

4440a:b

4440a:b

Form 504
 DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 L. & A. SURVEY
 MAR 10 1925
 State: S.E. Alaska Acc. No.
 DESCRIPTIVE REPORT.
 Hydrographic Sheet No. (2) 4440a
 LOCALITY:
 Upper Kasan Bay
 and
 Entrance to Twelvemile Arm
 1924
 CHIEF OF PARTY:
 F.B. Taylor

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 2 OF KASAAN BAY (Field number)

GENERAL REMARKS - The sounding and wire-drag work of Kasaan Bay were both accomplished during 1924. It was not practicable to plot the wire-drag work on the hydrographic sheet, as originally intended, on account of the detailed inshore work. Attention is therefore called to the fact that soundings obtained while dragging are not plotted on this sheet, but appear on the wire-drag sheet which has the same limits.

The datum indicated in blue is that of upper Kasaan Bay triangulation of 1906-11 and was used for the topographic and other field sheets. Later in the season when the triangulation of upper Kasaan Bay was connected to the Clarence Straits triangulation of 1912-22, which is based on the approximate S.E. Alaska datum, all the triangulation stations of Kasaan Bay were recomputed on the latter standard datum.

The triangulation stations on this sheet were plotted with coordinates based on the S.E. Alaska datum which projection is therefore the one shown in black, and which was constructed from the polygonic projection tables in the usual manner. The difference between the dm's and qp's of a triangulation station, for the two datums, furnished the necessary data over various parts of the sheet for constructing the Kasaan Bay datum as indicated in blue. Attention is called to the fact that there is a considerable difference in azimuth between the two datums, but a comparatively small distance ratio. On account of the difference in azimuth, the two projections are not parallel to each other.

The signals were transferred by tracing paper from the topographic sheets with respect to the projection used in the field and with respect to their position in relation to the triangulation signals. In some cases a slight adjustment in transferring signals was necessary on account of distortion in the field sheet. This was accomplished by fitting the four projection intersections corresponding to the relative distances to the signal to be transferred.

INSHORE DANGERS - From © BIN to the Kasaan cannery occasional outlying boulders mark the shoreline. This area is apparently safe for all navigation 250 meters off shore.

From the Kasaan cannery westward to © SCRUB the shoreline is clear of outlying dangers 300 meters off shore except for the 2 fathom spot 550 meters south of © DO.

A shoal area exists southeast of Karta Bay between © SALT and Sand Pt., the 10 fathom curve extending 900 meters off shore.

INSHORE DANGERS continued

Sand Pt. is clear 750 meters outside the high water line.

From 0 BEG to the southern limit of the sheet the inshore area is clear 150 meters off shore. The entrance to the bight north of Loy Is. is obstructed by rocks.

A 7 foot spot was round 150 meters, 25° from 0 SOT.

North of 0 LOV a gravel and boulder shoal, bare 4 feet at M.L. L.W. extends 600 meters off shore. East of this area and obstructing the mid-channel entrance to Coal Bay, a shoal covered 16 feet at M.L.L.W. lies 600 meters, 60° from 0 LOV. The channel southeast of this shoal is clear and affords ample entrance to Coal Bay.

Two rocks bare at M.L.L.W. lie 380 and 500 meters, respectively, 10° from 0 RIM.

(See also descriptive reports for topographic sheets)

LIMITS OF HYDROGRAPHY - The hydrography on this sheet covers the entire upper part of Kasaan Bay and part of Twelvemile Arm. It joins the work on sheet #1 (field number) near the western end of Long I. and the work on sheet #3 just east of the entrance to Hollis Anchorage in Twelvemile Arm. The work northeast of Karta Bay joins that done in previous years. (See register no's. 2821 and 2821A) An insert on this sheet shows soundings taken in the small cove at Kasaan cannery on a scale of 1:10,000.

ANCHORAGES -

Coal Bay, 1½ miles eastward from Outer Point affords good anchorage in 15 fathoms in any but northerly weather. A reef, mentioned above under "Inshore Dangers", partially obstructs the entrance to this bay.

Kina Cove, ½ mile west of Coal Bay has good bottom at 8 to 10 fathoms ¾ mile inside the entrance. In entering the bay a mid-channel course should be followed.

Karta Bay, in the western end of the head of Kasaan Bay, 2 miles west of Sand Pt., affords good anchorage in 10 to 12 fathoms with a clearance of 430 yards. 5/6 mile west of Sand Pt. a shoal with 1 fathom at lower low water, lies ¼ mile off shore.

KASAAN - The main wharf at the Kasaan cannery has a face of about 110 feet with 32 feet of water at L.L.W. It has been noticed that the larger steamers make a starboard landing here. In the north part of the cove there is a fairly extensive beach composed of gravel and entirely free from boulders making a fine place to beach small boats. In case of emergency it is probable that a larger boat could be safely beached here. Soundings were obtained along the faces of the main dock, oil dock and fish dock at the cannery and are shown on the insert on this sheet.

Miscellaneous -

It was necessary to plot the following positions appearing in the records for sheet #1 on this sheet, #2: 45-55p, 72-81j, 52-94s, 105-106s of Tender #1 and 14-14q, 24-25q and 32-49q of Scandinavia records. These positions are numbered on the sheet the same as in the records of sheet #1.

On the insert on this sheet it will be noticed that the low water line near position 9n has a seemingly unnatural appearance. It is believed to be correct as shown and due to the action of a stream which is quite sizable at some seasons of the year and enters at this point.

Compiled from notes by F.B.T.Siems and J.A.Bond with additions.

Allen A. Parker, D.D.

Additional Notes-

(Karta Bay)

The position of \odot ROUGH was located by plane-table triangulation on bromide H 2821 and was transferred from there to the smooth sheet.

Tracings from the topographic sheets which were used in making boat sheets as well as the smooth sheet are forwarded herewith. These tracings show the low water line as determined by the topographer and can be transferred and adjusted as required to the best advantage after the soundings have been inked. Great care was taken in making these tracings.

Approved:
F.B.T. Siems
.....
C. & G. Survey Comd'g.

STATISTICS SHEET NO. 2

<u>Date, 1924</u>	<u>Letter</u>	<u>Vol.</u>	<u>Positions</u>	<u>Soundings</u>	<u>Miles (statute)</u>	<u>Vessels</u>
June 26	a	1	105	288	16.1	Tender #1
" 27	b	1	121	306	16.6	"
July 9	c	1	24	66	4.0	"
Aug. 14	d	2	82	192	7.0	"
" 15	e	2	103	203	11.5	"
" 19	f	2	71	189	"	"
" 19	f	3	3	5	9.5	"
" 20	g	3	98	276	14.6	"
" 21	h	3	80	206	14.0	"
" 22	j	3	83	213	"	"
" 22	j	4	15	29	13.1	"
" 23	k	4	42	84	5.0	"
" 26	l	4	10	18	1.2	"
Sept. 12	m	4	16	39	2.0	"
" 13	n	4	22	70	1.5	"
June 26	a	1	84	84	14.0	Scandinavia
" 27	b	1	97	97	16.0	"
" 28	c	1	43	43	8.0	"
July 8	d	1	80	80	12.0	"
" 23	e	1	55	55	5.5	"
" 24	f	2	94	94	13.2	"
" 25	g	2	84	84	11.5	"
Aug. 13	h	2	54	208	11.0	"
" 14	j	2	52	226	10.5	"
TOTALS -----			<u>1518</u>	<u>3155</u>	<u>217.8</u>	

The following work appears in records of sheet 1 but is plotted on sheet 2.

July 18	j	3	10	41	---	Tender #1
" 25	p	4	11	24	---	"
Aug. 13	s	5	45	101	---	"
July 19	q	3	22	22	---	Scandinavia
TOTALS -----			<u>88</u>	<u>188</u>		

NOTES

Soundings in FATHOMS. Plane of reference - M.L.L.W.

Tide gauge at Kasaan Cannery M.L.L.W. reading on gauge 6.6

Lowest tide observed, reading on gauge - 2.9 July 18
 Highest " " " " " - 23.9 Sept. 12

March 31, 1925.

~~Division of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 4440a

Locality: Kasaan Bay, S. E. Alaska

Chief of Party: F. B. T. Sims in 1924

Plans of reference is lower low water and is

6.6 ft. on tide staff at Kasaan Cannery, Kasaan Bay, Alaska

6.6 " " " " " Hollis Anchorage, S. E. Alaska

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 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

Checking of this station has been exceedingly tedious and unsatisfactory for the reason that with few exceptions neither reducers nor lead line corrections have been entered in the record, although in some instances are very large. For example, on page 10, Vol. 4, lead line corrections of eleven and twelve feet occur.

J. W. Rude
Chief, Division of Tides and Currents.



DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 27, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4440^a

Upper Kasaan Bay and Entrance to Twelvemile Arm, Alaska.

Surveyed in 1924

Instructions dated April 19, 1925.

Chief of Party, F. B. T Siems.

Surveyed by J. A. Bond, C. Shaw, F. E. Joekel.

Protracted and soundings plotted by A. A. Parker

Verified and inked by A. L. Shalowitz.

1. The records conform to the requirements of the General Instructions, except that in the reduction of soundings in depths greater than 9 fathoms 4 feet was reduced as the next higher fathom, instead of being dropped.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are as good as could be expected considering the uneven bottom.
5. The information is sufficient for drawing the depth curves except in a few places alongshore.
6. The usual field plotting was done by the field party, and it was found to be accurate and complete.
7. The junctions with the adjoining sheets are satisfactory.
8. The drag work done on H. 4440^b, covering the same area as this sheet, is a good example of the need of drag work to supplement a leadline survey on uneven rocky bottom.

9. No further surveying is required within the limits of the sheet.
10. The character and scope of the surveying and field drafting are excellent.
11. Reviewed by E. P. Ellis, August, 1925.

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4440b

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: S.E. Alaska
11-5613

DESCRIPTIVE REPORT.
Wire-Draw Sheet No (2) 4440b

LOCALITY:
Upper Kasaan Bay
and
Entrance to Twelvemile Arm

1924
/1917

CHIEF OF PARTY:
F.B.T. Siems, H. & G. E.

MAR 10 1925

DESCRIPTIVE REPORT

to accompany

WIRE-DRAG SHEET NO. 2 OF KASAAN BAY (Field number)

GENERAL REMARKS - The sounding and wire-drag work of Kasaan Bay were both accomplished during 1924. It was not practicable to plot the wire-drag and hydrographic work on the same sheet. Wire-drag sheet #2 (field number) was constructed by carefully pricking with fine needle point positions of signals and projection intersections from hydrographic sheet field No. 2 shortly after that sheet was constructed and while it tested to be free from distortion. Both sheets were seasoned and flattened in accordance with approved methods. They were furthermore exposed to the same conditions for a period of about two days just prior to the transfer of projection and signals.

The projection shown on this sheet is referred to the S. E. Alaska datum of Clarence Straits 1912-22. Field sheets, as noted in other reports are referred to the Kasaan Bay datum 1906-11. (See descriptive reports accompanying hydrographic sheets, field No's 1 & 2.)

METHODS OF SURVEY AND PLOTTING - Frequent tests of the depth of drag were made and an officer was placed in charge of this work in connection with wire-drag tender duties. A general correction of 2 feet for lift for depths over 40 feet was made in the absence of drag depth tests. Greater lift was not indicated by drag tests except during abnormal conditions. Generally very little or no lift was indicated. In one case on sheet #1 while using 600 ft. sections with five new wooden floats between weights and reducing tension to a minimum of 325 lbs. for experimental purposes a lift of 4 feet occurred, principally due to excess buoyancy of the new wooden floats purchased at that time.

Positions and directions to large buoys were obtained from both launches every five minutes, in general. As the two original sets of launch records will accompany the sheet it was not considered necessary to copy the end launch angles into the guide launch records. The position numbers of the guide launch end of drag are indicated on the sheet, those of the end launch were not indicated. The numbers for simultaneous positions of end and guide launch do not necessarily correspond and in most cases two corresponding positions must be established by times the positions were taken, corrected if necessary.

Soundings on shoals are recorded in the tender record which will also accompany the sheet. However, all tender record data was copied in the guide launch records.

The launch positions while dragging were plotted on the smooth sheet and the tow-line connecting boat position and large buoy is indicated by light pencil line. This method of plotting is considered necessary for absolute accuracy and it also assists in shaping drag curves

METHODS OF SURVEY AND PLOTTING - continued

tangent to the tow-lines.

As the area was systematically covered by the two boat control method it was not considered necessary to make tracings of individual drag strips.

The wire-drag equipment used consisted of 5/16" bottom wire, 15 gallon oil drums with heads for intermediate buoys, 50 gallon gasoline drums with heads for end buoys, wooden floats and single tow-line 500 feet long (no bridle) connected to large weight.

The boat sheets used for hydrography were also used in plotting the wire-drag work in the field. The soundings were in general reduced from actual tide observations, but in some cases predicted tides were necessarily used. It was intended to drag over shoals within 3 feet of the bottom, but this was not accomplished in some cases on account of the necessity of using predicted tides for setting drag depth. However it may be stated here that the predicted tides corresponded remarkably close with the actual tides as later determined.

GROUNDS -

Pos. 7A, ground 300 m. WNW from \odot Son. Least water 17'. This shoal was not dragged over at any depth on account of it being near shore and a sufficiently wide channel West of it. ✓

Pos. 35B, ^{700m}ENE from \odot Son. Drag grounded for a few minutes and came clear with rising tide. Depth shown as one foot less than drag depth or 49'. Later reversed and passed over same spot with same depth of drag. ✓

Pos. 39B, 250 m. E from \odot Son. Ground at buoy #2. Tow-line first grounded and drag pulled around shoal. No sounding at ground. Not covered. Very close to shore. ✓ 49 f. charted a.T.S.

Pos. 60B, ground 700m. ENE from \odot Lov. Drag depth 42'. Least water found on shoal 38'. Shoal not covered with drag being near reef. ✓

Pos. 63B, 1000 m. NE \odot Lov. Least depth on ground 37'. Later covered with drag at 30'. ✓

Pos. 7C, 850 m. E x N from \odot Round. Least water found on shoal 48'. Drag depth 43'. This shoal and the split just north of it were covered later on sheet No. 1 with a 40' depth of drag. ✓

Pos. 37.6 C, 800 m. W x S from Δ Scrub 2. "N" buoy grounded but pulled off and passed over. Drag depth 45'. ✓ known depths

Pos. 57.4 C, 700 m. W x S from Δ Chan. "N" buoy began dragging along bottom. ✓

Pos. 60C, 800 m. W x S from Δ Chan. "N" and buoy #1 aground. Least water 41'. Shoal near shore and not covered with drag. ✓

Pos. 35.67 D, 300 m. NNW from Δ Bee. "N" buoy grounded but pulled off and passed over. This ground is near a 50' sounding on shoal developed by hydrography. ✓

Pos. 44 D, 190 m. NW from \odot Cut. Ground on 9-1/2' shoal. Drag never taken over this shoal which was very near the shore. ✓

Pos. 64 D, SE Δ Sand Pt. Ground at buoys 5 & 6 and between 2 & 3. Drag depth between 2 & 3 33', at #5 43', at #6 48'. Ground ✓

GROUNDS continued -

between 2 & 3 later covered with 28' drag, between 5 & 6 with 42' drag. No fixes could be taken from tender on these grounds at the time on account of stormy weather. Soundings were taken but none showed less depth than the drag.

Pos. 30 & 35 E, 660 m. E of O Rat. Ground on 22' shoal. Later dragged over this with 18'. chart 22 ft.

Pos. 46.6 E, 360 m. N x W from A Salt. "N" buoy dragging along bottom. Drag depth 27'. Least depth found by tender 40'. N-buoy hooked to 43ft (effective) 40ft charted

Pos. 50 E, Ground at "P" buoy 1000 m. W x S from A Chan. Drag depth 43'. Least water 30'.

Pos. 44 G, ground 450 m. NW from O Cut. Drag depth 40'. Shoal 37'. The split caused by this shoal was not discovered until the smooth sheet was plotted. The guide launch having stopped after pos. 44 G the drag evidently lifted over shoal and as two subsequent positions were plotted the area was shown as having been passed over on the boat sheet.

Pos. 68 G, "N" buoy grounded 620 m. ENE from A Salt. Drag depth 33'. Came clear and passed over. In known depths

Pos. 5 H, ground 1100 m. NE x N from O Lov. Drag depth 29'. Least water found on shoal 28'. Shoal near shore and unimportant, therefore was not dragged over again.

Pos. 18 H, ground on 38' shoal, 290 m. W of O Dam. Drag depth 39'. Shoal near shore.

Pos. 13 J, "N" buoy grounded 440 m. S x W from O Bill but slipped off. Drag depth 30'. chart 29 ft.

Pos. 16 J, grounded on 26' shoal 750 m. W of O Bill. No attempt was made to pass over this shoal on account of very shoal water just north of this position.

Pos. 12 K, "N" buoy grounded for an instant but came clear. Drag depth 44'. chart 44 ft.

Approved: *[Signature]*
O. & C. Survey Comd'g

Notes on grounds by: *[Signature]*

Statistics for Wire-drag sheet No. 2 (field).

<u>Date</u> 1924	Letter	Vol.	Pos.	Soundings	Miles (Statute)	Vessels
August 19	A	1	7 7 2	2	1.3	(G.I.) Helianthus Scandinavia (E.I.) Tender No. 1.
August 20	B	1	63 69 7	7	18.0	H S T
August 21	C	1	60 58 4	4	10.0	H S T
August 22	D	1	64 58 2	2	10.0	H S T
August 26	E	1	50 52 8	8	5.5	H S T
August 28	F	1 & 2	41 43 0	0	9.5	H S T
August 29	G	2	69 71 4	3	12.0	H S T
August 30	H	2	18 24 3	3	3.0	H S T
September 2	J	2	16 16 2	2	2.5	H S T
September 3	K	2	13 15 0	0	1.5	H S T

Statistics for Wire-draw sheet No. 2 (field) -continued.

<u>Date</u> 1924	Letter	Vol.	Pbs.	Soundings	Miles (statute)	Vessels
September 11	L	2	12 7 0	0	1.0	H S T
September 12	M	2	7 7 0	0	1.0	H S T

NOTES

Soundings in FEET. Plane of reference- M.L.L.W.

Tide guage at Kasaan Cannery. MLLW reading on guage 6.6.

Lowest tide observed, reading on guage - 2.9 July 18
 Highest " " " " " 23.9 Sept. 12.

March 25, 1925.

Section of Field Records

~~Bureau of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 440b

Locality: Kasan Bay, S. E. Alaska

Chief of Party: F. B. T. Sims

Plane of reference is mean lower low water and is
6.6 ft. on tide staff at Kasan Cannery, Kasan Bay, Alaska

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 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.

E.P.G.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 5, 1925

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. H 4440^b

Kasaan Bay -- Western Part, S. E. Alaska

Surveyed in 1924

Instructions dated April 19, 1924

Chief of Party, F. B. T. Siems.

Surveyed by F. B. T. Siems, Charles Shaw, Fred E. Joekel.

Protracted and inked by B. Williams.

Verified and Area and Depth Sheet by A. L. Shalowitz.

Tracing by J. C. MacNab.

1. The records conform to the requirements of the General Instructions except that, due to a misunderstanding regarding the forwarding to the office of all end launch and tender records, the end launch data was not transcribed into the guide launch records in the columns provided for such data as per Paragraph 247 of the General Instructions. Also the tender data was unnecessarily entered in the guide launch records.
2. The method and character of operations satisfy the General Instructions.
3. The extent of dragging satisfies the specific instructions except in the following respects:
 - a. The drag should have been carried closer inshore in a number of places. This can best be seen by a comparison of the A. and D. sheet with the hydrographic sheet (H. 4440^a) which is on the same scale.
 - b. The passage between Round Island and Berry Island should have been dragged.
4. The depth of dragging satisfies the specific instructions except as follows:
 - a. In the area west of Outer Point, the drag should have been set deeper than 27 ft.

b. North of Sandy Point the area, except that immediately surrounding the 22 ft. shoal, should have been dragged deeper than 18-27 ft.

5. The least water was found over all shoals except the following:

a. The 10 ft. sounding in lat. $55^{\circ} 30 \frac{3}{4}'$, long. $132^{\circ} 32 \frac{3}{4}'$ was not cleared. This, however, is too shoal to require further dragging.

b. The 37 ft. sounding about 300 meters northwest of the above 10 ft. spot was not cleared. Due to an oversight a split in the work was left around here. There is deep water between this and the 10 ft. sounding. A drag should therefore be passed over this area.

c. The 32 ft. sounding in Kina Cove was not cleared.

d. The 28 ft. sounding in lat. $55^{\circ} 30 \frac{3}{4}'$, long. $132^{\circ} 29 \frac{1}{2}'$ was not cleared. Deeper water exists between this sounding and the limits of the reef making out from shore.

e. The 37 ft. sounding about 300 meters east of the above 28 ft. spot was cleared by a 30 ft. drag.

f. The 16 ft. sounding ($2 \frac{4}{6}$ fathoms) from H. 4440^a off the entrance to Coal Bay should have been dragged over to determine the least water on the shoal.

g. The 17 ft. sounding off Berry Island in lat. $55^{\circ} 30 \frac{1}{2}'$ long. $132^{\circ} 23 \frac{3}{4}'$ was not cleared. Deep water exists between this spot and Berry Island and should be dragged over when the passage between Round and Berry Islands is dragged.

h. The 28 ft. sounding in lat. $55^{\circ} 30 \frac{1}{2}'$, long. $132^{\circ} 23'$ was not cleared.

i. The 4 fathom spot about 500 meters north of Long Island (from H. 4439^a) in lat. $55^{\circ} 30 \frac{1}{2}'$, long. $132^{\circ} 22 \frac{1}{2}'$ was not dragged over. This is an important spot and the least water should be determined.

j. The 22 ft. sounding (grounding depth) in lat. $55^{\circ} 33 \frac{1}{2}'$, long. $132^{\circ} 31 \frac{1}{2}'$ was cleared by an 18 ft. drag, but with an insufficient overlap. This should therefore be redragged.

k. The 30 ft. sounding in lat. $55^{\circ} 34 \frac{1}{2}'$,
long. $132^{\circ} 32 \frac{3}{4}'$ was not cleared.

l. The 33 ft. sounding (grounding depth) off
Sandy Pt. in lat. $55^{\circ} 32 \frac{3}{4}'$, long. $132^{\circ} 30 \frac{1}{2}'$
was cleared by a 28 ft. drag.

- C
6. The junctions with the adjacent sheets are satisfactory.
 7. The overlaps within the sheet are satisfactory, there being but one instance where it was insufficient, attention having been called to it under paragraph 5 j.
But one split was left on this sheet. See paragraph 5 b.
 8. While there are no areas important enough to require immediate attention, there are places which need additional work when opportunity affords.
 9. The field drafting was completed to the extent prescribed in the General Instructions except:
 - a. The projection was not shown in full, the intersections only having been inked.
 - b. The rule of surrounding deeper areas by their appropriate colors was not adhered to.
 - c. Instead of indicating the effective depth by a numeral representing the excess over the base for a particular color, the actual effective depth was shown. This method appears to be more logical and should be given consideration.
 10. Attention is called to the fact that the records for this sheet show great attention to details of the drag work. The work has the stamp of personal supervision of the chief of party, which is a step in the direction of progress.
 11. No verification report has been submitted with this sheet, the substance having been incorporated in this review.
 12. Rating of work (
 (Field work - very good.
 (Field drafting - very good.
 13. Reviewed by A. L. Shalowitz, July, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

WIRE-DRAG
Field No. 2.

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.

Wire drag field #
Register No. 4440b

State S.E. AlaskaGeneral locality Clarence Strait
~~Kasaan Bay, Prince of Wales Island~~Locality Upper Kasaan Bay and Entrance to Twelvemile ArmChief of party F.B.T. SiemsSurveyed by F.B.T. Siems, Charles Shaw, Fred E. JoekelDate of survey August 19 to September 12, 1924Scale 1 : 20 000 . (insert 1 : 10 000)Soundings in FeetPlane of reference M.L.L.W. Kasaan CanneryProtracted by B.W. Williams Soundings in pencil by B.W.Inked by B.W. Verified by

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, 5 Boat sheets, ^{# of these} (also used for hydrography)
1 Sounding books, 4 Wire-drag books, Photographs.

Data from other sources affecting sheet Triangulation 1906, '12, '15, '21, '22, & '24. Hydrographic sheets- Register Nos. 2821, 1652A, 1649E, and 1924 sheets Nos. 1 and 3 (field numbers). Tide records listed on title sheet for sheet no. 1 (field numbers).

Remarks: Datum of projection is approximate. S.E. Alaska of Clarence Straits, 1912.