4878 4879 4880
4881

4878 4879 4880
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Diag. Cht. No. 5802

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. H-4881

LOCALITY

State Oregon.

General locality Siuslaw River

Locality to Yaquina Head

1928

CHIEF OF PARTY

O. R. Swanson

LIBRARY & ARCHIVES

DATE .....

8 (8/20 1 (B)++

4878-488 1 incl.

4878 4879 4880 4881 488 1 incl.

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: Oregon

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic } *Sheet No.*

Field- 4878
" 2— 4879
" 6— 4880
" 11— 4881

LOCALITY

Siuslaw River to
Yaquina Head
(4 Sheets)

1928

CHIEF OF PARTY

O.W. Swainson

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEETS NOS. 1, 2, 6, & 11. 4878 4879 4880 4881

OREGON COAST

SURVEY VESSELS PIONEER

O. W. SWAINSON - COMD'G.

1928

D E S C R I P T I V E R E P O R T

TO ACCOMPANY HYDROGRAPHIC SHEETS NOS. 1, 2, 6, & 11.

INSHORE HYDROGRAPHY COAST OF OREGON.

SCALE 1:20,000.

AUTHORITY

The hydrography executed on these sheets was done under the Director's instructions to the Commanding Officer of the Str. PIONEER dated March 3, 1928, Director's letter of May 28, 1928, requesting additional development on hydrographic sheet No. 4749, and Director's letter of July 3, 1928 authorizing the running of lines parallel to the coast.

LIMITS

The area covered extends east and west from the inshore hydrography limits in about 3 fathoms to a junction with the ship sheets in 16 to 22 fathoms. The north and south limits of each sheet are as follows: Sheet 1, from Siletz Bay to about 4 miles north of Yaquina Head; Sheet 2, from Yaquina Head to Seal Rocks; Sheet 6, from Seal Rocks to Cape Perpetua; Sheet 11, from Cape Perpetua to a point 2 miles north of Siuslaw River. The area between the southern limits of sheet 1 and the northern limits of sheet 2 was surveyed by the launch party of the Str. PIONEER in 1927 as was also a small area just south of Yaquina Head.

On a subplan on sheet 1 is shown a development of several shoal indications found in 1927 on sheet 4749. The intensive development of shoals on sheet 2 necessitated plotting a number of soundings on an overlay. This overlay was made on tracing cloth and is attached to the sheet.

SURVEY METHODS

The hydrography was done with the launch "WISDOM", a sixty-one foot yacht chartered for the season. The launch is gasoline propelled and draws about 6 feet with tanks full. She provides accomodation for two officers and a crew of five men.

All sounding was done with the lead line, the sounding chair being located forward of the pilot house on the starboard side. Up to a depth of 12 fathoms vertical casts were obtained with the vessel maintaining a uniform speed. From 13 to 15 fathoms the clutch was thrown out just before each sounding. Above 15 fathoms it was necessary to reverse the engine for about twenty seconds before each sounding. As these decreases in speed were uniform between positions they are not mentioned in the sounding records, the actual time of sounding only being recorded.

Excellent control was avialable thruout from numerous triangulation stations and well spaced topographic signals.

On sheets 1 and 2 sounding lines were run normal to the beach, spaced slightly less than 200 meters apart with intensive development on shoal indications. On sheets 6 and 11 the regular nature of the bottom warranted running lines parallel to the shore. By this method the efficiency of the party was greatly increased, as long runs to and from port were eliminated and the danger of the launch being caught without shelter minimized.

DISCREPANCIES

No discrepancies of importance were found either in the depths or in the control. Such minor irregularities as naturally occur in the location of positions have been adjusted on the smooth sheets and full explanatory notes made in the records.

DANGERS

Sheet 1.

Lat. 44° 50', Long. 124° 04'. A continuation of the ledge on which △ Bald is located was found to extend offshore and has been developed as shown.

Lat. 44° 48', Long. 124° 04'. The development shown here is occasioned by the continuation of the ledge on which ⊙ Po is located.

The area from Cape Foulweather (△ Weather) to the southern limit of the sheet, for a distance varying from 1/4 to about 3/4 mile offshore is foul, marked with rocks, breakers, and kelp.

Sheet 2.

North and south of the entrance to Yaquina Bay (Lat. 44° 36⅓') extensive reefs run parallel to the shore. These have been carefully developed under favorable weather conditions. The reef extending just north of the entrance breaks in moderate weather on its shoalest part at all stages of the tide. In exceptionally calm weather it breaks frequently at low tide and occasionally at half tide.

The reef lying between latitudes 44° 38' and 44° 39' and the reef running northeast and southwest from latitude 44° 36' break on their shoalest parts at low tide in moderate weather and at all stages of the tide in heavy weather.

Close inshore on Chart 5802, just north of latitude 44° 32', are shown two reported rocks. On almost the exact location as given for the southern rock a depth of 16 feet was obtained, rising out of deep water area. About one half mile southwest of the location of the northern rock, as shown on the chart, a 25 foot sounding was obtained, surrounded by 15 fathoms. The existence

of these shoals was unknown to the inhabitants of the vicinity and careful inquiry failed to reveal anyone who had ever observed breakers at these points. The southern rock is marked by a small amount of kelp.

The area around Seal Rocks, extending offshore about 1/2 mile, from latitude 44° 28½' to 44° 31', is extremely foul and unsafe for any navigation.

Sheet 6.

The inshore water area south of latitude 44° 28' is sandy and regular with no indications of dangers.

Sheet 11.

No indications of dangers were found in the area covered by this sheet.

All rocks, ledges, kelp and other dangers shown in ink on the smooth sheets have been either transferred from the topographic sheets and checked in the field by the hydrographer, or have been located by the hydrographic party.

ANCHORAGES.

The only protection for vessels and small boats along the coast covered by these sheets is at Yaquina Bay (Sheet 2). The channel and bar is surveyed at regular intervals by the U. S. Army Engineers. According to instructions a connection was made with their latest survey and currents were measured between the breakwaters. With the aid of a local pilot lumber schooners drawing 17 feet enter the harbor at high tide in smooth weather. The bar breaks all the way across in heavy weather and the channel is liable to shift after severe storms.

TIDES.

An automatic tide gauge was kept in operation at Newport, Oregon, during the entire season. Simultaneous observations were made between this gauge and a plain staff located at Yaquina Head. The difference in height and time between these stations was negligible and for this reason Newport tides have been used for the reduction of soundings on sheets 1, 2, and 6, and Newport tides reduced 1 foot for range used for sheet 11, as per Director's letter of January 4, 1929, (25-E-F)

Respectfully submitted.

John A. Bond

John A. Bond,
Lieut., U. S. C. & G. S.

Approved and Forwarded:

O. W. Swainson

O. W. Swainson,
Chief of Party.

STATISTICS

HYDROGRAPHIC SHEET NO. 1.

Date 1928	Day Letter	Vol.	Bomb Pos.	Log Pos.	Visual Pos.	Stat. Miles	F.R.	F.W.	Sonic	Leadline	Boat
8	a	1			60	11.0				140	WISDOM
13	b	1			88	18.6				228	"
15	c	1			57	10.5				132	"
19	d	1			71	14.0				171	"
27	e	2			95	23.2				248	"
28	f	2			126	29.0				309	"
July 10	g	2			81	13.8				228	"
12	h	2			44	8.3				148	"
2	j	3			27	4.0				91	"
Totals					649	132.4				1695	

STATISTICS

HYDROGRAPHIC SHEET NO. II.

Date 1928	Day Letter	Vol.	Bomb Pos.	Log Pos.	Visual Pos.	Stat. Miles	F.R.	F.W.	Sonic	Leadline	Boat
June 6	a	1			95	21.1				269	WISDOM
7	b	1			101	20.7				258	"
14	c	1			140	28.0				426	"
29	d	2			103	21.0				298	"
30	e	2			75	15.0				253	"
July 30	f	2			81	10.0				198	"
31	g	2&3			84	10.0				230	"
Aug. 1	h	3			83	17.0				703	"
2	j	3			55	11.5				254	"
Totals					817	154.3				2889	

STATISTICS

HYDROGRAPHIC SHEET NO. VI.

Date	Day Letter	Sndg. Vol.	Bomb Pos.	Log. Pos.	Visual Pos.	Miles	F. R.	F. W.	Sonic	Leadline	Boat
July 16	A	1			92	30.0				372	WISDOM
17	B	1			92	30.0				386	"
19	C	1			92	30.0				364	"
20	D	2			34	8.0				113	"
Aug 11	E	2			26	7.0				133	"
Totals					336	105.0				1368	

STATISTICS

HYDROGRAPHIC SHEET NO. XI.

Date 1928	Day Letter	Vol.	Bomb Pos.	Log Pos.	Soundings: Visual Pos.	Soundings: Stat. Miles	Soundings: F.R.	Soundings: F.W.	Soundings: Sonic	Soundings: Leadline	Boat
Aug. 11	a	1			39	14.5				168	WISDOM
14	b	1			76	31.3				403	"
17	c	1			84	31.3				390	"
20	d	1			8	3.2				28	"
22	e	1&2			68	21.2				242	"
Totals					275	101.5				1231	

ACCEPTED POSITIONS OF HYDROGRAPHIC SIGNALS

SHEET 1 - Scale 1 : 20,000.

	Latitude			Longitude		
	°	'	m.	°	'	m.
			(979)			(20)
Sil	44	53	873	124	01	1297
			(1074)			(482)
Pig		51	778		02	836

REPORT OF COMMANDING OFFICER'S INSPECTION

OF RECORDS AND SHEETS.

Sheets 1, 2, 6, and 11 and their records have been examined and approved by me. Each individual record was not examined thoroughly but all doubtful entries found by the various officers when working on the records were examined and acted on. The officers were instructed to examine the records closely when they plotted the positions, reduced the soundings, and put the soundings on the sheet.

The field work of the launch hydrography was examined only from time to time during the season as the launch party was not in contact with the ship.

O. W. Swainson,
H. & G. Engineer.
Chief of Party.

ECM

FOR THE FILES OF FIELD RECORDS SECTION

Division of Hydrography and Topography:

June 8, 1929

Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET **4878**

Locality: **Oregon Coast, Siletz Bay to Yaquina Head**

Chief of Party: **O. W. Swainson in 1928**
Plane of reference is **mean lower low water, reading**
2.1 ft. on tide staff at **Newport, Oregon.**
~~[illegible]~~

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks:

Chief, Division of Tides and Currents.

FOR FILES OF FIELD RECORDS SECTION

Division of Hydrography and Topography: June 7, 1929.

Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 4879

Locality: Oregon Coast, Yaquina Head to Seal Rocks

Chief of Party: O. W. Sainson in 1928
Plane of reference is Mean lower low water, reading
2.1 ft. on tide staff at Newport, Oregon
[redacted].

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks:

Paul [illegible]

Chief, Division of Tides and Currents.

SECTION OF FIELD RECORDS

JULY 29 - 1929

REPORT ON SHEET No. 4879

CHIEF OF PARTY - O.W. SWAINSON
PROTRACTED BY - R.C. ROWSE
VER. & INKED BY - W.H. BAMFORD

SURVEYED IN - 1928
SURVEYED BY - J.A. BOND
SOUNDINGS PLOTTED BY - J.F. FAY

1./ The records were found to conform to the requirements of the General Instructions.
2./ The plan and character of development fulfill the requirements of the General Instructions.
3./ The sounding line crossings were found to be adequate
4./ The usual depth curves could be drawn.
5./ The field plotting was completed to the extent prescribed in the General Instructions.
6./ The time interval was very irregular throughout the shoal developments and most of the spacing of sounding had to be changed by the office draftsman. About 50% of the bottom characteristics were not penciled in.

7./ The junctions with the adjacent sheets were found to be satisfactory.

8./ The protracting was very well done but a great many soundings were not spaced in accordance with the time interval. The sheet was clean and the work legible.

Respectfully submitted

W H Bamford

FOR FILES OF FIELD RECORDS SECTION ✓ ecm

June 5, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
volumes of sounding records for
2

HYDROGRAPHIC SHEET

4880

Locality:

Oregon Coast, Seal Rocks to Cape Perpetua

Chief of Party: O. W. Swainson in 1928

Plane of reference is mean lower low water, reading
2.1 ft. on tide staff at Newport, Oregon
~~ft. below B. M.~~

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks:

Chief, Division of Tides and Currents.

Section of Field Records

Report on sheet No 4880

Surveyed in 1928 - Instructions dated 3/3/28

Chief of Party - O. W. Swainson

Surveyed by - J. A. Bond

Protracted by - R. B. Louse

Soundings plotted by - D. C. Mast

Verified and inked by - J. W. Church

1. The records conform to the requirements of the general instructions.

2. The plan and character of the development fulfil the requirements of the general instructions.

3. The usual depth curves can be completely drawn except the 1, 2 and 3 fathom curves.

4. The field plotting was completed to the extent prescribed by the general instructions; except that the soundings were not plotted between positions "11d" and "15d."

5. Remarks

Positions 92, 33d and 34d were replotted by the office draftsman.

The signals used in the field plotting the soundings were much larger than prescribed by the general instructions

June 27, 1929

Respectfully submitted

J. W. Church

tcm

For file, Field Records Section

June 6, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4881

Locality: Oregon Coast, Cape Perpetua to Siuslaw River

Chief of Party: O. W. Swainson in 1928
Plane of reference is Mean lower low water, reading
2.1 ft. on tide staff at Newport, Oregon
ft. below B. M.

*Allowance made for Difference in range.

Condition of records satisfactory except as checked below;

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.

Field Records

Report on Sheet No. 4881

June 29, 1929.

C. of P - O.W. Swainson
Protracted by - R.C. Rowse
Ver'd & Inked by - W.H. Bamford

Surveyed by J.A. Bond
Surveyed in August 1928.
Soundings Plotted by J.F. Fay

1./ The records were found to conform to the requirements of the General Instructions.

2./ The plan and character of development fulfill the requirements of the General Instructions.

3./ The plan and extent of development satisfies the Specific Instructions

5./ The usual depth curves can be completely drawn.

6./ The field plotting was completed to the extent prescribed in the General Instructions.

7./ Whenever the time interval was irregular - most of the soundings had to be respaced by the office draftsman.

8./ The junction with the adjacent sheet was satisfactory.

9./ The protacting on this sheet was excellent. only one position was changed by this office draftsman. The soundings were well penciled except for the poor spacing when the line interval was irregular. The sheet was very clean and quite legible.

Respectfully Submitted

Warren H Bamford.

July 19, 1929

Section of Field Records
Report on Hydrographic Sheet No. 4878
Yaquina Head to Siletz Bay, Oregon
Surveyed in 1928
Instructions dated March 3, 1928

Chief of Party — C. W. Swainson
Surveyed by — J. A. Bond
Protracted by — R. C. Rowe
Soundings Penciled by — J. T. Fay
Verified and Inked by — J. T. Jarman

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

2. The plan and character of development conform to the requirements of the General Instructions.

3. The information is sufficient for drawing the usual depth curves.

4. The field platting was completed to the extent prescribed in the General Instructions. However, the smooth sheet as received into the office did not have any geographical names on it.

5. The junctions with H 4748 and H4749 are good. The junction with H4756 on the west shows discrepancies of two to five fathoms. The work on H4756 was secured with the fathometer while that on H4878 was done with the lead line. At this time, it is not known what disposition will be made of the above case, and the curves involved have been left in pencil.

6. The field drafting was good.

Report respectfully submitted

F. J. Garman

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-WSW

DEPARTMENT OF COMMERCE.

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 26, 1930.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4878

Yaquina Head to Siletz Bay, Oregon.

Surveyed in 1928

Lead line soundings.

Instructions dated March 3, 1928. (Pioneer)

Directors letter of May 29, 1928

Directors letter of July 3, 1928

Chief of Party, O. W. Swainson.

Surveyed by J. A. Bond.

Protracted by R. C. Rouse.

Soundings plotted by J. F. Fay.

Verified and inked by J. T. Jarman.

1. The records conform to the requirements.

2. The plan and extent of the survey conform to the specific instructions with the following exceptions:

   a. Apparently the work could have been carried further inshore in the area north of Lat. 44° 51', as no breakers are noted in the records.

   b. There are a number of sunken rock symbols shown on T. 1776, which are not indicated on the new topographic sheets, T. 4338 and T. 4339. While T. 1776 is only reconnaissance, these rocks are shown on the present chart, No. 5902, and cannot be removed as no hydrographic examination was made. This was called for in paragraph 19 in the specific instructions. These rocks have been placed on this sheet, H. 4878 in green.

3. The few cross lines which were run cross very well.

4. The information is sufficient for drawing the usual depth curves except those close inshore.

5. The junction on the north with H. 4748 is satisfactory.

a. At the junction on the west with H. 4756, the agreement with the fathometer soundings is very poor. The fathometer soundings are consistently shoaler, causing the twenty fathom curve to be badly broken. It is noticed that most of the erratic fathometer soundings, at the junctions with the inshore sheets, are obtained while the ship is being turned.

b. The junction on the west with H. 4894 is satisfactory. The agreement is fairly good but the fathometer soundings are slightly shoaler.

c. The junction on the south with H. 4749 is satisfactory. An examination of several shoal soundings on H. 4749, is shown as a sub plan on this sheet, H. 4878. The depths were verified and in most cases shoaler depths found.

6. The usual amount of field plotting was well done by the field party.

7. With the exception of the omissions mentioned in paragraph 2, this survey is considered complete and no additional work is recommended.

8. Reviewed by R. L. Johnston, February 25, 1930.

Approved:

A. M. Sobieralski
Chief, Section of Field Records (CHARTS)

F. P. Borden
Chief, Section of Field Work (H. & T.)

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS

REPORT ON HYDROGRAPHIC SHEET No. 4879

Seal Rocks to Yaquina Head, Oregon

Surveyed in 1928

Instructions dated March 3, 1928 (PIONEER)

Chief of Party, O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings plotted by J. F. Fay

Verified and inked by W. H. Bamford

1. The records conform to the requirements of the Hydrographic Manual with the exception that notes in the "Remarks" column should be properly referenced in the sounding column.

2. The plan and extent of the survey conform to the requirements of the specific instructions. The requirement for a junction with Army Engineers survey (1927 survey was latest at time of survey) no longer obtains since there have been some later surveys in 1928. While the principal reefs have been developed, there appears to be indications of another reef inside the 10 fathom curve, between latitudes 44° 33' and 44° 35 1/2', which might have less water than shown.

   This sheet is subject to the same criticism that was made of other sheets along this coast. No mention is made in the records and no indication appears on the boat sheet for not running closer in to shore, between Seal Rocks and the entrance to Yaquina Bay. If there are breakers along here, such information is of value on the charts.

3. A comparison of this survey with other surveys (Engineers and this Bureau's) shows that on Yaquina and South Reefs lesser depths were in some cases obtained on the other surveys than were found on the present survey. As these reefs are undoubtedly unchangeable bottom the shoal soundings previously obtained should be retained on the charts.

A scale of 1:10,000 covering the limits of these reefs would have permitted a full development. This scale was used on the 1914 survey (H. 3727), but there the reefs were inadequately developed. As this survey (H. 4879) stands at present there is no certainty that the least depths were obtained over the various portions of the reefs.

4. The 2 4/6 fathom shoal found in lat. 44° 32', long. 124° 06 1/2' corresponds to the southernmost of two reported sunken rocks on Chart 5802. The northernmost could not be found in the position charted but a 4 1/6 fathom spot was found about 0.6 mile W x S of the charted position. The authority for these reported rocks could not be established except that they first appeared on the 1891 edition of Chart 6000 with corrections to 1899 (Plate No. 2204). Doubtless the two shoals found are the intended rocks. A light wire drag covering the area in the vicinity of these two shoals would have been highly desirable since they are well offshore and in the southern approach to Yaquina Bay.

5. The two sunken rocks shown in red on this survey in lat. 44° 36 3/4', long. 124° 05' were transferred from T. 1809 where breakers are shown. These correspond to two 6-foot soundings shown on the latest edition of Chart 6058.

6. The junctions with H. 4749 and H. 4880 are satisfactory.

   The junction with H. 4894 will be considered in the review for that sheet.

7. Additional work will be required in conformity with the observations made above.

8. Reviewed by A. L. Shalowitz, December, 1929.

Approved:

R. M. Sobiesiak
Chief, Section of Field Records (Charts)

T. S. Gordon
Chief, Section of Field Work (H. & T.)

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4880

Coast of Oregon - Cape Perpetua to Seal Rocks

Surveyed in 1928

Instructions dated March 3, 1928 (PIONEER) and Director's letter of July 3, 1928 (PIONEER)

Chief of Party, O. W. Swainson.

Surveyed by J. A. Bond.

Protracted by R.C. Rowse.

Soundings plotted by G. C. Mast.

Verified and inked by J. H. Church.

1. The records conform to the requirements of the Hydrographic Manual.

2. The plan, character and extent of the survey conform to the specific instructions, with the exception that the work was not carried in to the beach as called for. Judging from the note in the Descriptive Report, page 3, that "The inshore water area south of Lat. 44° 28' is sandy and regular with no indications of dangers," it would appear that the sounding lines could have been carried closer inshore. Furthermore, there are indications of narrow ridges along the inshore end and these should have been developed.

3. The sounding line crossings are adequate.

4. The usual depth curves could be completely drawn except those close inshore.

5. The usual field plotting was completed by the field party to the extent prescribed in the Hydrographic Manual with the exception that the pencilled soundings were much too large.

6. The junction with H. 4881 on the south is satisfactory.

The junctions with the other contemporary surveys on the north and west will be taken up when those sheets are reviewed.

7. This survey cannot be considered as complete. There are places along the shore where the nearest sounding line is 1000 meters away. If there are breakers this far off, a note to that effect should have been entered in the records. An attempt should have been made at least to develop the entrance to Alsea Bay. According to the Coast Pilot (Pacific Coast, page 146), there is about 6 feet of water at low tide in the entrance, there is considerable fishing and crabbing here, and a gas boat from Astoria makes irregular calls here.

8. Reviewed by A. L. Shalowitz, July, 1929.

Approved:

A. M. Sobieralski
Chief, Section of Field Records (Charts)

T. S. Borden
Chief, Section of Field Work (H. & T.)

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4881

Coast of Oregon - Siuslaw River to Cape Perpetua

Surveyed in 1928

Instructions dated March 3, 1928 (PIONEER) and Director's letter of July 3, 1928

Chief of Party, O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings plotted by J. F. Fay

Verified and inked by W. H. Bamford

1. The records conform to the requirements of the Hydrographic Manual.

2. The plan, character and extent of the survey conform to the specific instructions. It is noted, however, that the work ends a considerable distance from the beach. While this is, doubtless, due to the presence of breakers along the inshore end of the survey, no mention is made of such breakers either in the soundings records or the descriptive report. If such features actually exist the approximate line of breakers should have been sketched in the sheet as it is valuable information for the charts. It is recommended that the field party be consulted relative thereto.

3. The usual depth curves within the limits of this survey could be completely drawn. It should be noted here that in a system of parallel lines the locations of the depth curves are less rigid than in a system normal to the shore. It would therefore be advisable, when developing an area with parallel lines, to run in addition either a system of widely spaced normal lines or a zigzag system. This would give a better determination of the depth curves and would also pick up any narrow ridges that might exist parallel to the shore.

4. The usual field plotting was done by the field party. The protracting was excellent and the plotting of soundings was good with the exception that irregular time intervals were not adhered to.

5. The junctions with the contemporary adjoining sheets will be taken up when those sheets are reviewed.

6. No additional work is necessary within the limits of this survey, unless it is desired to extend the work closer to the beach.

7. Reviewed by A. L. Shalowitz, July 1929.

Approved:

R. M. Sobieralski
Chief, Section of Field Records (CHARTS)

J. S. Borden
Chief, Section of Field Work (H. & T.)

Form 537

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

REG. NO. 4878

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.

Field No. 1

REGISTER NO. 4878

State Oregon

General locality ~~Northern Oregon Coast~~ Cape Foulweather

Locality ~~Siletz Bay to~~ Yaquina Head to Siletz Bay

Scale 1 : 20,000 Date of survey June 8 - Aug. 2, 19 28

Vessel Launch WISDOM

Chief of Party O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings penciled by J. F. Fay

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated March 3, 19 28

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

Form 537

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4879

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.

Field No. 2

REGISTER NO. 4879

State Oregon

General locality ~~Northern Oregon Coast~~ Yaquina Head

Locality ~~Yaquina Head to~~ Seal Rocks to Yaquina Head

Scale 1 : 20,000 Date of survey June 6 - Aug. 2, 1928

Vessel Launch WISDOM

Chief of Party O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings penciled by J. F. Fay

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by Warren H Bamford

Verified by WHB

Instructions dated March 3, 1928

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

Form 537

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.

Field No. 6

REGISTER NO. 4880

State Oregon

General locality ~~Northern Oregon Coast~~ Alsea Bay

Locality ~~Seal Rocks to~~ Cape Perpetua to Seal Rocks

Scale 1 : 20,000 Date of survey July 16 - Aug. 11, 1928

Vessel Launch WISDOM

Chief of Party O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings penciled by G. O. Mast

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated March 3, 1928

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

Form 537

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.

Field No. 11

REGISTER NO. 4881

State Oregon

General locality ~~Southwest Oregon Coast~~ Heceta Head

Locality ~~Cape Perpetua to~~ Siuslaw River to Cape Perpetua

Scale 1 : 20,000 Date of survey Aug. 11 - Aug. 22, 1928

Vessel Launch WISDOM

Chief of Party O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings penciled by J. F. Fay

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by Warren H Bamford

Verified by W H B

Instructions dated March 3, 1928

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

11-WSW

August 26, 1930.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4878

Yaquina Head to Siletz Bay, Oregon.

Surveyed in 1928

Lead line soundings.

Instructions dated March 3, 1928. (Pioneer)

Directors letter of May 29, 1928

Directors letter of July 3, 1928

Chief of Party, O. M. Swainson.

Surveyed by J. A. Bond.

Protracted by R. C. Rouse.

Soundings plotted by J. F. Fay.

Verified and inked by J. T. Jarman.

1. The records conform to the requirements.

2. The plan and extent of the survey conform to the specific instructions with the following exceptions:

   a. Apparently the work could have been carried further inshore in the area north of Lat. 44° 51', as no breakers are noted in the records.

   b. There are a number of sunken rock symbols shown on T. 1776, which are not indicated on the new topographic sheets, T. 4338 and T. 4339. While T. 1776 is only reconnaissance, these rocks are shown on the present chart, No. 5902, and cannot be removed as no hydrographic examination was made. This was called for in paragraph 19 in the specific instructions. These rocks have been placed on this sheet, H. 4878 in green.

3. The few cross lines which were run cross very well.

4. The information is sufficient for drawing the usual depth curves except those close inshore.

5. The junction on the north with H. 4748 is satisfactory.

a. At the junction on the west with H. 4756, the agreement with the fathometer soundings is very poor. The fathometer soundings are consistently shoaler, causing the twenty fathom curve to be badly broken. It is noticed that most of the erratic fathometer soundings, at the junctions with the inshore sheets, are obtained while the ship is being turned.

b. The junction on the west with H. 4894 is satisfactory. The agreement is fairly good but the fathometer soundings are slightly shoaler.

c. The junction on the south with H. 4749 is satisfactory. An examination of several shoal soundings on H. 4749, is shown as a sub plan on this sheet, H. 4878. The depths were verified and in most cases shoaler depths found.

6. The usual amount of field plotting was well done by the field party.

7. With the exception of the omissions mentioned in paragraph 2, this survey is considered complete and no additional work is recommended.

8. Reviewed by R. L. Johnston, February 25, 1930.

Approved:

Chief, Section of Field Records (CHARTS)

Chief, Section of Field Work (H. & T.)

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS

REPORT ON HYDROGRAPHIC SHEET No. 4879

Seal Rocks to Yaquina Head, Oregon

Surveyed in 1928

Instructions dated March 3, 1928 (PIONEER)

Chief of Party, O. W. Swainson

Surveyed by J. A. Bond

Protracted by R. C. Rowse

Soundings plotted by J. F. Fay

Verified and inked by W. H. Bamford

1. The records conform to the requirements of the Hydrographic Manual with the exception that notes in the "Remarks" column should be properly referenced in the sounding column.

2. The plan and extent of the survey conform to the requirements of the specific instructions. The requirement for a junction with Army Engineers survey (1927 survey was latest at time of survey) no longer obtains since there have been some later surveys in 1928. While the principal reefs have been developed, there appears to be indications of another reef inside the 10 fathom curve, between latitudes 44° 33' and 44° 35 1/2', which might have less water than shown.

   This sheet is subject to the same criticism that was made of other sheets along this coast. No mention is made in the records and no indication appears on the boat sheet for not running closer in to shore, between Seal Rocks and the entrance to Yaquina Bay. If there are breakers along here, such information is of value on the charts.

3. A comparison of this survey with other surveys (Engineers and this Bureau's) shows that on Yaquina and South Reefs lesser depths were in some cases obtained on the other surveys than were found on the present survey. As these reefs are undoubtedly unchangeable bottom the shoal soundings previously obtained should be retained on the charts.

A scale of 1:10,000 covering the limits of these reefs would have permitted a full development. This scale was used on the 1914 survey (H. 3727), but there the reefs were inadequately developed. As this survey (H. 4879) stands at present there is no certainty that the least depths were obtained over the various portions of the reefs.

4. The 2 4/6 fathom shoal found in lat. 44° 32', long. 124° 06 1/2' corresponds to the southernmost of two reported sunken rocks on Chart 5802. The northernmost could not be found in the position charted but a 4 1/6 fathom spot was found about 0.6 mile W x S of the charted position. The authority for these reported rocks could not be established except that they first appeared on the 1891 edition of Chart 6000 with corrections to 1899 (Plate No. 2204). Doubtless the two shoals found are the intended rocks. A bight wire drag covering the area in the vicinity of these two shoals would have been highly desirable since they are well offshore and in the southern approach to Yaquina Bay.

5. The two sunken rocks shown in red on this survey in lat. 44° 36 3/4', long. 124° 05' were transferred from T. 1809 where breakers are shown. These correspond to two 6-foot soundings shown on the latest edition of Chart 6058.

6. The junctions with H. 4742 and H. 4880 are satisfactory.

   The junction with H. 4894 will be considered in the review for that sheet.

7. Additional work will be required in conformity with the observations made above.

8. Reviewed by A. L. Shalowitz, December, 1929.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

Field Records Section (Charts).

HYDROGRAPHIC SHEET No. 4578

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

Number of positions on sheet . 449.

Number of positions checked . 100.

Number of positions revised . 5.

Number of soundings recorded . 1695.

Number of soundings revised . 84.

Number of signals erroneously plotted or transferred . None.

Date: July 19, 1929

Cartographer: Junius J. Jarman

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4879

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

Number of positions on sheet	817
Number of positions checked	154
Number of positions revised	5
Number of soundings recorded	2889
Number of soundings revised	281
Number of signals erroneously plotted or transferred	0

Date: July 29 - 1929.

Cartographer: J. W. H. Bamford.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4881

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

Number of positions on sheet 276

Number of positions checked 53

Number of positions revised -1-

Number of soundings recorded 1229

Number of soundings revised 98

Number of signals erroneously plotted or transferred 0

Date: June 29-1929

Cartographer: Warren H Bamford

H-4878
H-4879
H-4880
} Applied to chart 6056 Feb. 1955

H-4879 about 1/2 daz pdgs & 12' curve near Newport applied to cht. 6055 H.E.M. Dec. 1954.