrography was begun on 6 July 1950 and ended 3 August 1950.

Sheet H-7817 joins Sheet H-7816 and extends to Harrington Pt., Washington where it joins Sheet H-7180. Hydrography was begun 4 August 1950 and ended 1 September 1950. (1947) Also joins H-7178 (1947).

Sheet H-7862 joins Sheet H-7748 at Bunker Hill Light and extends to the western end of Wallace Island where it joins Sheet H-7720. Hydrography was begun 17 October 1950 and ended 31 October 1950. During this time there was very little good hydrographic weather and some time was lost each day due to haze and fog. Part of the work was done in heavy rain.

C. Vessel and Equipment:

Hydrography on Sheets H-7815 and H-7816 was accomplished with Launch No. 141, a 36-foot landing barge (LCP)R. 808-A type portable depth recorder No. 77S was used with an outboard fish. The squat and settlement for this launch were accurately determined in 1946 and found to be negligible.

Hydrography on Sheets H-7817 and H-7862 was done with Launch No. 141 and Launch No. 134. Launch No. 134 is a 24-foot Navy Plane Personnel Craft.

808-A type portable depth recorder No. 62S was used with the sound unit located in the after bilge. Launch No. 134 was used primarily for sounding the back sloughs and shoal water. Squat and settlement were negligible at the speed at which hydrography was done.

The launches returned to the Ship HODGSON anchored at various places on the working grounds, at the end of each day. The Ship HODGSON returned to the Port of Longview each weekend for water and supplies while hydrography was done on sheets H-7815 and 7862. While work was done on Sheets H-7816 and H-7817, water and supplies were obtained at the Port of Astoria.

D. Tides and Currents:

Tides were recorded on portable automatic tide gages installed at Stella, County Line, Cape Horn, Cathlamet, Skamokawa, Brookfield, and Altoona, Washington and Aldrich Point and Knappa, Oregon. See TIDE NOTE which is part of this report.

Two 75-hour series of current observations were made from the stern of the Ship HODGSON using a Price Current Meter, at 3 depths, and a current pole. Observations made at the following locations:

- (1) Vicinity of Altoona:
Latitude $46^{\circ} 15' 39''$
Long. $123^{\circ} 38' 51''$
- (2) Vicinity of Hunts Mill Point:
Latitude $46^{\circ} 11' 41''$
Long. $123^{\circ} 25' 50''$

E. Smooth Sheet:

The smooth sheet will be prepared at a later date by the Seattle Processing Office.

F. Control Stations:

Most hydrographic signals were located from air photographs and plotted on the boat sheet by the Portland Photogrammetric Office. The photographs were controlled primarily by 1913, 1935, 1936, and 1950 triangulation. Some additional signals were located with sextant fixes by the hydrographic party, and a few questionable signals plotted from the photos were relocated with sextant fixes.

G. Shoreline and Topography:

The shoreline and topography will be obtained from Shoreline Manuscripts Nos. T-9266, T-9267, T-9268, T-9269, T-9272, and T-9510 prepared by the Portland Photogrammetric Office. *Only T-9266 and T-9267 fall within*

H. Soundings:

(1949)

- H-7817

Soundings were measured with two 808-A type portable depth recorders. The depths were measured in feet and scaled from the fathograms to the nearest 0.2 of a foot. A few soundings were measured from a skiff with a pole. Areas containing log rafts were sounded with a leadline while walk-

ing the logs. Soundings taken by shoal-walking parties were estimated to the nearest 0.25 foot from marks on boots.

The fathometer comparisons were made for Launch No. 141 by lowering a unit as approved in letter from Acting Director dated 16 June 1949. The fathometer comparisons for Launch No. 134 were made in the conventional manner using a bar. Corrections were taken from a mean curve drawn for each launch for each sheet.

I. Control of Hydrography:

All horizontal control of hydrography was done by the three-point fix method. The signals located from photographs were satisfactory for the most part. However, some discrepancies were discovered, particularly on Sheets H-7817 and H-7862. Several signals on each of these sheets were relocated by sextant fixes. In relocating the signals the horizon was closed when possible; in the cases where this was not possible three point fixes with check angle were taken.

On Sheet H-7817 the original photo location of signals JAP and PEG were found to be in error after some hydrography had been done. Positions using JAP from "a" thru "h" day and positions using PEG from "a" thru "g" day are in error on the boat sheet by a small amount. Some of these positions were replotted to make certain the area was adequately covered.

J. Adequacy of Survey:

This survey is complete and adequate and should supersede all prior surveys.

K. Crosslines:

About 10% of crosslines were run. No discrepancies were noted.

L. Comparison with Prior Surveys: (See Review, par. 5.)

Note: Only those items so designated fall within H-7817

Locality	67 ft. Smooth sheet	1935 Survey
Elliot Pt. 46° 15' 6" 123° 36' 9" 7817	65 foot deepest. Hole is filling in.	76 foot deepest.
Harrington Pt. 46° 15' 75" 123° 40' 7817	Area S of Harrington Pt. has been completely changed due to dredging. Least depth 6 feet.	Least depth 12 ft.
Miller Sands 46° 15' 3" 123° 37' 2" 7817	Least depth - 3 feet. The size of this shoal area has increased. - 2' smooth sheet	Least depth 4 feet.
S of Pillar Rock 46° 15' 123° 35' 7817	Sand bar bares. This area has shoaled considerably.	1936 Survey 16 ft.
46° 14' 123° 35' 7817	7 ft. This area has shoaled considerably.	17 ft. 1936 survey generally deeper in this vicinity.

NW entrance to Cathlamet Channel 46° 13'3 123° 25'7	Least depth 5 ft. Shoal extends further N than shown by prior surveys	
46° 12'9 123° 24'75	Least depth 3 ft. Shoaling has increased in this area.	
Cathlamet Channel 46° 12'6 123° 24'11	Least depth 0.0 ft. Shoaling has increased in this area.	
Clifton Channel 46° 13'13 123° 27'18	Least depth 2 ft. General shoaling of Clifton Channel. Now difficult to carry more than 6 ft. downstream thru Clifton Channel past N 46°13'	Least depth 9 ft. Could carry 11 ft.
46° 12.7' 123° 27'	Least depth 1 ft.	Least depth 5 ft.
46° 12'5 123° 26'	Large sand spit covering N half of entrance to Clifton Channel & extending northward 1/2 mile. Is gradually in- creasing in size.	
46° 12' 123° 23'5	Shoal extending N & E from Puget Island is increasing in size.	
N of W end of Wallace Island 46° 08'6 123° 16'5	Sand bar building up; now bares several feet at low water. Water now shoal for several hundred meters N of Wallace Island.	<u>1937 Survey</u> Least depth 5 ft.
46° 09'7 123° 13'5	Eureka Bar built up & extend- ing farther South. Area S of Eureka Bar generally shoaler.	
E of Gull Island 46° 11'2 123° 08'7	Sand bar built up. Area generally shoaler.	
NW entrance to Bradbury Slough 46° 10'7 123° 10'0	Sand bar has increased in size and extends further NE.	
46° 09' 123° 15'	Large sand bar now in this area.	

46° 13:8 123° 36:0	7817	Sandbar has increased in size ✓	
NE end Snag Is. 46° 14:5 123° 36'	7817	NE end of jetty has washed away and depths are generally greater. ✓	
46° 12:6 123° 37:7 Seal Island Prairie Channel	7817	Least depth ⁴ 3 ⁴ ft. ^{Smooth sheet.} generally. This channel is generally shoaler than prior surveys indicate. ✓	Least depth 14 ft. ✓
Svenson Is. Prairie Channel 46° 10:9 123° 39:6	7817	Mud bar building out into channel ✓	
46° 15:8 123° 38:6	7817	Least depth 6 ft. Shoal is building up downstream from Altoona Jetty. ✓	
46° 15:3 123° 36:7	7817	Least depth 26 ft. Shoal near channel has been removed, probably by dredging. ✓	Least depth 0.0 ft. ✓
46° 15:5 123° 35:5	7817	Least depth ²³ 22 ²³ ft. ^{Smooth sheet} Shoal area is larger than before. ✓	Least depth 26 ft. ✓
46° 13:3 123° 38:0	7817	General shoaling S of Snag Island. ✓	
Vicinity of 46° 14' 123° 33'		Hole in this vicinity has shoaled to 14 ft.	Least depth 26 ft.
46° 14:2 123° 31:65		Least depth 4 $\frac{1}{2}$ ft. Slight shoaling in this general area.	Least depth 8 ft.
46° 15:2 to 46° 15:5 123° 31:5		Shoal area has increased and extends much further downstream.	
Along face of Brookfield dock		Least depth 5 $\frac{1}{2}$ ft.	
Below Skamokawa 46° 16:2 123° 29:3		Shoal in midstream extends farther downstream. This shoal is used as a dredge spoilage area.	
E entrance to Red Slough 46° 14:6 123° 26:9		Sand shoal built up. Bares 3 ft. at C.R.D. 1 ft. can be carried N or S of the center of the entrance.	6 ft.
46° 15' 123° 27'		Shoal area extending E from Welch and Tenasillahe Islands gradually increasing.	

Comparison with Chart 6152:

46° 10:0 123° 13:1	Fish trap extends S from Eureka Upper Dike. Trap not shown on chart.
46° 12:9 123° 25:2	Chart shows dolphin. No dolphin now.
46° 13:2 123° 28:4	Chart shows 2 rocks just offshore. Area was developed and no rocks found.
46° 13:0 123° 25:8	Chart shows fish trap. No trap now.
46° 13:2 123° 25:8	Chart shows fish trap. No trap now.
46° 14:0 123° 26:2	Chart shows dolphin. No dolphin now.
46° 14:6 123° 25:2	Chart shows pile. No pile now.
46° 14:7 123° 27:1	Chart shows fish trap. No trap now.
46° 15:2 123° 26:6	Chart shows pile. No pile now.
46° 15:5 123° 27:0	Chart shows pile. No pile now.
46° 16:1 123° 27:6	Chart shows pile. No pile now.
46° 16:4 123° 29:6	Chart shows rock near shoreline. Rock not found; however, area was not completely developed and shoal sounding on boat sheet indicates that rock may still be there. <i>17 + 1. Smooth sheet</i>
46° 15:7 123° 32:9	Chart shows pile. No pile now.
46° 13:50 123° 36:25	Chart shows pile. No pile now. ✓ ✓ <i>7817</i>
46° 15:46 123° 35:05	Chart shows pile. No pile now. ✓ ✓ <i>7817</i>
46° 15:15 123° 35:4	24 foot sounding on H-6181 (1936-37) supported by ^{28' smooth sheet} 22 ₃ foot sounding in vicinity on H-7817 (1950). ✓
46° 15:4 123° 38:7	Miller Sands fish house now gone. Snag piles remain. Fish barn still remains. ✓ <i>7817</i>
46° 13:6 123° 38:5	Chart shows dolphin. ^{nearby.} Dolphin gone. <i>46 - 13.64 } Dolphin charted from smooth sheet HFS 9/18/52</i> <i>123 - 38.45</i> ✓ <i>7817</i>

- 46° 13:11
123° 39:18 7817 Green Island fish house gone. Snag piling still remains. ✓
- * 46° 13:15
123° 35:11 7817 Chart shows wreck. No indication of wreck now. ✓
- 46° 13:12
123° 36:18 7817 Dike in poor repair. ✓
- 46° 12:09
123° 39:00 7817 Green Island jetty in poor repair. ✓
- 46° 15:17
123° 39:15 7817 Jetty in ruins still remains. Boat sheet shows lines run through gap in jetty. ✓
- 46° 13:18
123° 36:19 7817 Fish house and dolphins have been removed and relocated at 46° 13:17 N., 123° 37:13 W. ✓
- 46° 14:14
123° 35:19 7817 Snag Island Jetty in poor condition. Eastern end has washed away. ✓
- 46° 15:15
123° 29:16 11 foot sounding shown on chart. Sounding no longer isolated due to general shoaling in this area.

N. Dangers and Shoals:

All newly found dangers and shoals have been discussed under Comparison with Prior Surveys. ✓

O. Coast Pilot Information:

Coast pilot information was submitted as a separate report. ✓

P. Aids to Navigation:

All aids to navigation are listed on Form 567 which is a part of this report. ✓

Pillar²⁶³ Rock Upper Range was established by Photo-Topo, approximate azimuth 262° 38'. The first hydrographic line for "a" day, Sheet H-7816, was run on this range.

Pillar Rock Lower Channel Range was established by triangulation, approximate azimuth 93° 35'. Hydrographic line recorded in Volume 1, Page 30, Sheet H-7817, was run on this range. ✓

Q. Landmarks for Charts:

All landmarks for charts are listed on Form 567 which is a part of this report. ✓

R. Geographic Names:

A separate report on geographic names will be submitted.

S. Silted Areas:

Major changes due to silting are discussed under Comparison with

Prior Surveys. In general the back channels are subject to much silting. The small islands and bars are composed mostly of fine sand and change slightly with each flood season. Generally they tend to increase in size. ✓

T. Tabulation of Applicable Data:

Forwarded to Washington Office:

- 10 - sheets, Form 681, Report-Tide Station (Aldrich Pt., Cathlamet, Tongue Point, Skamokawa, Brookfield, Altoona, Knappa, Cape Horn, County Line, and Stella.)
- 11 - volumes, Form 258, Leveling Records-Tide Stations (for above stations).
- 27 - marigrams, Aldrich Pt.
 - 7 - marigrams, Cathlamet
- 19 - marigrams, Skamokawa
- 18 - marigrams, Brookfield
 - 9 - marigrams, Altoona
- 10 - marigrams, Knappa
 - 7 - marigrams, County Line ✓
 - 8 - marigrams, Stella
 - 9 - marigrams, Cape Horn
- 4 - volumes, Form 270, Record of Current Observations (Hunts Mill and Altoona).
- 2 - volumes, Form 250, Horizontal Angles
- 4 - volumes, Form 251a, Horizontal Angles
- 4 - sheets, Form 28B, Geographic Positions
- 19 sheets, Form 24A, List of Directions
- 13 - sheets, Form 470, Abstract of Directions
 - 1 - sheet, Form 382, Reduction to Center
- 18 - sheets, Form 25, Computation of Triangles
- 27 - sheets, Form 27, Position Computations
 - 2 - sheets, Form 655, Computation of 3-pt. Problem
- 11 - sheets, Form 662, Inverse Position Computation
- 4 - cards, Form 525, Description of Triangulation Stations

- 21 - cards, Form 525b, Description of Triangulation Stations Intersection Stations
- 118 - cards, Form 526, Recovery Note, Triangulation Station
- 39 - cards, Form 685A, Recovery Note, Bench Marks
- 1 - Coast Pilot Notes

Forwarded to Seattle Processing Office:

- 7 - Map-manuscripts (photogrammetric) T-9266 to T-9269 inclusive, T-9510, T-9254(1949), and T-9272 (1949).
- 76 - Form M-2226-12, Control Station Identification Cards
- 162 - Pictures, single lens, field, scale 1:10,000
- 29 - Pictures, single lens, field, scale 1:5,000
- 167 - Pictures, single lens, office, scale 1:10,000
- 34 - Pictures, single lens, office, scale 1:5,000
- 8 - Film positives of 1936 Topographic Sheets, Nos. T-6384(b), T-6385(a) & (b), T-6386, T-6387 (a) & (b), and T-6522 (a) & (b)
- 1 - Field Inspection Report for Map Manuscripts Nos. T-9266 to T-9269 inclusive and T-9510.
- 1 - Descriptive Report for Manuscript (map) Nos. T-9266 - T-9269 incl.
- 1 - Descriptive Report for Map Manuscript No. T-9510.
- 89 - Form 524, Description of Recoverable Topographic Stations
- 22 - Fathograms, Sheet No. H-7815
- 20 - Fathograms, Sheet No. H7816
- 32 - Fathograms, Sheet No. H-7817
- 20 - Fathograms, Sheet No. 7862
- 4 - sheets, Form 28B, Geographic Positions
- 4 - cahiers, Tide Curves, Tide Reducers, Fathometer corrections
- 1 - Geographic Names Report
- 1 - Season's Report

Respectfully submitted,

John O. Boyer
 John O. Boyer
 Lieut., USC&GS

LEADLINE CORRECTIONS

Sheets H-7815, H-7816, H-7817, & H-7862

Leadline Reading	Correction Feet	Leadline Reading	Correction Feet	Leadline Reading	Correction Feet
<u>Leadline No. 4 (snapper)</u>		<u>Leadline No. 3 (snapper)</u>		<u>Leadline No. 1</u>	
0.0 to 12.0	0.0	0.0 to 80.0	0.0	0.0 to 09.0	0.0
12.1 to 21.0	-0.2			9.1 to 14.0	-0.2
21.1 to 32.0	-0.4			14.1 to 22.0	-0.4
32.1 to 45.0	-0.6			22.1 to 27.0	-0.6
45.1 to 58.0	-0.8			27.1 to 37.0	-0.8
58.1 to 110.0	-1.0			37.1 to 46.0	-1.0

Leadline No. 2 (snapper)

0.0 to 18.0	0.2
18.1 to 23.0	0.4
23.1 to 34.0	0.6
34.1 to 42.0	0.8
42.1 to 54.0	1.0
54.1 to 118.0	1.2

Leadline No. 6

0.0 to 3.0	0.0
3.1 to 53.0	0.2

TIDE NOTE

Hydrographic Sheets H-7815, H-7816, H-7817, & H-7862

The tides were recorded by portable automatic tide gages. The Tide Staffs were connected to U. S. C. & G. S. bench marks and referred to the Columbia River Datum as determined by the U. S. Army Engineers.

The boat sheets were divided into tidal zones, which are clearly marked on the sheets. Tide curves were drawn for each zone by interpolation for the duration of the hydrography in each zone. The zoning attempts to hold the difference in tides between adjoining zones to about 0.2 feet, but the differences at low water, which were greatest, sometimes were as much as but not more than 0.5 feet. Tide reducers were taken from these curves and entered in the sounding volumes to the nearest 0.2 foot.

Sheet No.	No. of Zones	Controlled by Tide Gages at	CRD on Staff	Geo. Pos. of Latitude	Tide Gage Longitude
H-7815	7	Cathlamet	0.0ft.	46° 12' 11"	123° 23' 11"
		Skamokawa	-0.01 ft.	46° 12' 12"	123° 27' 13"
		Aldrich Pt.	+4.57 ft.	46° 14' 12"	123° 30' 17"
H-7816	7	Skamokawa	-0.01 ft.	46° 12' 12"	123° 27' 13"
		Aldrich Pt.	+4.57 ft.	46° 14' 12"	123° 30' 17"
		Brookfield	+0.05 ft.	46° 15' 18"	123° 33' 16"
H-7817	5	Brookfield	+0.05 ft.	46° 15' 18"	123° 33' 16"
		Altoona	+1.0 ft.	46° 16' 10"	123° 39' 12"
		Knappa	+2.0 ft.	46° 11' 13"	123° 35' 13"
H-7862	4	Stella	+1.0	46° 11' 13"	123° 07' 16"
		County Line	+1.0	46° 11' 10"	123° 11' 14"
		Cape Horn	+1.6	46° 09' 11"	123° 17' 14"

Not on Boat Sheet

A comparison of the tides at Brookfield with Aldrich Point and Skamokawa indicate that the Columbia River Datum at Brookfield may be relatively too high by about 1/2 foot. The following is a portion of a letter from the Acting Director dated 31 October 1950. "However the series of observations at Brookfield is too short to give conclusive results and the indicated discrepancy, if real, is too small to be of practical significance in determining tide reducers. It is recommended that the tide reducers be entered in the sounding records on the assumption that the Columbia River Datum at Brookfield has been correctly determined as the available observational data do not disclose any positive evidence of appreciable error." As recommended above, the field party applied no correction to the tide readings obtained at Brookfield.

J. O. Boyer,
Lieut., USC&GS

APPROVAL SHEET

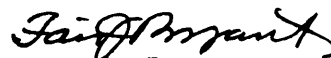
for

Hydrographic Survey Sheets H-7815, H-7816, H-7817, H-7862

Field work on these sheets was done under the immediate supervision of W. H. Bainbridge, Chief of Party. Commander Bainbridge was transferred from the Ship HODGSON prior to the writing of this report.

The records have been examined and found to be complete.

This survey is complete and adequate and should supersede all prior surveys.


Fair J. Bryant,
Acting Commanding Officer
Ship HODGSON

Lower Columbia River.

Sheets H	7815	Ho	1150
	7816		1250
	7817 ✓		1350
	7862		1450

Processing Office Notes.

Smooth sheets.

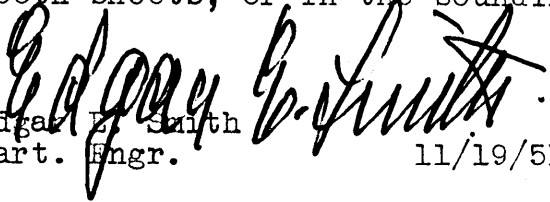
The four projections were made by hand; the first three on cut sheets, brand not known; the last on Whatman paper.

	H 7815 Ho 1150	H 7816 Ho 1250	H 7817 Ho 1350	H 7862 Ho 1450
Shoreline and Topographic signals.	T 9268 .9269	T 9266 9268	T 9266	T 9272 9510
Triangulation from adjusted GP's on pages here listed.	325 334 336 345 346 367 368 370 901 907 910	325 334 345 346 367 368 370 901 902 1113	325 335 336 346 368 1167 1168	343 360 361 369 370

Other GP's for all four sheets are found in the field computations of Bainbridge 1950.

Any features requiring special mention have been noted on the face of the smooth sheets, or in the sounding records.

Edgar E. Smith
Cart. Engr.



11/19/51

FATHOMETER CORRECTIONS

Launch No. 134

Sheet H-7817

Fathometer No. 62S

Fath. Depth Feet	Correction Feet	Fath. Depth Feet	Correction Feet
"A" Scale		"B" Scale	
0.0 to 1.4	+1.0	35.0 to 38.4	+0.2
1.5 to 2.5	+0.8	38.5 to 50.2	0.0
2.6 to 4.0	+0.6	50.3 to 67.2	-0.2
4.1 to 6.5	+0.4	67.3 to 74.0	-0.4
6.6 to 14.4	+0.2	74.1 to 85.4	-0.6
14.5 to 26.4	0.0	85.5 to --	-0.8
26.5 to 38.2	-0.2		
38.3 to 50.2	-0.4		
50.3 to --	-0.6		

Launch No. 141

"A" Scale

0.0 to 1.0	+1.6
1.1 to 2.2	+1.4
2.3 to 3.4	+1.2
3.5 to 5.4	+1.0
5.5 to 8.8	+0.8
8.9 to 19.0	+0.6
19.1 to 31.1	+0.4
31.2 to 42.9	+0.2
43.0 to 54.9	0.0
55.0 to 60.0	-0.2

Sheet H-7817

Fathometer 62S

"B" Scale

35.0 to 42.9	+0.6
43.0 to 54.2	+0.4
54.3 to 65.0	+0.2
65.1 to 76.0	0.0

Launch No. 141

"A" Scale

0.0 to 1.3	+1.6
1.4 to 3.3	+1.4
3.4 to 5.6	+1.2
5.7 to 8.1	+1.0
8.2 to 11.3	+0.8
11.4 to 15.7	+0.6
15.8 to 22.0	+0.4
22.1 to 42.0	+0.2
42.1 to 55.0	0.0

Sheet H-7817

Fathometer 77

"B" Scale

35.0 to 36.8	+1.8 ⁴
36.9 to 90.0	+1.2

"C" Scale

70.0 to 86.0	+3.0
86.1 to --	+3.2

HYDROGRAPHIC SIGNALS

Sheet H-7817 (HO-1350, Field)

HYDROGRAPHIC

NAME	TYPE	SOURCE
ABE	Hydro	Volume 1 ✓
ACE	Photo-Hydro	T-9266 (Sig. No. 178) ✓
ANT	Photo-Hydro	T-9267 (Sig. No. 188) ✓
BAG	Photo-Hydro	T-9267 (Sig. No. 181) ✓
BARN (Miller Sands Fish Barn, River Gable (Oreg) 1935)	Triang.	Triangulation 1935 ✓
BAT	Photo-Hydro	T-9267 (Sig. No. 190) ✓
BIG	Photo-Hydro	T-9267 (Sig. No. 204) ✓
BOB	Photo-Hydro	T-9267 (Sig. No. 173) ✓
BOX (Snag Island Fish Station Northeast Gable 1950)	Triang.	Triangulation 1950 ✓
BUM	Hydro	Volume 1 ✓
BRO	Hydro	Volume 1 ✓
BUS	Photo-Hydro	T-9267 (Sig. No. 222) ✓
BUT	Hydro (?)	Volume 1 (?) ✓
CAB	Photo-Hydro	T-9267 (Sig. No. 220) ✓
CAN (Elliott Cannery Flagpole, (Pillar Rock Cannery) (Wash) 1913)	Triang.	Triangulation 1913 ✓
CAT (Pillar Rock Lower Range Front 1947) (Pillar Rock Channel Front Range Light 1947)	Triang.	Triangulation 1947 ✓
COD	Photo-Hydro	T-9267 (Sig. No. 223) ✓
COP	Photo-Hydro	T-9267 (Sig. No. 212) ✓
COW	Photo-Hydro	T-9267 (Sig. No. 191) ✓
DIP	Hydro	Volume 1 ✓
DOG	Photo-Hydro	T-9267 (Sig. No. 202) ✓
DOL (Pillar Rock Dolphin, 1935)	Triang.	Triangulation 1935 ✓
DORM (Dorm 1950)	Photo-Topo	Form 524 ✓
DOT	Photo-Hydro	T-9267 (Sig. No. 192) ✓
DUCK (Duck 1935)	Triang.	Triangulation 1935 ✓
DUMP (Dump (USE) (Oreg.-Wash) 1935)	Triang.	Triangulation 1935 ✓
EGG	Photo-Hydro	T-9266 (Sig. No. 175) ✓
ELM	Photo-Hydro	T-9267 (Sig. No. 193) ✓
END	Photo-Hydro	T-9266 (Sig. No. 169) ✓
EVA	Photo-Hydro	T-9267 (Sig. No. 225) ✓
FIG	Photo-Hydro	T-9267 (Sig. No. 194) ✓
FIX	Hydro	Volume 1 ✓
FIZ	Photo-Hydro	T-9266 (Sig. No. 167) ✓
FOG	Photo-Hydro	T-9267 (Sig. No. 230) ✓
FOX	Photo-Hydro	T-9267 (Sig. No. 210) ✓
FRY	Photo-Hydro	T-9266 (Sig. No. 177) ✓
GAB (Rock Crusher River Gable (Wash) 1935)	Triang.	Triangulation 1935 ✓
GAL	Photo-Hydro	T-9267 (Sig. No. 182) ✓
GAS	Photo-Hydro	T-9266 (Sig. No. 121) ✓

T-9266 - 1949

T-9267 - 1949

GET	Photo-Hydro	T-9267 (Sig.No. 195)✓
GIN	Photo-Hydro	T-9266 (Sig.No.134)✓
GREEN (Green, 1950)	Triang.	Triangulation 1950✓
GUS	Photo-Hydro	T-9267 (Sig. No. 171)✓
GUY(Snag Island Fish Station, Northwest Gable, 1950)	Triang.	Triangulation 1950✓
HAT	Photo-Hydro	T-9267 (Sig. No. 170)✓
HER	Photo-Hydro	T-9266 (Sig. No. 135)✓
HIS	Photo-Hydro	T-9267 (Sig. No. 216)✓
HOP	Photo-Hydro	T-9266 (Sig. No. 120)✓
HUG	Photo-Hydro	T-9267 (Sig. No. 219)✓
ICE	Photo-Hydro	T-9267 (Sig. No. 136)✓
IDA	Photo-Hydro	T-9266 (Sig. No. 123)✓
IKE (Ike, 1950)	Photo-Topo	Form 524✓
JAP	Hydro	Volume 1✓
JAY	Photo-Hydro	T-9266 (Sig. No. 124)✓
JIM(Jim Crow Point Light, 1913)	Triang.	Triangulation 1913✓
JOE	Photo-Hydro	T-9266 (Sig. No. 128)✓
KEY	Photo-Hydro	T-9266 (Sig. No. 145)✓
LAR (Larson (Ore) 1935)	Triang.	Triangulation 1935✓
LEG	Photo-Hydro	T-9266 (Sig. No. 127)✓
LIP (Harrington Point Upper Dike Light, 1950)	Triang.	Triangulation 1950✓
LOG	Photo-Hydro	T-9267 (Sig. No. 200)✓
MAN	Photo-Hydro	T-9267 (Sig. No. 196)✓
MID	Photo-Hydro	T-9267 (Sig. No. 183)✓
MILL(Miller Sands Channel 8 light, 1950)	Triang.	Triangulation 1950✓
MOP	Photo-Hydro	T-9267 (Sig. No. 231)✓
NIL	Photo-Hydro	T-9267 (Sig. No. 197)✓
NIX	Hydro	Volume 1✓
NOR (North Island Dolphin, 1950)	Triang.	Triangulation 1950✓
NUB	Hydro	Volume 1✓
OAK	Photo-Hydro	T-9267 (Sig. No. 205)✓
OIL	Photo-Hydro	T-9267 (Sig. No. 184)✓
ORA	Photo-Hydro	T-9266 (Sig. No. 118)✓
OUT	Photo-Hydro	T-9266 (Sig. No. 151)✓
OWL	Photo-Hydro	T-9267 (Sig. No. 198)✓
PEG	Hydro	Volume 1✓
PIL(Pillar Rock Light(Oreg.-Wash) 1913)	Triang.	Triangulation 1913✓
POT	Photo-Hydro	T-9267 (Sig. No. 211)✓
PRO	Photo-Hydro	T-9267 (Sig. No. 199)✓
PUG	Photo-Hydro	T-9267 (Sig. No. 185)✓
PUP	Hydro	Volume 1✓
RAG	Photo-Hydro	T-9267 (Sig. No. 215)✓
RAN(Harrington Point Range Front Light 1947) also, (Pillar Rock Lower Range Rear Light 1947)	Triang.	Triangulation 1947✓
RAT	Photo-Hydro	T-9267 (Sig. No. 186)✓
ROCK(Rocky Point 2, (Wash) 1913)	Triang.	Triangulation 1913✓
ROT	Photo-Hydro	T-9267 (Sig. No. 201)✓
RUST (Rust 1950)	Triang.	Triangulation 1950✓
SAD	Photo-Hydro	T-9267 (Sig. No. 187)✓
SAM	Photo-Hydro	T-9266 (Sig. No. 156)✓
SAND (Sand (USE) 1935)	Triang.	Triangulation 1935✓

SHE	Photo-Hydro	T-9267 (Sig. No. 208) ✓
SIR	Hydro	Volume 1 ✓
SLY	Hydro	Volume 1 ✓
SNAG (Snag R. M. No. 1, 1935)	Triang.	Triangulation 1935 ✓
SOP	Photo-Hydro	T-9267 (Sig. No. 189) ✓
SOW	Photo-Hydro	T-9267 (Sig. No. 218) ✓
SUB	Photo-Hydro	T-9267 (Sig. No. 221) ✓
SUD	Hydro	Volume 1 ✓
SUE	Photo-Hydro	T-9267 (Sig. No. 229) ✓
TOM	Photo-Hydro	T-9267 (Sig. No. 224) ✓
TON (Altoona Cannery, Main Building, South Gable, 1913)	Triang.	Triangulation 1913 ✓
TRU	Photo-Hydro & Sextant Fix	T-9266 (Sig. No. 119) ✓ See Vol.1 for Ck. Angles ✓
TRY	Photo-Hydro	T-9267 (Sig. No. 232) ✓
USE (Harrington (USE) (Wash) 1913)	Triang.	Triangulation 1913 ✓
VEX	Photo-Hydro	T-9267 (Sig. No. 209) ✓
WAR (Marsh Island Light 1950)	Triang.	Triangulation 1950 ✓
WIG	Hydro	Volume 1 ✓
WIN (Win, 1950)	Photo-Topo	Form 524 ✓
WHO	Hydro	Volume 1 ✓
YAK	Photo-Hydro	T-9267 (Sig. No. 213) ✓
YET	Photo-Hydro	T-9266 (Sig. No. 143) ✓
ZAG (Red Barn 1950)	Triang.	Triangulation 1950 ✓
ZOO	Photo-Hydro	T-9267 (Sig. No. 216) ✓
REAR	Photo-Topo	?

Sampled a.m.l.
✓ a.m.l.

STATISTICS

Sheet No. H-7817(1950)

Launch No. 141					
Date	Day	No. of H.L.	No. of Pos.	Stat. Miles	Vol. Nos.
8/7/50	a	0	66	106	1
8/8/50	b	2	164	25.4	1&2
8/9/50	c	0	231	39.1	2&3
8/10/50	d	0	132	20.2	3
8/11/50	e	7	113	13.8	4
8/14/50	f	0	142	19.5	4&5
8/15/50	g	0	158	15.5	5
8/16/50	h	0	111	16.0	6
8/17/50	j	43	170	19.5	5&7
8/18/50	k	12	97	17.2	6
8/21/50	l	1	145	22.5	7&8
8/22/50	m	0	83	12.4	8
8/23/50	n	0	73	9.2	8
8/24/50	p	0	113	12.4	9
8/25/50	q	4	90	11.7	9
8/28/50	r	1	60	7.3	10
8/29/50	s	6	140/41	17.0	10
8/30/50	t	2	144	16.3	11
8/31/50	u	0	26	2.5	11
9/1/50	v	0	17	1.7	11
TOTAL - - - - -		78	2275 2276	309.8	

Launch No. 134					
8/4/50	a	15	15	1.0	12
8/11/50	b	45	45	1.8	12
8/14/50	c	12	13	0.6	12
8/15/50	d	57	57	2.4	12
8/16/50	e	70	106	7.8	12
8/17/50	f	64	162	13.6	13
8/18/50	g	5	126	13.6	13
8/21/50	h	46	73	4.5	13&14
8/22/50	j	0	78	10.0	14
8/23/50	k	1	76	8.4	14
8/24/50	l	0	39	4.2	14
8/25/50	m	4	164	20.8	15
8/28/50	n	0	97 98	12.5	15&16
8/29/50	p	87	163	17.6	16
8/30/50	q	99	58	5.5	16&17
8/31/50	r	0	82	6.8	17
9/1/50	s	28	21	0.9	17
TOTAL - - - - -		533	1375 1376	132.0	

Totals for sheet -611 ~~3650~~ 441.8
3652

Area, Launch 141 - 7.53 sq. stat. mi.
Area, Launch 134 - 3.33 sq. stat. mi.
Total area - 10.86 sq. stat. mi.

H 7817
Ho 1350

Lower Columbia River

List of geographic names
penciled on smooth sheet.

Washington	Miller Sands
Oregon	Jim Crow Sands
Columbia River	Snag Island
Woody Island Channel	Pillar Rock Island
Marsh Island Creek	Horseshoe Island
Prairie Channel	Brush Island
Blind Slough	Karlson Island
Knappa Slough	Minaker Island
Big Creek Slough	Stenson Island
Calendar Slough	Russian Island
	Green Island
Harrington Point	North Island
Rocky Point	Seal Island
Pillar Rock	Long Island
Jim Crow Point	Marsh Island
Knappa Landing	Snag Island Jetty
	Elliott Point
	Altoona

These names were taken from Chart 6152 or from
the Geographic Names Report of 1950.

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

NONRECOMMENDED FOR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REJECTED~~

STRIKE OUT ONE

Portland, Oregon

20 Dec., 1950

I recommend that the following objects which have ~~not~~ been inspected from seaward to determine their value as landmarks be charted on ~~existing~~ the charts indicated.
The positions given have been checked after listing by J. O. Boyer

W. H. Bairbridge

Chief of Party

STATE Oregon - Washington, Columbia River

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE	D.M. METERS	LONGITUDE	D.P. METERS							
TANK	Beaver Ammunition Storage Depot Tank	TANK	46-10	1657.3	123-10	943.7	N.A.	Photo-topo	1950	X			6152
TANK	Up-stream One of Twin Metal Blask Stack, Mauna Lumber Co., Mauna, Oreg.	✓ on Air Plot 19270 UP PLOT	46-09	984	123-24	331	"	"	1949	X			"
STACK	Bradley-Woodward Lumber Co. North (North of 4.) Stack, Bradwood, Oregon	STACK	46-11	1583.3	123-26	159.2	"	Trlang.	1936	X			"
FISH	Domatrasa Barn Gable, Welch Is.	✓ with Air Plot 1268 KIDZ	46-15	240.8	123-27	910.8	"	"	1950	X			"
BARN	Upstream Barn Gable, Welch Is.	EGG	46-15	129.7	123-27	846.3	"	"	1950	X			"
FISH	Stromokna Grade School Cupola,	✓ Air Plot 19268 T 9268	46-16	(1321.0) 531.6	123-27	(6614) 683.4	"	Photo-hydro	1950	X			"
CUPOLA	New Fish House, River Gable,	✓ with 7268 NEW	46-15	1638.7	123-29	627.7	"	Trlang.	1935	X			"
BARN	Woody Island Fish House, River	NEW	46-15	1638.7	123-29	627.7	"	Trlang.	1935	X			"
FISH	Woody Island Fish House, River	NEW	46-15	1638.7	123-29	627.7	"	Trlang.	1935	X			"
FISH	Gable	WAS	46-15	97.5	123-32	239.5	"	"	1935	X			"
HOUSE	Snag. Is. Fish Station, N.W. Gable	7817 GUY	46-13	1394.5	123-37	324.1	"	"	1950	X			"
FISH	Snag. Is. Fish Station, N.E. Gable	7817 BOX	46-13	1395.3	123-37	294.8	"	"	1950	X			"
HOUSE													"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating,

L18L-H

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

NONFLOATING AIDS ~~ON HANDMADE MAPS~~ FOR CHARTS

TO BE CHARTED STRIKE OUT ONE
~~FOR HANDMADE MAPS~~

Portland, Oregon

20 Dec., 1950

I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on ~~the charts~~ the charts indicated.

The positions given have been checked after listing by J. O. Boyer

W. H. Rainbridge

Chief of Party.

STATE Oregon - Washington, Columbia River

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE D. M. METERS	LONGITUDE D. P. METERS							
Buoy No. 1046	Gull Island Channel, Lighted Buoy		46-11 (1498.6)	123-09 (874)	H.A. 1927	H-7862	1950	X			6158
Buoy No. 1045	Fl. W. L. sec. Eureka Channel, Lighted Buoy 79		46-10 (1247)	123-13 (1139)	"	"	"	X			"
Buoy No. 1042	Fl. W. L. sec. Eureka Channel, Lighted Buoy 73		46-09 (583)	123-14 (394)	"	"	"	X			"
Buoy No. 1037	Fl. G. L. sec. Eureka Channel, Lighted Buoy 70		46-09 (1715)	123-15 (808)	"	"	"	X			"
Buoy No. 1024	Fl. R. L. sec. Eureka Channel, Lighted Buoy 41		46-09 (1522)	123-15 (904)	"	"	"	X			"
Buoy No. 1006	Fl. W. L. sec. Puget Island North, Lighted Buoy 30		46-13 (1470)	123-25 (535)	"	H-7815	"	X			"
Buoy No. 999.5	Fl. R. L. sec. Woloh Island Sands, Lighted Buoy 26		46-16 (1545)	123-28 (750)	"	H-7816	"	X			"
Buoy No. 998.5	Fl. R. L. sec. Woloh Island Sands, Lighted Buoy 21		46-16 (640)	123-30 (317)	"	H-7816	"	X			"
Buoy No. 996	Fl. G. L. sec. Pillar Rock, Lighted Buoy 4		46-15 (997)	123-32 (305)	"	H-7816	"	X			"
Buoy No. 992	Fl. R. L. sec. Pillar Rock, Lighted Buoy 17		46-15 (1404)(997)	123-33 (11065)	"	H-7816	"	X			"
Buoy No. 991	Fl. G. L. sec. Pillar Rock, Lighted Buoy 14		46-15 (1081)(1487)	123-35 (1202)	"	H-7817	"	X			"
Buoy No. 989	Fl. R. L. sec. Pillar Rock, Lighted Buoy 13		46-15 (712)(766)	123-37 (83)	"	H-7817	"	X			"
Buoy No. 988	Fl. W. L. sec. Killoot Point, Lighted Buoy 10		46-15 (1051)	123-36 (1202)	"	H-7817	"	X			"
Buoy No. 986	Fl. W. L. sec. Miller Sands Channel, Lighted Buoy 10		46-15 (949)(1403)	123-36 (208)(240)	"	H-7817	"	X			"
Buoy No. 981	Fl. W. L. sec. Miller Sands Channel, Lighted Buoy 7		46-15 (854)(850) (939)(968)	123-38 (1077)(1095) (555)(747)	"	H-7817	"	X			"
			46-15 (1589)(885)	123-39 (720)(528)	"	H-7817	"	X			"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

Plotted on Reconst. 6152 from survey sheets if in agreement with Aid Proof Pos.

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

~~NON-FLOATING AIDS~~ **NON-FLOATING AIDS** ~~OR~~ ~~REVISIONS~~ **FOR CHARTS**

TO BE CHARTED
~~TO BE CHARTED~~

STRIKE OUT ONE

Portland, Oregon

20 Dec., 1950

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(the)~~ the charts indicated.

The positions given have been checked after listing by J. O. Boyer

H. H. Rainbridge

Chief of Party

STATE **Oregon - Washington, Columbia River**

CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			°	'	°	'							
Buoy No. 17	Prelrie Channel Buoy 17 Black, 2d. 01. num(a)		46-18	1578	123-37	310	N. A. 1927	H-7817	1950	X			6152
Buoy No. 18	Prelrie Channel Buoy 18 Red, 2d. 01. Num(s)		46-18	1501	123-37	591	"	"	1950	X			"
Buoy No. 16	Prelrie Channel Buoy 16 Red, 2d. 01. Num (s)		46-11	1591	123-37	1005	"	"	"	X			"
Buoy No. 14	Prelrie Channel Buoy 14 Red, 2d. 01. Num (s)		46-11	1191	123-38	132	"	"	"	X			"

NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

~~TO BE CHARTED~~
TO BE DELETED

STRIKE OUT ONE

Portland, Oregon

20 Dec., 1950

I recommend that the following objects which have ~~(been examined)~~ been inspected from seaward to determine their value as landmarks be ~~deleted~~ (deleted from) the charts indicated.

The positions given have been checked after listing by J. O. Boyer

W. H. Bainsbridge

Chief of Party.

STATE	Oregon - Washington, Columbia River	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE	D. M. METERS	LONGITUDE	D. P. METERS						
Lt. No. 1008		Cathlamet Channel Lt. No. 1008		VRM	123-24	164	146-12	386	N.A. 1927	H-7815	1950			6152
			Notes: The above light No. 1008 was destroyed in April, 1950, and has not been replaced as of this date.											

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

~~NON-FLOATING~~ LANDMARKS FOR CHARTS

~~TO BE DELETED~~ STRIKE OUT ONE

Portland, Oregon

20 Dec., 1950

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be ~~(deleted)~~ (deleted from) the charts indicated.
The positions given have been checked after listing by J. O. Boyer

W. H. Baldwin

Chief of Party

STATE Oregon - Washington, Columbia River

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHARTS AFFECTED			
			LATITUDE D. M. METERS	LONGITUDE D. P. METERS				HARBOR CHART	INSHORE CHART	OFFSHORE CHART	
FISH BARN	Old Fish Barn, N.E. End Welch Island (Fish barn destroyed and gone) Buildings, Snag Island, South of (Destroyed, no longer in existence)		46-15-1586.6	123-29-376.8	M.A. 1927	Triang.	1935	X			6152
DOLPHIN FISH HOUSE	Dolphin, W. end of Snag Is., Jetty (Destroyed, only ruins now)		46-13-48.0"	123-36-52" (Approx. pos. from Chart 6152)				X			6152
FISH HOUSE	Fish House, Miller Sands (dismantled, only stub piles now)		46-15-24"	123-38-46" (Approx. pos. from Chart 6152)				X			6152
HOUSE	Green Island Fish House (no longer in place)		46-13-05"	123-39-17" (Approx. pos. from Chart 6152)				X			6152
PANK OVERHEAD CABLE	Settler Point, W. of Fremont, Oreg. Over-head Cable, Clatskanie Creek		46-10-33"	123-40-15" (Approx. pos. from Chart 6152)				X			6152
			46-08-17"	123-15-43" (Approx. pos. from Chart 6152)				X			6152

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

NONFLOATING AIDS AND MARKS FOR CHARTS

TO BE CHARTED }
~~TO BE REMOVED~~ } STRIKE OUT ONE

Portland, Oregon

20 December, 1950

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(attached)~~ the charts indicated.
The positions given have been checked after listing by J. O. Boyer

W. H. Baldwin

Chief of Party

STATE Oregon - Washington, Columbia River

CHARTING NAME	DESCRIPTION	Est. Rebuilt	SIGNAL NAME	POSITION			DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE	D.P. METERS							
Lt. No. 1019	Stella Range Rear	1929	STBL	46-11	123-07	(592.1)	N. A. 1927	Triang. Photo-	1936	X			6153
Lt. No. 1018	Stella Range Front	1913	--	46-11	123-07	(809.2)	"	Photo-	1949	X			6153
Lt. No. 1017	Bunker Hill	1930	BUNK	46-11	123-08	(899.8)	"	"	"	X			6152
Lt. No. 1015	Abernethy Point	1909	ABR	46-11	123-09	(12.0)	"	Triang.	1936	X			6152
Lt. No. 1014	Oak Point	1935	OAK	46-11	123-10	(129.1)	USE Coord.	Triang.	---	X			6152
Lt. No. 1013	Hetchkiss Dike	1924	HOT	46-09	123-12	(460.3)	N. A. 1927	"	1950	X			6152
Lt. No. 1012.5	Wallace Island	1908	WAL	46-08	123-13	(280.9)	"	"	"	X			6152
Lt. No. 1011	Eureka Dike Upper	1924	UP	46-10	123-12	(199.4)	"	"	"	X			6152
Lt. No. 1010	Eureka Dike Lower	1924	LOM	46-09	123-13	(1087.8)	"	"	"	X			6152
Lt. No. 1009	Eureka Lt. 77	1932	ORP	46-10	123-14	(738.5)	"	"	"	X			6152
Lt. No. 1008	Eureka Lower Dike	1924	NEW	46-09	123-13	(518.7)	"	"	"	X			6152
Lt. No. 1005	Cooper Point No. 71	1898	COOP	46-09	123-15	(94.2)	"	"	"	X			6152
Lt. No. 1003	Waterford	1887	WAT	46-09	123-15	(1053.1)	"	"	1936	X			6152
Lt. No. 1011.5	Dahlamot Dike 8	1925	CAT	46-09	123-17	(231.5)	"	Photo-	1950	X			6152

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

NONFLOATING AIDS ~~ON BOTTOM~~ FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
~~TO BE RECHARTED~~ } Portland, Oregon 20 Dec., 1950

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.
The positions given have been checked after listing by J. O. Boyer

W. H. Batbridge
Chief of Party

STATE Oregon-Washington, Columbia River

CHARTING NAME	DESCRIPTION	Est. Rebuilt	SIGNAL NAME	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE							
Lt. No. 1018	Mauna Fl. W. 4 sec.	1926	1926	16-10	216.0	123-21	658.0	N.A. 1927	Photo-topo	1919	X	6152
Lt. No. 1016	Puget Island 3 Fl. G. 4 sec.	1939	1939	16-10	1019.4	123-25	139.6	Coord	Triang.	1919	X	"
Lt. No. 1015	Puget Island No. 47 Fl. W. 4 sec.	1913	1913	16-10	1681.7	123-25	611.6	"	"	"	X	"
Lt. No. 1014	Bugby Hole Gr. Fl. W.	1906	1906	16-10	1687.5	123-25	1119.1	N.A. 1927	Photo-topo	"	X	"
Lt. No. 1013	Clifton Dike South End Fl. E. 4 sec.	1925	1925	16-12	211.2	123-26	72.0	USE	Triang.	"	X	"
Lt. No. 1012	Clifton Dike North End Fl. Rl. sec.	1925	1925	16-12	(1194.4)	123-25	(257.0)	Coord. N.A.	Photo-topo	1950	X	"
Lt. No. 1007	Cathlamet Channel 2 Fl. W 4 sec.	1933	1933	16-12	(969.0)	123-21	(422.1)	"	"	"	X	"
Lt. No. 1005	Puget Island Range Rear Fl. W.	1906	1906	16-13	1713.0	123-25	218.6	USE	"	"	X	"
Lt. No. 1004	Puget Island Range Front Fl. W. 1 sec., Fl. W. 4 sec.	1906	1906	16-13	(575.2)	123-25	(997.0)	Coord. N.A.	Photo-topo	"	X	"
Lt. No. 1003	Hunting Island Light Fl. W.	1950	1950	16-13	(505.0)	123-25	(920)	"	"	"	X	"
Lt. No. 1002	Steamboat Slough 37 Fl. W. 4 sec.	1915	1915	16-14	(428.0)	123-25	(207.4)	"	H-7815 Photo-topo	"	X	"
Lt. No. 1001	Price Island Gp. Fl. W. 5 sec., 2 flashes	1913	1913	16-15	(1184.5)	123-26	(335.1)	USE	"	"	X	"
Lt. No. 1000	Skamokawa Slough Fl. W. 4 sec.	1893	1893	16-15	(56.5)	123-27	(739.5)	Coord. Triang. N.A.	Photo-topo	"	X	"
Lt. No. 1000	Skamokawa Fl. G.	1934	1934	16-16	612.9	123-28	306.4	"	Triang.	1935	X	"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

DEPARTMENT OF COMMERCE
U. S. COAST & GEODETIC SURVEY

NONFLOATING AIDS ~~OR BOUNDARY MARKERS~~ FOR CHARTS

TO BE CHARTED
~~FOR BOUNDARY PURPOSES~~ STRIKE OUT ONE

Portland, Oregon

20 Dec. 1950

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by J. O. Boyer

W. H. Bainbridge

Chief of Party

STATE Oregon - Washington, Columbia River

CHARTING NAME	DESCRIPTION	Est. Rebuilt	SIGNAL NAME	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE							
Lt.No. 999	BAYVIEW Gp. Fl. W. 6 sec., 3 flashes	1909	HAY	46-16	845.4	123-29	234.5	N.A. 1927	Triang.	1936	X	6152
Lt.No. 998	Rockland F. G.	1928	LAMP	46-16	585.7	123-30	349.5	"	"	"	X	"
Lt.No. 997	Three Tree Point Fl. W. 4 sec.	1889	TRIER	46-16	64.2	123-31	182.5	"	"	"	X	"
Lt.No. 995	Jim Crow Point Fl. W. 5 sec.	1888	JIM	46-15	1181.3	123-33	1003.2	"	H-7817	1913-1935	X	"
Lt.No. 994	Pillar Rook Upper Range Rear	1944	BEAR	46-15	(341.1)	123-30	(1123.7)	160.0	photo- topo	1950	X	"
Lt.No. 993	Pillar Rook Upper Range Front	1944	ROCK	46-15	(154.4)	123-30	(174.9)	"	"	"	X	"
Lt.No. 990	Pillar Rook	1922	PIK	46-15	913.3	123-30	1110.3	"	H-7817	"	X	"
Lt.No. 987	Harrington Point Upper Dike Fl. W.	1927	PIK	46-15	944.7	123-35	202.0	"	Triang.	1913-1935	X	"
Lt.No. 986.5	Pillar Rook Lower Range Rear	1945	RAM	46-15	1257.9	123-38	557.4	"	H-7817	1950	X	"
Lt.No. 986.3	Pillar Rook Lower Range Front	1945	RAM	46-15	1111.0	123-40	71.2	"	Triang.	1947	X	6152
Lt.No. 985	Pillar Rook Lower Range Front	1945	RAM	46-15	1067.8	123-39	613.8	"	H-7817	"	X	6152
Lt.No. 984	Miller Sands Channel 8 Fl. R.	1935	MILL	46-15	615.4	123-39	538.0	"	H-7817	1950	X	"
Lt.No. 939	Harrington Point Range Front	1898	MILL	46-15	1111.0	123-40	71.2	"	H-7817	1947	X	"
Lt. No. 910	Harrington Point Range Rear	1898	RAM	46-15	1135.0	123-40	1029.3	"	photo- topo	1950	X	"
Lt.No. 970	Marsh Island Fl. W.	1936	RAM	46-16	68.8	123-39	255.6	"	H-7817	1950	X	"
Lt.No. 970	Marsh Island Fl. W.	1949	RAM	46-12	1580.7	123-37	169.2	"	Triang.	"	X	6152

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

GEOGRAPHIC NAMES

Survey No. H-7817

No. / Name on Survey	Sources										
	A	B	C	D	E	F	G	H	K		
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List			
<u>Oregon</u> ✓									B-T-N	1	
<u>Washington</u> ✓									"	2	
<u>Columbia River</u> ✓									"	3	
<u>Svensen Island</u> ✓ (not Swensen)									"	4	
<u>Russian Island</u> ✓										5	
<u>Prairie Channel</u> ✓										6	
<u>Minaker Island</u> ✓										7	
<u>Calendar Slough</u> ✓										8	
<u>Big Creek slough</u> ✓										9	
<u>Karlson Island</u> ✓									B-T-N	10	
<u>Knappa Slough</u> ✓									"	11	
<u>Knappa landing</u> ✓										12	
<u>Blind Slough</u> ✓										13	
<u>Long Island</u> ✓										14	
<u>Marsh Island</u> ✓										15	
<u>Marsh Island Creek</u> ✓										16	
<u>Brush Island</u> ✓										17	
<u>Horseshoe Island</u> ✓										18	
<u>Woody Island Channel</u> ✓										19	
<u>Snag Island</u> ✓										20	
<u>Snag Island Jetty</u> ✓										21	
<u>North Island</u> ✓										22	
<u>Seal Island</u> ✓										23	
<u>Green Island</u> ✓										24	
<u>Miller Sands</u> ✓										25	
<u>Pillar Rock Island</u> ✓										26	
<u>Jim Crow sand</u> ✓										27	

GEOGRAPHIC NAMES

Survey No. H-7817

No. 2
Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>Jim Crow Point</u>										1
<u>Pillar Rock</u>										2
<u>Elliott Point</u>				(not Elliot)						3
<u>Altoona</u>										4
<u>Harrington Point</u>										5
<u>Warren slough</u>				(near Knappa Landing) Page 1, line 12						6
										7
										8
										9
										10
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										27

Names underlined in red are approved
5-29-52
L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7817.....

Records accompanying survey:

Boat sheets ..²...; sounding vols.. ..¹⁷...; wire drag vols. ...⁰...;
 bomb vols. ...⁰...; graphic recorder rolls ...¹...;
 special reports, etc. 1. Smooth Sheet; 1. Descriptive Report; 1. Cahier Tide
 Reducers; 1 Geographic Names Report; 1 Cahier Fathometer Corrections.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		3652
Number of positions checked		754
Number of positions revised		6 *
Number of soundings revised (refers to depth only)		45 ϕ
Number of soundings erroneously spaced		21
Number of signals erroneously plotted or transferred		1
Topographic details	Time	36 hrs.
Junctions	Time	21 hrs.
Verification of soundings from graphic record	Time	20 hrs.

Verification by *Gordon J. Thompson* Total time *299 1/2 hrs.* Date *23 Jan '53*

Reviewed by *J. A. Dinmore* Time *32* Date *10 Febr. 1953*
Stini 7-hrs.

NOTES:

* includes two omitted positions } added during
 ϕ includes twelve omitted soundings } verification

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7817

FIELD NO. HO-1350

Oregon-Washington, Lower Columbia River, Jim Crow Pt. to
Harrington Pt.

Project No. CS-339

Surveyed - August-September 1950

Scale 1:10,000

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - W. H. Bainbridge
Surveyed by - P. Taylor, R. F. Lanier and A. M. Legako
Protracted by - C. E. Pederson
Soundings plotted by - C. E. Pederson
Verified and inked by - G. J. Thompson
Reviewed by - T. A. Dinsmore, 10 February 1953
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with the unreviewed manuscripts of air-photographic surveys T-9266 and T-9267 of 1950. Present hydrography indicates that the shoreline of marshy islands is uncertain or has eroded in several localities. In these localities, the shoreline has been revised and is shown by a broken red line.

The signals also originate with the above surveys. The fixes for the supplementary hydrographic signals are recorded in the sounding volumes of the present survey.

2. Sounding Line Crossings

Considering the irregularities in the bottom, depths at sounding line crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated except in foul inshore areas. The 3-ft. depth curve has been added to emphasize the bottom configuration in the shoal areas.

The bottom configuration shows considerable irregularities

which result from strong current action and from dredging in the main channel. Shifting channels and shoals have also contributed to the bottom irregularities.

4. Junctions with Contemporary Surveys

Adequate junctions are effected with H-7180 (1947) on the southwest and with H-7178 (1947) on the west between lat. 46° 12.3' and lat. 46° 14.5'. In the vicinity of lat. 46° 15.4', long. 123° 39.7', present depths are 1-8 ft. shoaler than the depths on H-7178. In this locality, H-7178 is superseded within the limits of the present survey.

No junction is shown with H-5927 (1935) in the main ship channel area on the extreme northwest where that survey has been superseded by later surveys by the Corps of Engineers.

The junction with H-7816 (1950) on the east will be considered in the review of that survey.

5. Comparison with Prior Surveys

a. H-1015 (1867-68) and H-1016 (1868) at scales of 1:10,000

These early surveys have been compared with and were superseded by the surveys of 1935-37 which are discussed in the succeeding paragraph. Further consideration of these early surveys is, therefore, deemed unnecessary in the present review.

b. H-5927 (1935) 1:10,000 H-6181 (1936-37) 1:10,000
H-5928 (1935) 1:10,000

These prior surveys taken together cover the area of the present survey. A comparison of the prior and present surveys reveals numerous and extensive changes in location and depths of shoals, bars, channels, etc., as well as appreciable changes in shoreline. Most of the river islands have increased in area and many small marshy islands have been created probably from the dumping of dredged spoil.

Examples of conspicuous changes in bottom are given in the following comparison:

<u>Latitude</u>	<u>Longitude</u>	<u>Prior Depth</u>	<u>Present Depth</u>
46° 15.70'	123° 39.84'	30	6
46° 15.75'	123° 39.40'	75	15
46° 15.82'	123° 38.60'	20	6
46° 15.38'	123° 36.71'	0-5	36
46° 15.00'	123° 35.00'	17	-3
46° 14.27'	123° 36.25'	0	55
46° 14.05'	123° 36.20'	38	2-3

<u>Latitude</u>	<u>Longitude</u>	<u>Prior Depth</u>	<u>Present Depth</u>
46° 13.65'	123° 36.28'	20-30	0
46° 13.20'	123° 39.07'	31	19
46° 13.35'	123° 38.20'	21	-1
46° 12.60'	123° 37.70'	16	4-6

Portions of the main river channel are dredged periodically by the Corps of Engineers and the spoil is dumped in the shoal areas. This, together with the spring freshets which cause an appreciable shifting of the bottom are the principal factors contributing to the changes that have taken place in the area.

Two rocks awash charted in the vicinity of lat. 46° 15.65', long. 123° 36.95', from H-5927 fall in an undeveloped foul area on the present survey. The rocks have been carried forward to the present survey.

With the indicated additions, the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 6152 (1st Edition and print of 1953)

A. Hydrography

Charted hydrography originates principally with the present survey prior to verification and review. Supplemental information is also charted from recent surveys by the Corps of Engineers shown on blueprints 48721-22 and 48746 (1952). Differences of 1-2 ft. are noted between a few of the charted soundings and present smooth-sheet depths.

The present survey supersedes the charted information except that originating with the surveys made subsequent to the present survey.

B. Dredged Channels

The project depth in the portions of the dredged channel covered by the present survey is 35 feet. The present survey shows numerous soundings ranging in depth from 27 to 34 ft. within the limits of the marked channel. Inasmuch as portions of the main channel are dredged periodically, it is presumed that the project depth has been subsequently restored.

C. Aids to Navigation

The buoys located in lat. 46° 12.86', long. 123° 37.24' and lat. 46° 11.15', long. 123° 38.10' on the present survey are charted about 200 meters WSW and NNE respectively, from the survey positions. The charted aids adequately serve the purpose intended.

Except as noted, the aids to navigation located on the present survey are in substantial agreement with the charted aids and adequately mark the features intended.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

The survey is considered to be basic for the area covered and no additional field work is recommended. This is a highly changeable area over which the Corps of Engineers make periodic channel surveys.

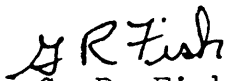


H. R. Edmonston
Chief, Nautical Chart Branch

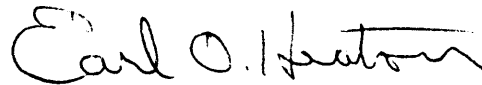
Examined and approved:



H. Arnold Karo
Chief, Division of Charts



G. R. Fish
Chief, Section of Hydrography



Earl O. Heaton
Chief, Division of Coastal Surveys

123° 40'

123° 40'

Harrington Pt.

Elliott Pt.

Pillar Rock

Jim Crow

MILLER SANDS CHANNEL
OK FLR 10

PILLAR ROCK LOWER RANGE

Miller Sands

Snag Island Jetty

WOODY ISLAND

CHANNEL

7817

7817

7817

GREEN I. marsh

old dike

North I.

MARSH ISLAND
FL 4 sec

Seal I.

MARSH I.

PRAIRIE LO

BLIND Cable area

Russian Island

KARLSON I.

PRAIRIE CHANNEL

Knappa Slough

Knappa Slough

Knappa

7817 MS 7

en Island

CHART 6152

839

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~ 17 January 1952

Division of Charts: R. H. Carstens

Plane of reference approved in 17
volumes of sounding records for

HYDROGRAPHIC SHEET 7817

Locality Jim Crow Point to Harrington Point, Lower Columbia River

Chief of Party: W. H. Bainbridge in 1950
Plane of reference is Columbia River Datum, reading
0.1 ft. on tide staff at Brookfield
13.3 ft. below B. M. U.S.E. 25 W

1.0 ft. on tide staff at Altoona
12.6 ft. below B. M. 4 (1940)

2.0 ft. on tide staff at Knappa
15.1 ft. below B. M. J 31 (1920)

Condition of records satisfactory except as noted below:

E. C. McKay
Section

Chief, ~~Division of Tides and Currents.~~

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7817

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1/29/52	Reconst 6152	<i>[Signature]</i>	Before After Verification and Review
9/25/52	6151	N-WB	Before After Verification and Review <i>Applied thru Reconstruction of 6152</i>
12/2/53	6151	NWB	Before After Verification and Review <i>Completely applied</i>
11/4/54	6152	<i>[Signature]</i>	Before After Verification and Review <i>Completely applied.</i>
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.