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Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

L. & A

APR 9 1927

State: S. E. ALASKEC No.

DESCRIPTIVE REPORT.

Field letter "D"

Meet No. 4623a

llydrographi&heet No.

LOCALITY:

Chatham Strait

TEBENKOF BAY- GHATHAM STRAIT

including

GEDNEY HARBOR

1926

CHIEF OF PARTY:

F.B.T. Siems

to accompany

HYDROGRAPHIC SHEET of TEBENKOF BAY. SE.ALASKA 1926.

EXTUNT:

The hydrographic survey covers the area between <u>POINT ELHS</u> and <u>POINT COSMOS</u> and was executed according to instructions dated March 9th 1926.

METHODS:

Tender # 1, launches Scandinavia & Helinanthus were used. Handlead in less khan 10 fathoms of water and sounding machine with stranded wire in desper water.

In deep water the lines were spaced 300 meters apart and in various arms and bays 200 meters and even less, depending upon the nature of the bottom.

Most of the rocks were located at minus tides. In developing a small shoal to find least water, numerous soundings were taken and only least depths recorded. In practically all such cases the launch was anchored on top of the rocks, with engine going slow ahead and cruising in a circle. Several leadlines were used simultaneously, from the bow, astern and from the regualar sounding platform. By this method numerous dangers were found, having less water than reported by the fishermen. for instance the pinnacle rock of $1\frac{1}{2}$ fathoms which lies 1800° meters 284^{0} from Δ TOP. This rock was reported to have 4 fathoms over it. It is marked by thick kelp which however shows only at low tides. The tender was tied to the kelp at the bow at minus tides, leadlines thrown in all directions and gradually hauled in, virtually drasging the area. As soon as less water was found the stern of the launch was tied to the kelp also in the locality of shoaler soundings and in short time the least depth was found, namly 12 fathoms, M.L.L.W. This rock covers only a small area and by feeling with the lead it was found to be a pinnacle rock with 5 fathoms alongside of it. This rock is visible at minus tides and is a source of trouble to the fishermen.

The inshore hydrography West of O KEL was done by the Scandinavia, Mr. Horne in charge and is shown in blue letters. Some of the work in the North and Southeast Arm was done by the Helianthus, Mr. Jankowski in charge and is also shown in blue letters. The remainder of the work was done by the Scandinavia & Tender # 1. Mr. Weidlich in charge and is shown in red letters.

With the exception of the work done in the North arm and the area East of Δ ONE, all lines were run in a Northerly and Southerly direction, which proved to be the most economical way, avoiding the short lines.

DANGERS & OBSTRUCTIONS:

A rock with 2 fathoms over it at M.L.L.W. lies 1590 meters 262° from \triangle OUT, covers only a small area and is marked by thick kelp at low tides, with deep water all around it.

A rock with 3-5/6 fathoms over it at M.L.L.W. lies 1400 meters 3400 from $\sqrt{}$ Δ TOP, covers only a small area, with deep water around it and is marked by thick kelp.

A pinnacle rock with $\frac{1}{2}$ fathoms over it at M.L.L.W. lies 1800 meters 2840 from Δ <u>TOP</u>. This rock is of very small area and hard to locate at high tides, has deep water all around it. It is marked by very thick kelp, which is visible only at low tides.

A rock with 6 fathoms over it at M.L.L.W. lies 650 meters 3220 from A TOP A This rock covers only a small area, with deep water all around it and is marked

by thick kelp. √

a rock which bares at low tides lies 230 meters 272° from OBERG. This area \checkmark is marked by very thick kelp. The area east of this rock is foul and appearntly connected with the island. Located by cuts # 35 & 36 %, wire drag.

A rock which bares at low tides lies 290 meters 160° from O <u>BERG</u>. Foul area between it and the shores is marked by very thick kelp.

A rock with 1-2/6 fathoms over it at M.L.L.V. lies 540 meters 3440 from \triangle X CRIS

A rock with 1-5/6 fathoms over it at M.L.L.W. lies 450 meters 526° from \triangle CRIS. The area between both rocks is foul, bottom very irregular and marked by very thick kelp. Numerous soundings were taken only least depths recorded.

A rock wich bares at low tides lies 170 meters 345° from \triangle CRIS, thick kelp all around it and markes the extreme end of foul area north of \triangle CRIS. \swarrow

A foul area marked by kelp during late summer lies about 650M. 2410 from \triangle RIP. Least sounding obtained by hydrography 6 fathoms, rocky bottom, least depth found with wiredrag 4-1/6 fathoms. \checkmark

A foul area with rocks awash at low tides lies about 200 meters West of & WHITE. These rocks are marked by thick kelp, deep water all around it.

A foul area with rocks awash at low tides lies about 480 meters, 245° from O HAUL. It is marked by thick kelp. Deep water all around it.

The North entrance to GEDNEY HARBOR is foul and studded with rocks East of OCHAN and OHOG. This body of water is navigable to vessels of very shallow draft at high tides only. Tender # 1. $3\frac{1}{2}$ feet draft, had difficulties to enter-Gedney Harbor at half tides and had to worm its way through at very slow speed.

The south entrance is clear and free of obstructions, except low water point and shoal water 50 meters off South extreme point near O <u>PON</u>. (See wiregrag sheet). Foul area near O <u>MA</u> and O <u>STI</u> is marked by thick kelp. This area is wire dragged. \checkmark

A shoal with $8\frac{3}{4}$ fathoms at M.L.L.V. lies 1310 meters 460 from \triangle CRIS and \bigvee is marked by very thin kelp. This area is wiredragged, leadt depth found 7 fathoms.

A shoal with 8 fathoms over it at M.L.L.W. lies 660 meters 348° from Δ BASS. It is marked by very thin kelp. Wiredrag party found depth of (5-1/6) fms.

A shoal with 5 fathoms over it at M.L.L.W. lies 260 meters 2460 from OKA VI is marked by very thin kelp.

A rock with 4 feet over it at M.L.L.W. lies 280 meters 1580 from O SET. It is marked by thick kelp. The area North of this rock is foul.

A shoal with 4-4/6 fathoms over it at M.L.L.W. lies 475% meters 129° from O SET. This shoal was marked by kelp during late summer. The 4-4/6 fathoms sounding markes the Southern end of the shoal.

A shoal with 7 fathoms over it at M.L.L.W. lies 560 meters 1020 from O <u>SET</u> and is marked by very thin kelp.

A rock with 2-4/6 fathoms over it at M.L.L.W. lies 320 meters 1280 from \triangle NEL and is marked by thick kelp. \lor

A rock with 4/6 fathoms over it at M.L.L.W. lies 260 meters 2900 from O MIN.

This rock markes the Northern end of a foul area which is marked by thick kelp. $\sqrt{}$

The East and West entrance of Helianthus Passage is apparently clear with the following exceptions: A rock with 2 fathoms over it at M.L.L.W. lies 220 the ters North from O NES. This rock is plainly visible at low tides and has the shape of a wedge. It is marked by kelp, which is much heavier during autum months.

A rock with 4 fathoms over it at M.L.L.W. lies 330 meters 30 from O $\underline{\text{NES}}$ about midchannel. It is marked by kelp. \times

A ledge extents about 110 meters from O NIN in a South-Westerly direction. The extreme end is marked by kelp. \checkmark

Numerous lines of soundings were run in this passage, but on account of the small scale no attempt was made to plot all the soundings.

This passage was used quite frequently by the Steamen Explorer with rising tide, favoring the North shore. Passage should not be attempted during spring tide, at strength of current of about 2 knots.

During early summer months little or no kelp was present however during the late Summer, the entire passage was covered with kelp.

DANGERS & OBSTRUCTION between Froller Islands, locally known as Fishermen's Anchorage.

This body of water is foul and studded with rocks and covered with kelp, and should be used only by boats with local knowledge. The Northern part is used by fishing vessels as anchorage and frequently vessels anchored for the night at high tides drag their anchors and go aground.

The passage between ONOB and OLOK is foul but may be navigated by small fishing vessels at high tides. This body of water examined at low tides.

A rowk with 4/6 fathom over it at M.L.L.W. lies 225 meters 18° from <u>OBES</u> \checkmark and is marked by kelp.

A rock with 1-4/6 fathoms over it at M.L.L.W. lies 300 meters 357° from O BES and is marked by kelp. \checkmark

A rock with 1 fathom over it at M.L.L.W. lies 350 meters 60 from OBES and is arked by thick kelp. \checkmark

A rock which bares at low tides lies 270Meters 345° from O BES. This rock is surrounded by thick kelp.

A rock with 1 fathom over it at M.L.L.W. lies 365 meters 3570 from O BES and / is marked by thick kelp.

A rock with 2/6 fathom over it at M.L.L.W. lies 85 meters 260° from O SI, another rock with 1-2/6 fathoms over it lies about 25 meters Westward of it. The whole area is marked by thick kelp.

A rock awash at high tides lies 90 meters SOUTHWEST from O SI.

A rock with 5/6 fathom over it at M.L.L.W. lies 70 meters 85° from O KIS. It is marked by thick kelp.

A rock which bares at low tides lies about 90 meters 800 from OLAB.

A rock with 2-2/6 fathoms over it at M.L.L.W. lies 220 meters 1080 from O LAN. This Area is marked by thick kelp.

All obstructions in this body of water are marked by thick kelp and therfore kelp should be avoided by strangers.

Position # 8e. markes the extreme end of foul area North of \triangle OUT. sounding 1-1/6 fathoms . \checkmark

Position # 7e. marked the extreme end of foul area South of \triangle OUT. soundings $1\frac{1}{2}$ fathoms.

The area included between these soundings and the island is marked by thick kelp and #### breaks at a moderate SW swell. \(\)

These positions were taken at minus tides.

Position # 6e. markes the extreme end of foul area East of a rock which bares deposition at tide. I see and is marked by thick kelp. Sounding 1 fathom. Position at tide. I position # 5e. markes the extreme end of foul area North of A BANANA is covered with thick kelp. Sounding 5/6 fathoms.

A rock which bares at low water lies 410 meters 2719 from O TEL. This rock covers an area of about 200 squaremeters and is marked by thick kelp. There is deep navigable water Eastward of this rock. Breakers mark this rock at high tides with Southerly winds and moderate swell.

A rock with $5\frac{1}{2}$ fathoms over it at M.L.L.W. lies 1000 meters 3030 from \triangle FOX. Wiredrag party found adepth of 2 fathoms over the rock.

Positions # 1-2-3-4-5-6-7-8e and # 1-2eK show the locations of extreme end s $\sqrt{}$ of rocks which bare at minus tides. The whole area is foul and closed to any kind of navigation. All rocks in this locality are covered at extreme high tides.

A rock with 4/6 fathom over it at M.L.L.W. lies 230 meters 60 from A FOX.

A rock with 2/6 fathom over it at M.L.L.W. lies 320 meters 3° from \triangle FOX. These rocks are marked by thick kelp. Bottom is visible between both rocks.

Position # 11c shows the extreme Northerly end of a small islet. (See topographic sheet)

A rock with 4/6 fathom over it lies about 200 meters 96° from \triangle <u>FLAT</u> \vee A group of rock with a least depth of $\frac{1}{2}$ fathom over it at M.L.L.W. lies about 420 meters 180° from \triangle <u>FLAT</u>. These rocks are marked by thick kelp.

A rock with 3 fathoms over it at M.L.L.W. lies about 1080 meters 530 from \triangle ADD This rock is marked by a few sheaves of thin kelp. Numerous soundings were taken, only least depth depth recorded. \checkmark

A rock with 1 fthom over it at M.L.L.W. lies about midchannel at the entrance of a small bay between $5 \, \underline{\text{Ma}}$ and $\underline{\text{OPIT}}$, 140 meters 95° from $\underline{\text{O}} \, \underline{\text{NA}}$. Numerous soundings were taken only least depth recorded. This rock is marked by thick kelp.

* Positions # 1 & 2 r. mark the North and South end of rocks which bare at low tides. They are not maked by any kelp. $\sqrt{}$

A rock which bares at minus tides lies about 350 meters 3170 from A TWIN. This rock markes the extreme end of a foul area extenting from the island. Pos. # 4r.

Position 5r. shows the extreme end of a ledge extenting South from \triangle BOWL and bares at minus tides.

Position # 6r. shows the extreme SOUTHEAST and of a ledge which bares at minus tides. Ledge is sketched on smoothsheet as taken from boatsheet. $\sqrt{}$

Position # 7r. is the Westerly end of a gravel spit extenting from O $\underline{\text{TIN}}$ which bares at minus tides. The spit is sketched on smooth sheet as taken from boatsheet. \checkmark

Attention is called to a 72 fathom sounding between positions # 104e and 105e. (blue) This work was done by the launch Helianthus. A few additional soundings were taken to verify this doubtful sounding but no less than 15 fathoms was found. V

The big descripency in these soundings was discovered too late to make \checkmark further investigations, it came to my attention while plotting the smooth sheet. \checkmark

The passage between O BE and O SAME is foul and marked by kelp. Numerous soundings were taken in this locality. Least depth obtained 1-4/6 fathoms about midchannel. The Area SSE off O SAME is foul and marked by rocks which bare 2 feet at low water. \checkmark

A rocky patch with 2 fathoms over it at M.L.L.W. lies about 110 meters NE from \triangle ROW and is marked by thick kelp. \checkmark

Position # lq. markes the extreme end of a reef which extents from a small island in a SW ly direction. This reef bares at minus ########## tides and is marked by thick kelp. 300 meters 2050 from O USE.

Position # 2q & 3q mark the Southerly and Northerly ends of a group of rocks which bare at minus tides the water between these two position is foul. There was no sign of any kelp when the rocks were located however a few thin streamer of kelp was noticed at the close of the season.

These rocks lie about 1010 meters 1120 from A STEP.

4 rocky area with a least depth of 5-1/6 fathoms over it at M.L.W. lies about 1200 meters 66° from \triangle STEP and is marked by thin kelp.

A rock with a depth of 2-4/6 fathoms over it at M.K.L.W. lies 875 meters 2140 from A TEB. Numerous soundings were taken in this locality, only least depth recorded. This fould area was marked by very thin kelp during late summer.

A rock with 2/6 fathom over it at M.L.L.W. lies 530 meters 2230 from \triangle <u>TEB</u> This rocknis marked by a few streamer of thin kelp \cdot

A rock which bares 2 feet at M.L L.W. lies 120 meters 1200 from O SUM and

is surrounded by kelp. \checkmark A rocky patch with a least depth found of 4- $\frac{1}{2}$ fathoms at M.L.L.W. lies about 300 meters 100° from \triangle BEN . Numerous soundings were taken only least depths

Position # 5q & 6 q mark the the Northern and Southern extreme ends of a rock which bare at minus tides. Positions were taken at low tide. This rock lies 830 meters 173° from A RUN. 830 meters located as force 660 m proton for the state of the state of

Position #4 q. markes the Northern end of a rock which bares at property with minus tides. It lies about 470 meters 900 from SUE. Position taken at low tide.

A rocky area with a depth of $4\frac{1}{2}$ fathoms over it at M.L.L.W. lies about 250 westers 3240 from O KIT. Numerous soundings were taken only least depths recorded. The Passage between OLIN and a small island North of it is foul. One line of soundings was run through this passage, least sounding obstained was 2 fathoms. However this ######### Passage is foul and should be avoided. It was examined on several occasions at low tides and found to be covered with rocks. Thick kelp markes this area.

A rock with lifathom over it at M.L.L.W. lies 300 meters 160° from A END vand is marked by thin kelp. Numerous soundings were taken, only least depth recorded.

The Area between \triangle ROCK and \bigcirc BOS is foul and was examined at low tides and is covered with kelp.

A Rock which bares 2 feet at minus tides lies 180 meters 3110 from A POINT.

DANGERS & OBSTRUCTIONS shown on Subsheet . scale 1/10000.

A rock which bares $\frac{1}{2}$ foot at M.L.L.W. and was used as O EX lies 1570 meters 319° from A ENT. This rock covers an area of about 30 sq. meters, is covered with oysters. No kelp was to be seen at the time this rock was located, a few streamer of thin kelp marked this rock at the close of the season.

A group of rocks which bare and awash at minus tides lie between A ROCK and a small islet SSE of this signal. The rocks were located at minus tides by hydrographic party and shown by positions # 15-16 & 17 b. Later on these rocks were located by topography. No kelp was visible at the beginning of the season a few streamers of thin kelp were noticed during late summer.

The area between the Southern most rock which bares at minus tides and the small islet is apparently clear and was used by the Helianthus and Scandinavia an numerous occasions. Soundings in this passage shown on 1/20000 sheet.

Positions # 148a and 14 b. show the extreme Northern end of a group of rocks which are connected with a small islet at low tides. The channel North of these positions is apparently clear and was used on numerous occasions by the launches. No soundings are shown in this vicinity.

ositions # 101-102-115-116 and 3b mark the extreme ends of a foul area which extents from a small islet on which \(\Delta \) ENT is located. Position 3b was determined at minus tides.

Position 10b markes the extreme Northerly end of a ledge extenting from O MID.

Approved;

F.B.T. Siems Chief of Party

Additional Notes: The 3-5/6 fms. rock located by independent position 82-y, without check angles, plots within and near edge of a 33 ft. drag strip. Considerable current occurs in this locality, and it is believed that in taking the angles by one observer some time elapsed between the two angles taken while drifting, causing displacement of position to the westward.

No depth curves were shown because it was thought that it would interfere with the legibility of the soundings in pencil.

Kelp and low-water limits were shown in pencil as indicated on the boat sheets and in the records.

Rock shown 400 meters 2050 from 9 USE on Topographic Sheet is very probably in error. At minus tides the hydrographic party located the rock with check angles 300 meters 2050 from USE. It appears that the rock was located by the topographic party by an erroneous rod reading distance scaling with plane table at 9 USE.

COAST PILOT NOTES

TEREMEDE BAY has its entrance on the Eastern side of Chatham Strait between Pt. Ellis and Blake Point and is nearly eight miles wide. From here it extends easterly for about seven miles, branching, however, into four main arms of very irregular shape; one extending in a northerly direction and three in a southerly direction. The western most of the three southern arms forms part of Explorer Basin. Humerous islands and reefs are found scattered in various localities of the Bay. Fox farms are located on some of the islands, but there is no other commercial development in the Bay.

The high regions North and South of the entrance to Tebenkof Bay merge into the low lying hills which cover the entrance islands and the long projecting points of land in Tebenkof Bay, further inland the numerous islands and East shore of Tebenkof Bay are also low; this extensive low area is a distinctive feature. Some distance offshore in Chatham Strait the Windfall and Troller Islands (entrance islands) appear generally as a continuous stretch of shore line; however, the flat topped hill on the Horthern Windfall Island stands out quite prominently in that it is the highest in the locality and is in the foreground. From the locality of Pt. Ellis the northern most wooded island of the Troller group stands out alone, and the Troller and Windfall Islands also appear separated.

Doig Rock Islet is the bare rock of gray appearance of about 18 feet elevation, situated in the middle of the entrance of Tebenkof Bay, about one mile WMW (mag.) from Troller Point. It forms an excellent landmark for entering the Bay. A similar rocky islet lies 1/4 mile northward of Troller Point. Entrance to the Bay may be made between these rocky islets, but its approach from the southeastward is endangered by several pinnacle rocks, namely: a 2 fms. pinnacle rock 0.9 mile SW 5/4 W (mag.) 262° (Trus) from Doig Rock Islet, a 1½ fms. pinnacle rock 1.0 mile WSW 5/4W (mag.) 284° (Trus) from the North end of the Northern Windfall Island and a 3-5/6 fms. pinnacle rock 1.0 mile S (mag.) 209° (Trus) from Doig Rock Islet. To make this approach safely, bring Gap Point in range with Troller Point on a course of 92° (Trus) and steer that course until abeam of Doig Rock Islet, then shape course so as to pass midway between the two rocky islets about 45° (Trus). Gap Point is identified by a distinct gap in the tree line in back of the point visible from the direction of entering as above. This approach and entrance have been wire dragged.

The above named pinnacle rocks also endanger the entrance northward of Doig Rock Islet when approaching from the southward; otherwise, that entrance entails no difficulties.

Entrance into Tebenkof Bay for small vessels may also be made via the passage between Blake Peint and Windfall Island and via Helianthus Narrows.

Helianthus Narrows connecting Explorer Basin with the inner part of Tebenkof Bay is obstructed by a 2 fms. rock near midchannel at its southeast entrance. Strong currents occur in the Narrows daring spring tides.

The passage between Blake Point and the Windfall Islands is endangered by a 1-2/6 fms. shoal marked by thick kelp 0.5 mile NW (mag.) from Blake Point, and a rock awash at low water o.1 mile southward of Southern Windfall Island. The channel lies between these two obstructions.

FISHERMAN'S ANCHORAGE is the name given to the protected waters and passages among the Troller Islands. During the fishing season many fishing craft anchor here overnight, as it is close to the fishing grounds off Deig Rock Islet and off Windfall Islands. Some suitable places for anchoring among the Troller Islands are available, but for the most part the area is covered by low water rocks and strangers frequently go aground. Fishing craft anchor near the shore to avoid the moderately strong currents in these passages.

MARY FRANCES ANCHORAGE is an ideal harbor for moderate size vessels, having a depth of 7 fms. mud bettom. It is limited as to swinging room by shoal area extending from the rocky ledge point at the head of the anchorage, and the shoal water along the East shore. It is, therefore, necessary to favor the West shore and entrance end of the anchorage when anchoring.

OYSTER ROCkbares only at minus tides and has no kelp; care in necessary to avoid it in approaching Mary Frances Anchorage.

PILEDRIVER COVE is a small cove on the North shore of Tebenkof Bay. It has numerous dolphins put there as moorings for piledrivers. The cove is open to the West and Southwest.

HAPPY COVE is also on the North shore, but is farther in the Bay. It is smaller than Piledriver Cove, but well sheltered on all sides. Its entrance is marked by two small islands; one bare and one wooded. The upper part of the cove, separated from the lower part by a narrow channel, has a sand bottom and beach throughout.

It is much used by fishermen for beaching their vessels. There are several dolphins at both the upper part and near the entrance. (The hydrographic party failed to cover this area).

NORTH ARM affords good anchorage at various places, its Western entrance channel having been wire dragged.

SOUTHEAST AHM has its approach endangered by numerous reefs and shoels.

SOUTH ARM (middle of the three Southern arms) affords excellent anchorage at its head in 9 to 10 fms. mud bettom. Its approach is clear, but the anchorage is somewhat distant from the entrance of the Bay.

The Southeast part of EXPLORER RASIN, which is considered one of the arms of the Bay, affords fair anchorage for vessels during Southeast weather. Anchorage should be made in about 18 fms. 300 yds. eastward of Bass Island, which Island is wooded and easily identified in approaching from the northwestward. Shoal water and rocks along points opposite the designated anchorage restrict the swinging room. Very good anchorage for small vessels may be had in the cove at the head of the arm situated 5/4 mile east-southeastward of Bass Island, in 4 to 6 fms. mud bottom. Fishermen sometimes use the South shore of this cove for beaching their vessels.

GEDNEY HARBOR has its entrance on the eastern side of Chatham Strait 2 miles NME of Point Cosmos and 32 miles southward of Blake Point.

The Harbor is a horse-shoe shaped cove averaging 400 yds. in width which surrounds a wooded island over one mile long. The passage northeast of the island is blocked at its northwest end by rocks and reefs.

The entrance to the harbor is on either side of a ledge 400 yds. long situated between the island and a prominent point on the main shore. The northwest and southeast ends of the ledge are bare heads which show but a few feet above the highest tides. The midchannels on both sides of the ledge have been examined by the wire drag and found to be clear.

About 1/4 mile ESE of the ledge the passage southwest of the island becomes cheked to a width of about 200 yds., by a projecting sharp point from the main shore. Kelp and some shoal water extends about 50 yds. off the point, but the drag revealed no dangers further

out then 50 yds.

A ledge having kelp extends a short distance from the southeast end of the island with a rock just showing at high water about 25 yds. from the island. Anchorage may be made in midchannel with the southeast end of the island bearing about North in 11 to 12 fms. muddy bottom; also in the slight expension off the northeast side of the island in 4 to 5 fms. muddy bottom. The harbor is sheltered from all winds, but its size makes it suitable only for small or moderate size vessels.

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

STATISTIC FOR HYDROGRAPHIC SHEET TEBENKOF BAY

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Aug	o 7th.	at	h 6d	# 6	62	163	13. 8	Tender
11	9th	b*	Ħ	# 7	113	299	19.2	1011001
11	10th	C *	n	# 7	142	418	23.5	11
n	11th	d'	11	# 8	97	323	13.9	11
11	18th	e f	11	# 8	43	225	8.2	n
11	19th	f °	**	# 8	100	361	16.3	n
11	20 th	gt	**	# 8	104	382	16.9	11
***	21st	'n'	**	# 9	68	333	14.0	77
19	23rd	j•	Ħ	# 9	111	326	14.9	**
11	24th	K8	Ħ	# 9	104	402	14.3	**
17	25th	1 *	Ħ	#10	105	454	18.3	11
**	27th	m*	11	#10	110	479	16.5	11
Sept		n	11	#10	57	272	8.5	11
H	2nd	p'	n _o	#12	29	153	3. 5	11
17	3rd	q'	n o	#11	52	294	7.5	17
**	4th	rf	n	#11	113	541	16.5	. 11
11	7th	g †	71	#11	65	171	14.5	"
11	8th	t	Ħ	#12	110	391	16.5	n
11	llth	u*	11	#12	56	205	11.0	17
**	13th	A 4	**	#12	74			n
	10.011	•		ATE	3219	211	8.6	44
					2213	10599	549.7	

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in 15 volumes of sounding records for

HYDROGRAPHIC SHEET 4623 A

S. E. ALASKA Locality:

Chief of Party: F. B. T. Siems Plane of reference is MLLW 12.6 ft. on tide staff at Mary Frances Anchorage, Tebenkof Bay Gedney Harbor do 7.9 ft.

Condition of records satisfactory except as checked below:

- 1. Locality and sublocality of survey omitted.
- 2. Month and day of month omitted.
- Time meridian not given at beginning of day's work.
- Time (whether A.M. or P.M.) not given at beginning of day's work.
- Soundings (whether in feet or fathoms) not clearly shown in record.
- 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.
- Remarks. 13.

Chief, Division of Fides and Currents.

DEPARTMENT OF COMMERCE

AND REFER TO NO. 3-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

January 28, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4623a

Tebenkof Bay and Gedney Harbor, Southeast Alaska

Surveyed in 1926

Instructions dated March 9, 1926

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

Surveyed by W. Weidlich, R. D. Horn, and A. F. Jankowski.

Protracted and plotted by W. Weidlich.

Verified and inked by J. D. Torrey.

- 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 plan and extent of development satisfy the specific instructions.
- 4. No cross lines of soundings are required in the specific instructions; the occasional ones run show the soundings coinciding closely.
- 5. The information is sufficient to permit the complete drawing of depth curves except in the foul areas.
- 6. The protracting by the field party was found practically accurate.
- 7. The usual field plotting was done by the field party and was found satisfactory.
- 8. The junction with sheet 4626 is satisfactory.
- 9. Wire drag sheet No. 4623^b covering parts of this area is not yet completed. This may develop additional shoal soundings.

important areas. See review for H. 4623 b for additional work.

The character and scope of the survey are excellent. A few

orrors were found in both protracting and plotting but considering the character of the bottom and the numerous foul areas, this work can be considered excellent.

12. Reviewed by J. D. Torrey, January, 1928.

Sheet inspected by Q. L. Shaland,

Approved:

Chief, Section of Field Records (Charts)

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

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. 4623 a

State Alaska S.E. Alaska

General locality SE Alaska

Locality Tebenkof Bay including Gedney Harbor

Chief of party F.B.T. Siems

Surveyed by W.Weidlich, R.D. Horn & A.F. Jankowski

Date of survey 1926 Aug. 2 ~ Sept. 13, 1926

Scale 1/20000 , subsheat 1/10000

Soundings in Fathoms

Plane of reference M.L.L.W.

Protracted by W.Weidlich . Soundings in pencil by W.Weidlich.

Inked by ... Verified by

Records accompanying sheet (check those forwarded):

Des. report, 1. Tide books, 13 Marigrams, Boat sheets,

Remarks: * were dragnessorts accompany W. D. Sheet

tounding books, J

... Wire-drag books, Photographs.

maniquem not found apr. 16, 1927

	1
Form 504	1
DEPARTMENT OF COMMERCE	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	VEY /
L & A	1 /
APR 9 1	2
	ř' /
State:S. B. ALASKA Acc. No.	
DESCRIPTIVE REPORT.	
Field letter "M"	
ydrographic Sheet No. 4623h	
Wire Drag	
LOCALITY:	
Tebenkof Bay including Gedney	
)	
Harbor, Chatham Strait.	
**	
,	
<i>19</i> £ 6	
CHIEF OF PARTY:	
F.B.T. Siems	1

DESCRIPTIVE REPORT

to accompany

Wire Drag Sheet (Field Letter M)

TEBENKOF BAY

Extent: The area dragged includes all approaches to Tebenkof Bay excepting Helianthus Passage, and passages leading to Mary Frances Anchorage, North Arm, Gedney Harbor and Bass Island Anchorage, Explorer Basin. It joins the offshore drag work shown on 1/40,000 scale sheet (field letter M).

An important fishing area around the entrance to Tebenkof Bay is included in the area dragged. Fishing gear is subject to heavy losses if the depths and location of shoals, including the deeper shoals, are not known. In order to meet this requirement, the drag has been set deeper than would ordinarily be required to locate and determine depths of shoals in this area.

Methods: The usual wire drag equipment and practice were employed. Positions of grounds were sometimes obtained by directions from the two launches and by noting the part of the drag where aground at the apex of the V, and applying distances. For instance, a ground at #4 plus 200 in a drag of 300 ft. sections would indicate that the drag was aground between buoys 4 and 5. or 200 feet from 4 and 100 feet from 5. The distance of a ground from an adjacent buoy can be very accurately estimated on either towing launch after the V of grounding has formed. The buoys near the one launch will generally line up in range to the ground. the remainder of the buoys to the other launch will appear separated with considerable distance between them, a comparison between the apparent distance from the ground to the adjacent buoy and the apparent distance of the first section length will determine the former distance.

RESULTS OF THE WIRE DRAG SURVEY: The passages that were dragged were generally found to be clear. A number of shoals were found by the drag southwestward of Doig Rock Islet in addition to the dangerous pinnacle rocks found by the hydrographic party; these are of importance to fishermen using seines and trolling gear. The areas a short distance west and NW of the Northern Windfall Island have been dragged and are comparatively clear and may be used as an approach to Tebenkof Bay from the southward in addition to those mentioned in Coast Pilot notes.

& Olsiams Chiefoffarty

TEBENKOF BAY WIRE DRAG

List of Grounds.

- L. Pos. 14A Drag grounded at an effective depth of 67 feet but was pulled clear. Covered with a depth of 58 feet on Q day. (see 1/40,000 sheet.) (H4(262) a sounding of 65ff obtained. Pos. 38A-grounded on some shall with depth of 64ff. Sounding platted 64ff.
- 2. Pos. 10B Drag grounded at a depth of 83 feet. No sdgs obtained, depth of 83 feet plotted. Not dragged over as ground was near shore.
- 3. Pos. 30B Grounded at a depth of 57 feet between buoys 11 & 12 and at a depth of 86 feet between buoys 3 & 4. An attempt to cover the first shoal with 51 feet drag on N day was unsuccessful. The drag depth of 51 feet was plotted. Between positions 11 & 12 of N day F buoy grounded momentarely at a depth of 49 feet on the edge of this shoal. 49 feet is plotted. No further attempt made to cover as shoal was near shore. No sdgs. The ground between buoys 3 & 4 at position 30B was covered on N.day with a depth of 49 feet and possibly 52 feet.
- 4. Pos. 30 Drag grounded at a depth of 69 feet while setting out drag. No sdgs. Drag depth of 69 feet plotted. Covered on F day with depth of 54 feet.
- 5. Pos. 8C Drag grounded at a depth of 86 feet whole setting out. No sdgs. Covered with a depth of 52 feet on F day.
- 6. Pos. 130 Drag grounded at a depth of 71 feet. No sdgs. 71 feet plotted. Dragged over with 70 feet same day.
- Pos. 210 Drag grounded with a depth of 70 feet. Least sounding obtained 6.5 feet, is plotted. Coveredwith a depth of 50 feet on F day.

 57 fr at poo 2c M.D. Sounding need
- 8. Pos. 7D Grounded at a depth of 61 feet. On F day a 48 foot drag grounded at the same spot. No soundings ontained 48 feet plotted. Covered on P day with a depth of 47 feet.
- 9. Pos. 22E Drag grounded at a depth of 83 feet. No soundings obtained. 83 Leftet plotted. Covered on D. day with 67 feet.
- 10. Pos. 27E Grounded on shoal above with same depth drag while reversing. Drag cleared shortly afterward without causing split.
- 11. Pos. 40E Drounded at drag depth of 84 feet on area previously covered with 69 feet. Sounding of 85 feet obtained . 84 feet plotted.
- 12. Pos. 4 F Drag grounded with a depth of 56 feet. No soundings obtained. 56_{2} feet plotted. Covered on L day with a depth of 43 feet.
- 13. Pos. 25F Grounded at a depth of 48 feet. Covered on P day with a depth of 47 feet. Same ground as described in # 8.
- 14. Pos. 35F F touched momentarely between position 35 & 36. Covered on M day with a depth of 44 feet.

- 15. Pos. 8G Drag grounded at a depth of 56 feet. later covered by 47 feet on LT day No sdgs? 56 feet plotted.
- 16. Pos. 1-8H Buoys N, 1& 2 were aground on the same shoal at various times between these positions. No soundings obtained. Drag depth of 42 feet plotted.
- 17. Pos. 13H Drag grounded at a depth of 42 feet. Covered on J day with a depth of 37 feet and on H day with a depth of 36 feet. No. soundings. 42 feet plotted.
- 18. Pos. 27H Grounded at two places. The first at buoy # 4 with a effective depth of 34 feet which was later covered with 30 feet the same day. Least Sdg. 34 feet. 34 feet plotted/ at intersection of cuts. (no tender). The second at buoy # 12 with an effective depth of 37 feet. This ground was near shore. Not covered. No sdgs. 37 feet plotted.
- 19. Pos. 37H Drag grounded at several places when it was wrapped around BASS Island. Least soundings obtained were 31 & 32 feet. Drag depths of 29 feet at buoy #2, 29 feet at buoy # 5, 32 feet at bouy # 6 and 30 feet near buoy # 8 were plotted.
- 20. Pos. 6J Momentarely aground at a depth of 41 feet. This had previously been covered with 37 feet on H day.
- 21. Pos.47J Gracunded at an effective depth of 4l feet. No shoal sdgs. obtained. On K day a 40 foot drag grounded near the same place coming from the opposite direction. A least sounding of 39 feet was obtained them. While taking up the drag it grounded between 5 & 6. The drag depth of 4l feet was plotted. These grounds were covered by a 3% foot drag on P day.
- 22. Pose 11K Grounded with an effective depth of 41 feet. Least sdg. obtained 36 feet. Not covered later as the ground was near the shore.
- 23. Pos. 14K Drag grounded momentarily at # 12 at a depth of 41 feet. No sdgs.
 41 feet plotted. Covered on M. day with 39 feet. Note-hydrographic survey shows
 28 fathoms & no indication of shoal. Very probably no shoal here.

 ### flotted (advise of Capt Colbert) Res
- 24. Pos. 21K Drag grounded with an effective depth of 40 feet between buoys # 11 & 12 and near buoy # 3. Isst sounding obtained 39 feet. These grounds covered on P day with an effective depth of 33 feet.
- 25. Pos. 21L N aground near shore with an effective depth of 39 feet. A sdg. of 31 feet was obtained and plotted. G.L. reversed and cleared. Not covered later as ground was near shore.
- 26. Pos. 29L Drag was being wrapped around shoal and grounded at various places. Various sdgs and buoy positions taken and plotted.
- 27. Pos. 8M Drag grounded with an effective depth of 41 feet. Sdg. of 38 feet obtained & plotted. G.L. reversed and cleared. Not covered later.

- 28. Pos. 18M... Drag grounded between buoys 10 & 11. No sdgs. Drag depth of 40 feet plotted. A 34 foot drag on Q day grounded near the same place. Covered on P day with 32 feet but with a narrow overlap, about 25 meters.
- 29. Pos. 19 M. Buoy # 8 grounded with an effective depth of 40 feet. No sdg \swarrow 40 feet plotted. Covered on P.day with 32 feet.
- 30. Pos. 20 M. Drag grounded between buoys 2 & 3 with an effective depth of 40 feet. No sdgs. 40 feet plotted. Covered on P day with 20 feet.
- 31. Pos. 33 M. Drag was brought up against OUT rock an grounded between buoys # 6 & 7. No soundings. Drag depth of 40 feet plotted.
- 32. Pos. 55 M. Drag grounded near huoy # 10 . No soundings as ground was om known shoal. Drag depth of 43 feet plotted.
- 33. Pos. 56 M. Grounded between buoys # 5 & 6 on same shoal as above. Np soundings. Drag depth of 43 feet plotted.
- 34. Pos. 62 M. Grounded at buoy # 2. on above shoal. Sdg. 38 feet obtained and plotted. This shoal defined by grounds 27-32-33-34 was not covered as the least water is 2 fathems.
- 35. Pos. 5 N. The drag at an effective depth of 5% feet grounded at the same shoal as the 57 foot drag of B.day. Described under ground #3. Sounding of 50 feet obtained near buoy #13.

 36. Pos. 11N. F buoy grounded momentarily with effective depth of 49 feet. 49 feet plotted. Not covered later
- 37. Pos. 37 P. Line ended on position # 37 but in reversing buoy # 13 grounded. The drag depth of 68 feet was plotted. This area had previously been covered to a depth of 41 feet.
- 38. Pos. 5 Q. Drag grounded with an effective depth of 34 feet. This is on the edge of a 33 foot drag and may have been covered by it. The overlap is about u 25 meters. 34 feet is plotted. No soundings taken.
- 39. 42 Pos. 29 R. Drag grounded when brought up against the shore. Drag depth of 41 feet plotted. No soundings taken.
- 40. Pos. 54 R. Drag grounded on various places when brought up against Oys- ter Rock. No soundings taken. Drag of 40 feet plotted.
- 41. Pos. 73 R. Drag grounded when brought up against known shoal. Drag depth of 39 feet plotted. Not dragged over.
- 42. Pos. 76 R. F grounded on edge of shoal near Oyster Rock. End launch reversed to clear. Drag depth of 39 feet plotted.
- 43. Pos. 81 R. Drag grounded with an effective depth of 39 feet. NO soundings. 39 feet plotted. Not covered later.

- 44. POS. 25. Buoy # 1 grounded when setting out drag. Guide launch reversed and cleared. No soundings. Drag depth of 40 feet plotted. Not covered later as ground was near shore.
- 45. Pos.10 S. Buoy F grounded and pulled clear. Drag depth of 40 feet plotted. Ground was near shore, not covered later. A 31 foot drag on V day grounded near the same place.
- 46. Pos.12 S. Drag grounded with an effective depth of 40 feet. No soundings. 40 feet plotted. Covered on V day with 31 feet.
- 47. Pos.19 S. Drag grounded near shore. Drag depth of 37 feet plotted. Launch reversed and cleared.
- 48. Pos. 23S. Buoy N grounded momentarily. Drag depth of 38 feet plotted. Not covered as ground was near shore.
- 49. Pos. 258. Drag grounded when brought up against the shore. Drag depthsof 38 feet plotted. Buoy positions taken but no soundings.
- 50. Pos. 22T. Drag grounded on several places when wrapped around the bare islands at the entrance to Gedney Harbor. Positions of the buoys were taken and the drag depths of 46 feet plotted at the grounds. The ground at buoy # 11 was covered with 37 feet on V day.
- 51. Pos. 45T. Drag grounded near shore with am effective depth of 38 feet. Soundings of 35 feet obtained and plotted.
- 52. Pos. 5 U. Drag grounded with a depth of 40 feet. No soundings. 40 feet plot- ted. Covered later the same day with 31 feet.
- 53. Pos.12 U. # 6 buoy grounded momentarily on shoal of ground 52. Drag depth of 33 feet plotted. Covered by 26 feet on V day.
- E4. Pos.17 U. Drag grounded near buoy F. Drag depth 31 feet. Sounding of 29 feet obtained and lotted. A 25 foot drag on V day touched momentarily on this spot. 25 feet plotted as least water.
- 55. Pos. 52V. Drag grounded at various places when wrapped around the entrame islands of Gedney Harbor. Buoy positions taken and drag depth of 37 feet plotted at the grounds.
- 56. Pos. 4 V. Buoy F grounded near shore. Drag depth of 38 feet plotted. Launch ω reversed and cleared.
- 57. Pos. 8 V. Buoy F grounded again. Same place above. Same depth. Drag pulled clear.
- 58. Pos. 11V. Drag grounded at buoys # 5 & 7. No soundings. Drag depth of 38 feet plotted. Covered later the same day with 35 feet? Sounding of 36 feet obtained here.
- 59. Pos. 18V. Drag grounded at buoys # 5.6 & 9. No soundings. Drag depth of _____ 35 feet plotted. Covered the same day by 31 feet.

- 60. Pos. 26 V. Drag grounded when brought up against <u>PON</u> point. Drag depth of 31 feet plotted. F.grounded near shore . 31 feet plotted.
- 61. Pos. 32 V. Drag grounded momentarily at buoy # 8. Drag depth of 25 feet plotted. The least sounding (obtained U day) was 29 feet. 25 feet plotted. Not covered later.
- 62. Pos. 6 W. Buoy F grounded. Launch reversed and cleared. Drag depth of 29 feet plotted.
- 63. Pos. 8 W. Buoy # 4 aground. Drag depth with 29 feet plotted . No soundings. Covered later with 27 feet.
- 64. Pos.13 W. Drag grounded with an effective depth of 27 feet. No soundings. 27 feet plotted. Not covered later.
- 65. Pos. 25 W. Buoy F grounded with an effective depth of 28 feet. 28 feet plotted. Later covered by a 27 foot drag same day.
- 66. Pos. 28 W. Buoy N, effective depth 28 feet grounded and remained aground while End launch swung its end of the drag around. Sounding of 30 feet obtained and plotted. A 27 foot drag grounded on the same place. 27 feet plotted at ground. Not covered.
- 67. Pos. 29 W. End launch swung drag around N as a pivot until its end grounded. At Buoy F the drag depth of 28 feet is plotted. This ground covered later by 27 feet. Between Buoys # 3 & 4 27 feet is plotted, as a **** 27 foot drag grounded at the same place. Not covered as it was the beginning of known shoal water.
- 68. Pos. 31 W. In reversing to clear Buoy F grounded again. Drag depth of 28 feet plotted. Not covered.
- 69. Pos. 33 W. Line begins with N still aground. 27 feet plotted. End launch swings its end around again and grounds at same place. 27 feet plotted. Launches reverse, pull buoy clear and begin new line.
- 70. Pos. 39 W. Drag grounds with an effective depth of 27 feet. 27 feet plot ted. Buoy positions taken of drag & plotted. Ground not covered.
- 71. Pos. 51 X. Buoy N grounded near shore & subsequently pu led loose. Drag \sim depth of 43 feet plotted.
- 72. Pos. 55 X. Buoy # 1 grounded momentarily on spot that N had grounded on. Same drag depth of 43 feet.
- 73. Pos. 56 X. Buoy N grounded and pulled clear. Drag depth of 43 feet plotted.
- 74. Pos. 57 X. Bouy #1 grounded on the spot that N had just cleared.

75. Pos. 58 X. N grounded. Drag depth of 44 feet plotted. The end launch swung its end of the drag around and grounded at buoys # 8,9 & F. Positions of the buoys were taken and plotted. Drag depths of 44 feet was plotted at the grounds.

76. Pos. 67 X. Buoy F grounded but was pulled clear. Drag depth of 27 feet plotted.

77. Pos. 69 X. Buoy N grounded. **Brag** depth of 27 feet plotted. Not covered, ground near shore.

78. Pos. 72 X. Buoy N grounded and dragged over bottom to pos. # 73. Drag depth of 27 feet plotted in both cases. Least depth obtained by hydrographic party was 12 feet.

Lists of Grounds prepared by G. A. Nelson Aid, C. & G. S.

Examined and

Approved:

F. B. T. Siems Chief of Party

TABLE OF STATISTICS. TEBENKOF BAY WIRE DRAG

POSITIONS									
Date	9	Day	Guide Launch	End Launch	Tender	Miles	Soundings.		
1	ק ר		17			4			
Aug		A			2	6	3 .		
**	19	В	33						
11	20	C	24		4	4	4		
11	21	D	8			1			
11	23	E	48			. 8	1		
11	24	F	42			7.5			
18	26	G	24		4	2.0			
11	27	H	51		2	2.8	3		
Sept		J	48		1	5	1		
11	2	K	26		2	2.2	3		
**	3	L	38		14	4.0	14		
11		M	6 3			3.0	3 ·		
11	4			43		3.0			
	7	N	30				7		
11	8	P	48	69		7.0	1		
11	9	Q	• 15	16	2	1.4	2		
11	14	\mathbf{R}	82	80		6.0			
. #	15	S	59	60		2.5	•		
11	28	${f T}$	46	62	11	5.5	. 1		
11	29	U	52	96	13	5.6	6		
11	30	V	34	49	3	2.5			
Out		W	41	54	7	4.5	1 .		
11	2	X	73	77	5	5.0			

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 24, 1928.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4623b

Tebenkof Bay, Alaska

Surveyed in 1926

Instructions dated March 9, 1926 (EXPLORER)

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

Surveyed by F. B. T. S., R. D. Horne.

Protracted and subdivisions by G. A. Nelson.

Soundings and groundings verified and inked by R. L. Johnston.

Drag work verified and area and depth sheet prepared by A.L. Shalowitz

- 1. The records conform to the requirements of the instructions for wire drag work.
- 2. The methods and character of the survey conform to the requirements of the General Instructions.
- 3. The depth of dragging is generally sufficient for surface navigation and with the exception of the area in Mary Frances Anchorage and a small area at the head of the indentation to the east of Blake Pt., will fall within the rule for indicating wire dragged limits on the charts.
- 4. If the intention was to drag only the main channels into Tebenkof Bay then the extent of the drag work is adequate. But if a comprehensive wire drag survey of the bay is contemplated then many areas still remain to be dragged, particularly the areas close inshore where the bottom appears rather irregular. By superimposing the A. & D. sheet on the hydrographic sheet, these areas can be seen at a glance and no specific mention need be made of them here. Only the more important areas will be considered below.
- 5. A clearance depth was obtained over all important shoals discovered sufficient for surface navigation except the following:

- a. In the vicinity of lat. 56° 32', long. 134° 15' a considerable shoal areas exists. A 50 foot drag grounded here and a 50 and 52 foot sounding was obtained. The shoal was not subsequently cleared.
- b. In the vicinity of lat. 56° 30 1/4', long. 134° 05 1/2' a 44 foot drag grounded in several places. No sounding was obtained nor was the area subsequently dragged. In order to insure as wide a channel as possible for entering this arm of the bay, a clearance depth should be obtained over this shoal.
- c. In lat. 56° 25', long. 134° 15 1/2' a 25 foot drag bumped momentarily. Previously a 29 foot sounding was obtained here. A 25 foot sounding will be charted here and an exaggerated split shown as it is uncertain what the clearance depth is. The shoal should be redragged.
- d. In Mary Francis Anchorage, in the vicinity of lat. 56° 25' long. 134° 08 1/4' a 27 foot drag grounded. No soundings were obtained. As this restricts the entrance to the head of the anchorage considerably, it would be well to determine the least depth over this shoal.
- e. The 34 foot grounding in lat. 56° 28 1/2', long. 134° 15 3/4' should be definitely cleared to ascertain the least depth. It may have been cleared by a 33 foot drag on P day (12-14P) but if so, by so small a margin as to cast some doubt on the drag having actually covered it.
- 6. Some of the more important shoals found by the hydrographic party that should be dragged are the following:
 - a. The 4 1/2 fathom shoal in lat. 56° 30 1/4', long. 134° 06'.
 - b. The 4 1/2 fathom shoal in lat. 56° 28 1/2', long. 134° 06 1/2'.
 - c. The 7 1/4 fathom shoal in lat. 56° 24 1/4', long. 134° 05 1/4' should be dragged over if possible. This sounding is questioned by the field party (pos. 104-105 e) but the development is insufficient to disprove it.
- 7. The overlaps within the sheet are for the most part generous. The few cases of insufficient overlap are appropriately indicated on the A. & D. sheet.

The insufficient overlap at the head of Gedney Harbor may have been sufficiently dragged in maneuvering the drag from the grounding at 25 S where it was reversed to pos. 29 S when bight was in normal position.

- 8. The splits in the work are for the most part around known shoals and it is just a matter of how close to the shoals it is desired to carry the drag. The split in the vicinity of lat. 56° 27 1/4', long. 134° 10' should be covered whenever work is again done here. This may have been covered by the bights of the drag in the various strips, but owing to the practice of plotting a straight line at the beginning of a strip, a split results.
- 9. The junctions with the adjacent wire drag surveys will be taken up when those sheets are reviewed.
- 10. Additional work will be required as mentioned in paragraphs 4, 5 and 6 if a complete wire drag survey of Tebenkof Bay is desired. The drag depths in Mary Frances Anchorage should be increased to permit the drag limits being indicated on the charts.
- 11. Attention is called to the following:
 - a. At position 39 H (end launch) there is a note in the record (questioned by field party) of a "rock just inside of O Gus:" As no definite location for this is given, it was assumed that the rock referred to is probably the outer end of the reef to the southeast of O Gus.
 - b. After position 32 S to end of day the drag work was not plotted as no statement appears in the tender record of the depth to which the drag was hooked up. A note in Vol. 5, page 48 by the officer in charge says that the area was dragged to a safe depth for fishing boats. Some groundings occurred on this strip, but owing to uncertainty of the drag depth, these groundings could not be plotted.
 - c. The soundings and groundings on this sheet were verified and inked prior to the verification of the drag work proper. In this final verification, no attempt was made to go over the groundings again, but they were accepted as plotted.
- 12. There is no verification report for this sheet, the substance having been incorporated in this review.

- 13. Character and scope of field operations excellent. Field drafting excellent.
- 14. Reviewed by A. L. Shalowitz.

Approved:

Chief, Section of Field Records (Charts)

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

May 2. 1927.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET

4623 1

Locality:

S. E. ALASKA.

Chief of Party: Plane of reference is b. T. Siems.

12.6 ft. on tide staff at L W

12.6 Kary Frances Ancherage, Tebenkof Bay.

7.9 ft. do Gedney Harbor.

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.
- 6. 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. .

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

M

HYDROGRAPHIC TITLE SHEET

WIRE DRAG

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. M REGISTER NO. 4623h WIRE DRAG State SE ALASKA General locality KUIU ISLANDS Chatham Strait Locality TEBENKOF BAY including Gedney Harbor Scale 1/20,000 Date of survey Aug. 13-Oct 2. ,192 6 Vessel EXPLORER Chief of Party F.B.T. SIEMS Surveyed by F.B.T. SIEMS & R.D. HORNE. Protracted by G.A. NELSON Soundings penciled by G.A. NELSON Soundings in fall house feet Plane of reference M.L.L.W. Subdivision of wire dragged areas by..... Inked by G.A. NELSON Verified by..... Instructions dated March 9th. ,192 6 Remarks: