

4525 a-b  
a+b

4525 a-b

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

State: SE. Alaska

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 16, 4525<sup>a-b</sup>

LOCALITY:

Chichagof I. - W. Coast

Kukhan B. + Lower Part Portlock Hbr.

1925

CHIEF OF PARTY:

A.M. Sobieralski

DEPARTMENT OF COMMERCE

U.S. Coast & Geodetic Survey.

E. Lester Jones, Director.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET #

S.E. Alaska  
Pertleek Harbor, Chichagof Island.  
Scale 1-10000

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Season of 1925

Steamer Surveyer

*Date of Instructions Feb. 4, 1925.*

A. M. Seberialski, H. and G. E.  
Chief of Party.

Descriptive Report to accompany Sheet 1B Field, Hydrographic.

GENERAL DESCRIPTION AND LIMITS

This sheet includes the south section of Pertleok Harbor, Surveyer' Passage, Black Bay, South Passage, Kukkan Bay, Cape Edward, Passage, and Geese Passage.

INSHORE DANGERS

1. Sunken rock with 4 ft. over it at L.W. 265 meters 210° true from O Eagle.
2. Sunken rock with 8ft. over it at L.W. 530 meters 205° true from O Eagle.
3. Rock awash at L.W. 210 meters 195° true from O Chris.
4. Rock awash at L.W. 68 meters 0° true O Gar.
5. Rock awash L.W. 68 meters, 315° true from O Nut.
6. Sunken Rock 112 meters 228° true O Drap.
7. Minnie Reef bares at  $\frac{1}{2}$  tide, 60 meters in diameter, 209 meters, 55° true from O Rain.
8. Rock awash at L.W. 179 meters 34° true O Rain.
9. Sunken Rock 150 meters 332° true O Zac.
10. Sunken Rock 110 meters 0° true O Zac.
11. Rock awash L.W. 50 meters 239° true from O Ann.
12. " " " 196 " 281° " " O Sex.
13. Reef awash at L.W. 107 meters South of O Zip. This reef extends in a westerly direction for 120 meters.
14. Reef awash at L.W. 220 meters 122° true from O Few. Toe
15. Reef awash at L.W. 70 meters northerly of O La.
16. Sunken Rock 190 meters 92° from O Few. Toe
17. Reef awash at L.W. 230 meters 84° true from O Few. Toe
18. Rock awash at L.W. 86 meters 17° true O Bat.
19. Black Bay Reef bares at  $\frac{1}{2}$  tide 440 meters 69° true from O Bat.
20. Sunken Rock 110 meters 31° from O Fal.
21. Rock awash L.W. 320 meters 97° true from O Fal.
22. Sunken Rock covered by 4 ft. water at L.W. 206 meters 145° true from O Chat.
23. Rock awash at L.W. 100 meters 322° true O Pal.
24. Rock awash at L.W. 240 meters 20° true O Bad.
25. Rock awash L.W. 380 meters 26° true O Bad.
26. Recks awash at L.W. 230 meters 46° true O Bad.
27. Sunken Rock 316 meters 49° true O Deer
28. Rock awash L.W. 240 meters 276° true Dad.
29. Rock awash. L.W. 50 meters 0° true O Nat. Marked by kelp in the vicinity.
30. The sheraline from O Nat to O Gun on the south shore of South Passage is foul with numerous recks and kelp.
31. Rock awash at L.W. 158 meters 236° true O Age.
32. Recks awash at L.W. 60 meters N.E. of Edward.
33. Rock awash at L.W. 240 meters 146° true of Edward.
34. " " " 387 meters 149° true of Edward.

35. Sunken rock covered by 13 ft. water at L.W. 431 meters 354° true from O Yap. This is the tip of a sunken reef that breaks in heavy weather and extends in a S.E.'ly direction to O Yap. It is marked by anchored kelp in the Spring. ✓

36. Reck bare at L.W. 100 meters 60° true O Yap. *prob. 160° R.R.*

37. 17 ft. shoal, rocky, 484 meters 131° true O Yap. ✓

38. Reck bare at L.W. 593 meters 140° true O Yap. ✓

39. Reck awash at L.W. 730 meters 125° true O Yap. ✓

40. 8 ft. shoal, rocky, 730 meters 125° true from O Yap. ✓

41. Reck awash 150 meters 99° true from O Fun. ✓

42. Sunken rock 164 meters. 0° true from O Leek. ✓

43. Reck bars at L.W. 230 meters 180° true O Step. ✓

44. Reef awash extends 100 meters in a N.W.'ly direction from O Sid. ✓

45. Reck awash 220 meters 290° true from O Sid. The channel between this rock and O Sid is shallow- 6 ft. being the least depth. ✓

46. Reck awash at L.W. 100 meters 0° true from O Gu. ✓

47. Reef awash at L.W. extends in a N.W.'ly direction for a distance of 140 meters O Set. ✓

48. Reef awash at L.W. 239 meters 193° true O Tez. ✓

49. Sunken Reck 300 meters 67° true from O In. ✓

REMARKS.

Beginnings and endings of lines are entered in sounding records in degrees true and statute miles.

All bearings to rocks and breakers are recorded in sounding records are magnetic unless otherwise noted.

The plane of reference for tides is MLLW. Kimshan Cove tides were used- plane of reference 12.3 and Sitka tides when Kimshan Cove tide gauge was not in operation- plane of reference 9.8ft.

*Augustus P. Ratti*

Respectfully submitted,

Jr. H. and G.E.

STATISTICS

SHEET # 1 B

Date 1925	Letter	Volume	Positions	Soundings	Mi. Statute Sounding Lines	Mi. Statute to Working Grounds	Mi. Statute from Working Grounds	Launch
June 8	a	1	27	86	5.2	28.0	5.0	62
9	b	1	35	95	5.5	4.5	5.5	
16	c	1	77	203	11.0	5.0	6.5	
26	d	1	34	81	4.0	5.5	5.0	
July 16	e	1	42	106	5.5	6.0	6.0	
17	f	1	11	31	1.3	4.0		
17	f	2	25	93	5.2		4.0	
21	g	2	57	171	9.5	4.0	4.0	
22	h	2	25	54	5.6	4.0	4.5	
24	j	2	121	221	14.2	6.0	7.0	
August 1	k	2	5	12	0.5	6.0	7.0	
7	l	2	3	4	0.1	2.0	2.0	
17	m	2	21	74	1.5	1.0	1.0	
20	n	2	7	18	1.0	2.0	8.0	
Sept. 29	o	3	66	114	5.5	10.0	10.0	
30	p	3	102	198	15.0	10.0	10.0	
Oct. 1	q	3	90	201	14.4	10.0	10.0	
2	r	3	6	15	0.2	7.0	8.0	
3	s	3	33	69	3.0	9.0		
3	s	4	28	52	3.0		10.0	
5	t	4	109	161	9.0	10.0	10.0	
9	u	4	13	21	1.0	10.0	9.0	
14	v	4	81	167	13.0	3.0	4.0	
15	w	4	123	229	16.0	3.0		
15	w	5	51	105	5.0		3.0	
			1192	2581	155.2	150.0	139.5	
Total Area Sounded			10.00	Sq. Mi.	(Statute Miles)			

3-DRM

January 21, 1927.

To: Commanding Officer,  
U. S. Coast and Geodetic Survey,  
Steamer SURVEYOR,  
202 Burke Building,  
Seattle, Washington.

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

Subject: Hydrographic Sheet No. 4525<sup>B</sup>.

Reference: (a) Director's letter No. 10-LE, January 4, 1927.  
(b) Letter from Commanding Officer, SURVEYOR,  
January 11, 1927.

The receipt is acknowledged of reference (b).

The rock indicated as sunken on the boat sheet of hydrographic sheet No. 4525<sup>B</sup> off signal "Sex" has been plotted on the smooth sheet and chart as a rock awash which is thought advisable for safety.

The fact that the hydrographer noted the rock in passing, and as it was your intention to have the topographer later determine a closer location of this obstruction, would indicate that the rock is close to the surface. Adjacent soundings also tend to warrant this conclusion on account of the broken bottom in the immediate vicinity.

(Signed) R. L. Harie

Acting Director

POST-OFFICE ADDRESS: 202 Burke Bldg., Seattle, Wash.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

JAN 17 9 15 AM '27

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

Str. SURVEYOR  
Jan. 11, 1927

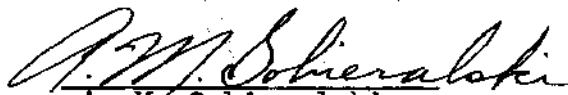
To: Director,  
U. S. Coast & Geodetic Survey.

From: Commanding Officer,  
U. S. C. & G. S. S. SURVEYOR.

Subject: Hydrographic Sheet 4525a. ✓

Reference: Director's Letter 10-LE dated Jan. 4, 1927.

\*  
The rock shown on the boat sheet off the point on which signal Sex is located mentioned in above reference was located by approximate distance and direction from a hydrographic position. It was intended that the topographer should more accurately locate the danger, but as far as can be determined from the records on hand, this was never done.

  
A. M. Sobieralski  
Commanding Officer  
U.S.C.& G.S.S.SURVEYOR

\* Plotted on smooth sheet as rock awash in position shown on boat sheet, as information indicates that this rock is close to the surface.

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1000



10-13

January 4, 1927.

*Q*  
*OKA* *AS*

Reference to A. N. D. V. No. 100

**To:** Commanding Officer,  
Coast and Geodetic Survey,  
under Ship SURVEYOR,  
202 Burke Building,  
Seattle, Washington.

**Through:** Inspector, Seattle Field Station.

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

**Subject:** Hydrographic Sheet 4525a.

There is forwarded to you under separate cover, boat sheet of work executed by your party in the vicinity of Herbert Graves Island.

Off the point upon which signal Sex is located, there is shown in pencil the sunken rock symbol. There also appears the word "locate" near this symbol. The symbol was not transferred to the smooth sheet.

In order that the proper record may be made for the smooth sheet it is desired that you advise whether the position of this rock was definitely determined or if it will be necessary to consider the position plotted on the boat sheet as approximate only.

(Signed) E. Lester Jones

Director.

*See attached letter (Jan. 11, 1927)*



Hyd. 4525 a

This sheet covers the southern part of Portlock Harbor, Surveyor Passage, Black Bay, South Passage, Kukkan Bay, Cape Edward Passage and Goose Passage.

The ground, which is very broken with numerous rocks and shoals, has been fairly well covered but not closely developed. A few more soundings could have been obtained in the narrow channel between Surveyor Passage and Black Bay.

The rocks shown on the sheet have been checked up with the topographic sheets and the list given in the descriptive report. There is a sunken rock symbol shown in pencil on the boat sheet, off signal "Sex" on the west side of Division Island, which is not on the smooth sheet.

The sheet has been only fairly well protracted as a number of errors were found. The soundings have been poorly plotted. The soundings between positions were invariably spaced evenly without regard for the time interval.

Doubtful points which came up in the verification of the sheet were discussed and settled.

The records are satisfactory.

R. L. Johnston

N.D. 4525 b

The wire drag work on this sheet consists of one strip in the lower part of Portlock Harbor and one strip in Surveyor Passage.

This sheet is on a scale of 1 to 5,000, but the U. and D. tracing was prepared on a scale of 1 to 10,000 so that it could be superimposed on the hydrographic sheet.

No descriptive report was turned in for this sheet.

The records are satisfactory except that on a few pages in the end launch record, both the day letter and date were omitted.

The work has been well plotted.

R. L. Johnston

E.P.E.

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 11-DEPM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON December 11, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4525<sup>a</sup>

West Coast Chichagof Island - Vicinity of Portlock Harbor, S. E. Alaska

Surveyed in 1925

Instructions dated February 4, 1925. (Surveyor.)

Chief of Party, A. M. Sobieralski.

Surveyed by A. P. Ratti.

Protracted and soundings plotted by E. H. Kirsch.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of the survey conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions except that there are a few indications of dangers that were not sufficiently developed. These will be mentioned hereafter.
4. The information is sufficient for drawing the usual depth curves except in a few places along shore.
5. The sounding line crossings wherever run are generally adequate. A comparison of adjacent lines shows a good agreement on the whole considering the irregular character of the bottom.
6. The field plotting was completed to the extent prescribed in the General Instructions, but it was not carefully done. There were a number of errors in protracting. The soundings were spaced uniformly throughout, entirely disregarding the time intervals.
7. The junction with H. 4524 is adequate.

A junction was effected with the work on the old survey, H. 2859.

The junction with H. 4526 will be taken up in the review for that sheet.

8. Additional lead line development is required in the following places.
  - a. The shoal area off  $\odot$  Tiz (lat.  $57^{\circ} 43 \frac{3}{4}'$ , long.  $136^{\circ} 11'$ ) requires further work to determine the extent of the shoal.
  - b. More soundings are needed off the northern end of Division Island. The  $5 \frac{1}{2}$  fathom sounding found by the drag (from H. 4525<sup>b</sup>) should be dragged again to determine the least water.
  - c. The  $3 \frac{1}{2}$  fathom shoal in Surveyor Passage (lat.  $57^{\circ} 42'$  1180 m., long.  $136^{\circ} 09'$  715 m.) found by the drag (H. 4525<sup>b</sup>) should either have further lead line development or else should be redragged to determine the least water.
  - d. The northern entrance to Black Bay from Surveyor Passage needs development. A spit apparently makes out towards this entrance from the mainland, making it important to know what depth can be carried across.
  - e. The 15 fathom shoal in South Passage (lat.  $57^{\circ} 41'$ , long.  $136^{\circ} 15 \frac{3}{4}'$ ) should be developed closer.
  - f. The ridge in the vicinity of lat.  $57^{\circ} 40 \frac{1}{4}'$ , long.  $136^{\circ} 15 \frac{1}{2}'$  needs further development.
  - g. The 11 fathom shoal at the entrance to Kukkan Bay (lat.  $57^{\circ} 40'$ , long.  $136^{\circ} 14 \frac{3}{4}'$ ) should have more soundings.
  - h. In Kukkan Passage about 250 meters southwest of  $\odot$  Heel more soundings are needed to completely develop the shoal. If this is a used passage then additional soundings should be taken in the narrows (lat.  $57^{\circ} 38'$  900 m., long.  $136^{\circ} 11'$  600 m.).
  - i. More soundings in the channel north of  $\triangle$  Snipe leading into Ogden Passage.
  - j. The work in Tawak Passage is no more than a reconnaissance and if it is considered sufficiently important additional lines should be run.
9. Whenever this area develops commercially, it is recommended that all shoals be wire dragged.
10. Attention is called to the following which should be referred to the field party for information:

a. About 65 meters west of Ⓞ Sex on Division Island the boat sheet shows a sunken rock symbol in pencil. It was not plotted on the smooth sheet by the field party nor is there any mention made of it in the sounding records. Pending information from the field this rock will not be shown. ←

Note:  
Rock to be plotted as rock awash in boat sheet position. See letter from Sabienalski, Jan. 11, 1927. attached to this report.

11. Character and scope of field operations - very good.  
Field drafting - fair.
12. Reviewed by A. L. Shalowitz, Nov., 1926.

Approved:

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Chief, Section of Field Records (Charts)

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

E.P.C.

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

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 11-DEM

WASHINGTON

December 7, 1926.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4525<sup>b</sup>

Surveyor Passage - Portlock Harbor, Southeast Alaska.

Surveyed in 1925.

Instructions dated February 4, 1925. (Surveyor.)

Chief of Party, A. M. Sobieralski.

Surveyed by A. P. Ratti.

Protracted and inked by A. P. R.

Verified and Area and Depth Sheet, R. L. Johnston.

1. The records conform to the requirements of instructions for wire drag work except that the regulation wire drag volumes were not used. Also on several pages of the end launch records, the information usually given at the top of each page was omitted.
2. The methods and character of the survey do not conform to the requirements of the General Instructions. The drag work is not continuous nor was the least water determined over the shoals that were found. The controlling effective depth of the drag in Surveyor Passage is only 20 feet and in many places the width of the drag narrows down to almost a negligible width.
3. The least water was not found on the two important shoals that were discovered, namely, the 21 ft. sounding in Surveyor Passage opposite Division Island\* and the 33 ft. sounding about 1/5 mile north of Division Island\*. The latter is surrounded by depths of 8 and 9 fathoms and lies directly in the path of vessels rounding the black buoy. Gaps in the drag work were left in both cases.
4. The drag work from 31 C to the end of the day was not plotted by the field party. This work apparently extends into Kimsham Cove, and uses signals that could not be identified in the office. At the suggestion of the Chief of Field Work this work was omitted inasmuch as no groundings occurred and particularly since the survey is incomplete.

*Hydrobia!*  
3171

5. On account of the incomplete character of the drag work and the fact that it was not intended to make a systematic drag survey of this passage, it is recommended that the soundings only should be charted, omitting the limits of the drag work from the tinted charts.
6. Character and scope of field operations - good.  
Field drafting - very good.
7. Reviewed by A. L. Shalowits, Nov., 1926.

Approved:

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Chief, Section of Field Records (Charts)

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

Note:

There is no descriptive report for this sheet. This report is therefore attached to H. 4525<sup>a</sup>.

June 27, 1927.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in  
1 volume of sounding records for

HYDROGRAPHIC SHEET, 4525a

Locality: S. E. ALASKA, PORTLOCK HARBOR.

Chief of Party: J. M. Sobieralski, 1926.

Plane of reference is M L L W

6.2 ft. on tide staff at Sitka

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 each 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.

*E. W. ...*

Chief, Division of Tides and Currents.



WWD  
June 4, 1926.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4525A

Locality: S. E. ALASKA.

Chief of Party: A. M. Sobieralski: in 1925.

Plane of reference is  
9.8 ft. on tide staff at Sitka.  
12.3 ft. ----- do ----- Kimshan Cove.

For reduction of soundings, 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 each 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.

June 5, 1926.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4525 B

Locality: S. E. ALASKA.

Chief of Party: A. M. Sobieralski in 1925.

Plane of reference is MLLW  
12.3 ft. on tide staff at Kimshan Cove.

For reduction of soundings, 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 each 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.

Descriptive Report  
to accompany  
Wire Drag Work *Surveyed 1926*  
on Hyd. Sheet No. 4525a

MAR 12 11 26 AM '27

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16

Portlock Harbor, Alaska.

While the instructions for field work for the Str. SURVEYOR did not specify wire drag work in this vicinity, a favorable opportunity was found to drag over some suspicious soundings, which had not been fully developed by the hydrographic party.

The drag was set at 48 feet. No test of the drag was made because the engine of one of the launches broke down and the tender had to be used for towing the launch. The ship's drag outfit with collapsible buoys was used for this work.

No shoals were discovered.

The work was plotted on a tracing of Hydrographic Sheet No. Scale 1-10,000. Southern part of Portlock Harbor and can easily be transferred to the smooth sheet.

## Section of Field Records

Report on wire drag work shown on Sheet No 4525a

Surveyed in Oct., 1926

Chief of Party - A. M. Sobieralski

Surveyed by - C. P. Ratti

Protracted and inked by P. L. Johnston

Verified by A. L. Shalowitz

sheet inspected  
by - A. L. S.

The records conform to the requirements of the General Instructions.

The methods and character of operations fulfill the requirements of the General Instructions except that no tests were made for lift as the tender was not available for that purpose.

No specific instructions were issued for wire drag work.

This work consists of only one drag strip. No shoals were discovered and no soundings taken.

The work was plotted by the field party on a tracing of Hyd. 4525a. This tracing is now filed as a boatsheet. The work was replotted in the office on the original sheet, <sup>(Hyd. 4525a)</sup> and has been incorporated in the Area and Depth sheet of Hyd. 4525b.

P. L. Johnston

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

4525a

HYDROGRAPHIC TITLE SHEET

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

U. S. Coast and Geodetic Survey.

Register No. 4525a  
| B

State . . . S. E. Alaska . . . . .

General locality . . . West Coast Chichagof Island . . . . . West Coast

Locality . . . Kukkan Bay and Lower Part Portlock Harbor . . . . .  
~~Portlock Harbor (Southern Section)~~

Chief of party . . . A. M. Seberialski, Com'd'g. Str., Surveyer, . . . . .

Surveyed by . . . Augustus P. Ratti, Jr. H. and G. E. . . . . .

Date of survey . . . June 8 to Oct. 15, 1925. . . . . .

Scale 1-10000 . . . . .

Soundings in Fathoms . . . . .

Plane of reference MLLW . . . . .

Protracted by E. H. Kirach . . . . . Soundings in pencil by E. H. K.  
~~A. P. R.~~

Inked by . . . R. L. G. . . . . . Verified by . . . R. L. G. . . . . .

Records accompanying sheet (check those forwarded):

Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, 1 Boat sheets,

5 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet . . . . .

Remarks:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4525b WIRE DRAG

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. ....

REGISTER NO. 4525b WIRE DRAG

SE.  
State Alaska

General locality Chichagof I. - W. Coast  
~~Portlock Harbor, Chichagof I.~~

Locality Surveyor Passage and SE. Portlock Hbr.

Scale 1-5,000 Date of survey Oct., 1925

Vessel SURVEYOR

Chief of Party A. M. Sabieralski, H. + G. E.

Surveyed by A. P. Ratti, Jr. H. + G. E.

Protracted by A. P. Ratti

Soundings penciled by A. P. Ratti

Soundings in ~~fathoms~~ feet

Plane of reference M. L. L. W. Kimshan Cove

Subdivision of wire dragged areas by A. P. Ratti

Inked by .....

Verified by .....

Instructions dated Feb 4, 1925

Remarks: Enlargement from Hyd Sheet #  
to show wire drag work.