

4585

4585

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	<i>Hydrographic</i>
Field No.	Office No. <i>4585</i>
LOCALITY	
State	<i>Alaska</i>
General locality	<i>Shelikof</i>
Locality	<i>Strait</i> <i>Shuyak Strait</i>
<u>1926</u>	
CHIEF OF PARTY	
<i>Charles Shaw</i>	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET H - 1,

SHUYAK STRAIT, ALASKA.

DATE OF INSTRUCTIONS.

Hydrography of Shuyak Strait, Alaska was done under instructions to Lieut. Charles Shaw, dated March 27th, 1926.

LOCALITY.

This sheet covers the following area; Shuyak Strait between Cape Newland and Lighthouse Point at the west, to about two miles east of Cape Current Narrows, the eastern entrance to the Strait in Perenosa Bay.

Latitude $58^{\circ} 28' N$ and longitude $152^{\circ} 33' W$ is about the central point of this area.

KIND OF SURVEY.

This is an original survey executed entirely in new area on a polyconic projection of 1 : 20,000 scale.

LINES RUN.

Lines were run normal to the shoreline in the strait and in the bays, and all lines were run by ranges.

SPACING OF SOUNDING LINES.

Lines were run not over 200 meters apart and the majority were run 100 meters or less.

As shown on the boat sheet two shoal spots east of Cape Current Narrows and two near Port Lawrence were developed by planting a buoy on the highest spot of the shoals, and then feeling around with the hand lead for the least water.

Much development work was done in the area of this sheet and every effort made to find least water.

HYDROGRAPHIC SHEET H - 2.

This sheet, H - 1, joins hydrographic sheet, H - 2, at the western entrance to Shuyak Strait.

GENERAL FEATURES OF BOTTOM.

The 50 fathom curve from Shelikof Strait extends into Shuyak Strait east of Lighthouse Point as far as Redfox Bay approximately centrally

the Strait for about $2\frac{1}{2}$ miles and about $\frac{1}{2}$ mile wide. The 20 fathom curve extends for another mile eastward, and the 10 fathom curve to Cape Current Narrows $2\frac{1}{2}$ miles further. There is a very narrow section across the Narrows less than 10 fathoms in depth.

In Perenosa Bay the 20 fathom curve is about 1 mile south of the southern end of Big Fort Id. and then swings very close to Cape Current Narrows and along the western shore of Perenosa Bay close in. The islets and the rocks just off Perenosa Bay entrance near the Narrows vicinity establish another 20 fathom curve about $\frac{1}{2}$ mile north of the northernmost high water rock upon which is signal "Out". The 50 fathom curve is about 1 to $1\frac{1}{2}$ miles east of Cape Current in Perenosa Bay entrance.

The general depth of Shuyak harbor including its western entrance is between 10 and 20 fathoms. The eastern entrance is shoaler with a rock with 4 feet on it at MLLW. Strangely, this entrance is the one previously to this survey that shipping has favored.

The general depth of Port Lawrence is between 10 and 20 fathoms with an 8 fathom spot in the center of the main entrance.

Port William is clear of dangers except about $1\frac{1}{3}$ mile west of the Port in Shuyak Strait where rocks bare 2 feet at MLLW. The general depth of Port William is about 10 to 20 fathoms.

Daylight harbor is confined and used only by herring boats. Its general depth is less than 10 fathoms with a narrow dangerous entrance.

The general depth of Redfox Bay is between 10 and 20 fathoms.

In Shuyak Strait channel 1 mile east of Lighthouse Point about $1\frac{1}{3}$ the distance north of Afognak shore there is a $7\frac{1}{6}$ fathom rocky pinnacle. (22 fms) About 1 mile east of Redfox Bay in the Strait mid channel there is a 15 foot rocky spot of flat topped pinnacle nature.

There are several dangers, bearing at L W, across channel at Cape Current Narrows.

About 1 mile east of the Narrows there is a $5\frac{1}{6}$ fathom spot, and $1\frac{1}{2}$ mile east of the Narrows a $6\frac{1}{6}$ fathom spot, both in the fairway to Cape Current Narrows passage.

DANGERS TO NAVIGATION.

1. Several rocks inside the 10 fathom curve just south of Cape Newland bare at different stages of the tide. (See letter Aug. 7th, par 2.) *Letter 374-1926*
2. A rock with 4 feet of water at MLLW, about awash at lowest tide, is in latitude $58^{\circ} 29'.65$ N and longitude $152^{\circ} 38'.07$ W, in the eastern entrance to Shuyak harbor. (See letter to Inspector -Dangers -dated June 26th, par. 1 *Letter 330-1926*) No kelp.
3. There is an 8 fathom spot in latitude $58^{\circ} 29'.42$ N and longitude $152^{\circ} 37'.02$ W. (See letter dated Sept. 11th, par 3) No kelp.
4. There is a rocky area about 0.1 mile long bare 2 feet at MLLW in latitude $58^{\circ} 29'.13$ N and longitude $152^{\circ} 36'.35$ W. Kelp marked.
5. A small pinnacle rock with $7\frac{1}{6}$ fathoms of water is in latitude $58^{\circ} 28'.85$ N and longitude $152^{\circ} 37'.67$ W. This rises out of very deep water. There is no kelp. (see letter dated Sept. 11th, par 4)
6. There is a rock bare at MLLW in latitude $58^{\circ} 27'.95$ N and longitude $152^{\circ} 36'.56$ W. No kelp. (see letter to Inspector dated June 26th, par 2) *Letter 330, 1926*
7. There is a pinnacle rock bare at LLW at latitude $58^{\circ} 27'.21$ N and longitude $152^{\circ} 36'.13$ W. (see letter to Insp. dated June 26th, par 3) No kelp on this rock.
8. There is a pinnacle rock with $1\frac{1}{6}$ fathoms in latitude $58^{\circ} 27'.9$ N and longitude $152^{\circ} 33'.93$ W. No kelp.
9. There is a small shoal with 15 feet of water in latitude $58^{\circ} 28'$ N

and longitude $152^{\circ} 33.28' W$. Kelp in mid summer but towed under and difficult to see. (See letter dated August 7th, par 3.) *Letter 394, 1926* ✓

10. A rock bare at 4 feet above MLLW with no kelp in latitude $58^{\circ} 27.92' N$ longitude $152^{\circ} 29.55' W$. Top of rock is 5 feet across and base about 100 feet. (see letter dated Aug. 7th, par. 4) *Let. 394, 1926* ✓

11. A rock bare at 3 feet above MLLW with no kelp in latitude $58^{\circ} 27.92' N$ and longitude $152^{\circ} 29.73' W$. Rock is about 300 feet in length. (see letter dated Aug. 7th, par 5) *Letter 394, 1926* ✓

12. Two separate rocks in a 100 meter in diameter area bare at ~~3~~ above MLLW are at latitude $58^{\circ} 27.75' N$ and longitude $152^{\circ} 29.64' W$. No kelp. (see letter dated Aug. 7th, par 6) *One rk per letter. 155m off s. shore 22° from N.E. Head Narrows (1926)* ✓

13. A rock bare at LLW about 100 feet in diameter is in latitude $58^{\circ} 27.82' N$ and longitude $152^{\circ} 29.88' W$. No kelp. (see letter dated Aug 7th, par. 7) *125 meters off s. shore par L-394 (1926) (11-12A)* ✓

14. A cluster of 4 rocks about 8 feet above H W closely surrounded by rocks that bare at L W in an area of about 600 feet is in the eastern entrance to Cape Current Narrows; This cluster is in about latitude $58^{\circ} 27.7' N$ and longitude $152^{\circ} 29.1' W$. Kelp is in among these rocks. (see letter dated Aug. 7th, par 8) *par. 20 B* ✓

15. A small shoal spot with $5 \frac{1}{8}$ fathoms is in latitude $58^{\circ} 27.62' N$ and longitude $152^{\circ} 27.52' W$. There is no kelp. (see letter dated Sept 11th par. 1.) Rocky bottom.

16. A small shoal spot, rocky, with $6 \frac{4}{16}$ fathoms is in latitude $58^{\circ} 27.66' N$ and longitude $152^{\circ} 26.48' W$. No kelp. (see letter dated Sept 11th, par. 2)

17. There is an $8 \frac{1}{2}$ fathom spot, rocky, in latitude $58^{\circ} 27.9' N$ and longitude $152^{\circ} 26.76' W$. No kelp.

18. There is a $2 \frac{1}{2}$ fathom spot, rocky, in latitude $58^{\circ} 28.1' N$ and longitude $152^{\circ} 26.73' W$. This is kelp marked.

19. There is a $1 \frac{1}{2}$ fathom spot, rocky, in latitude $58^{\circ} 28.35' N$ and longitude $152^{\circ} 26.38' W$. This is kelp marked.

20. The area for 1 mile southwest of Big Fort Id is shoal and has large kelp patches as shown on sheets.

21. There is a rock bare at MLLW, off kelp area, in latitude $58^{\circ} 26.79' N$ and longitude $152^{\circ} 28.36' W$.

Depths as above are exact. Depths in above letters are preliminary.

ANCHORAGE.

The usual anchorage used by vessels is in Redfox Bay in about 16 or 17 fathoms, hard bottom, about $\frac{1}{2}$ mile SSW from the entrance Islet. However, it is reported that this bottom does not hold well in heavy blows and anchors drag. Except in very hard blows Redfox Bay seems very well protected. During the surveying season no very severe weather was experienced in this bay in which we had our camp site.

For temporary anchorage vessels use at times the area just off Port William.

In the water east of Redfox Bay the current runs quite strong and at times severe tide rips are present. It is not desirable anchorage ground.

GENERAL DESCRIPTION OF COAST.

Refer to Coast Pilot Notes, Shuyak Strait, Alaska submitted June 30, 1926.

On Afognak Id about 2 miles in from the SW head of Perenosa Bay and about 6 miles SSW from Cape Current is a conspicuous truncated cone moun-

tain terminating at the top in three peaks in an area of less than a mile at the top. The three peaks are about 2000 feet high and their tops rise about 400 feet above the truncated cone top. The mountain is bare and steep to. The three peak tops are located by triangulation and are numbers 1, 2 and 3 in the record book of angles.

The surrounding country to the eastward is much lower and is rolling hills, perhaps generally not over 1000 feet in height. Wooded.

Red Peak, Afognak Id is also conspicuous from off Perenosa Bay vicinity.

These peaks are usually clear in the summer except during stormy weather

WEATHER.

Refer to "WEATHER" in descriptive report for hydrographic sheet H - 2, page 7, dated December 4th, 1926.

Northeast blows against a tidal current running to the eastward at Cape Current produces a very dangerous and ugly condition at Cape Current Narrows. Tide rips and swirls are severe and extend about completely across the whole eastern entrance of the Narrows. Also tide rips extend at times as far east as 1 1/2 miles from Cape Current, to about the 20 fathom curve.

MAGNETICS.

Refer to report on Magnetism of vicinity of Shuyak Strait, dated October 7th, 1926.

No unusual magnetic disturbance was found, and the field values checked the declination as given on the chart number 8555 for the locality.

CURRENTS.

Refer to descriptive report accompanying Tidal and Current Data of Shuyak Strait, Alaska submitted November 18th, 1926.

DOCKS.

Svendson's dock in Shuyak harbor, San Juan Fishing & Packing Co dock in Port Lawrence, and Sklarof's dock in Port William are deep water docks and have accommodated the S. S. "Redondo," S. S. "Admiral Evans" and "Admiral Watson" and S. S. "Starr".

The Daylight harbor dock, the dock on the east side of Port William and the dock in Shuyak harbor south of Svendson's are almost dry at L W.

The small dock just north of Svendson's in Shuyak harbor called Svendson and Shaw's dock is dry at LW.

With the exception of the last dock and Daylight harbor dock all the others were built this summer after the surveying party arrived on the working grounds.

A gridiron was built by the Franklin Packing Co for caulking and repairing its large flat bottom herring ^{salt} barge at the head of Port William but it is now learned the gridiron is in bad shape and of little use. Bed rock was too near the ground surface and the piling for the gridiron could not be driven but a short distance.

In S W weather steamers do not like to dock in Shuyak Harbor or Port Lawrence due to the swell making in these places, and the limited maneuvering room. Port William is much better protected at Sklarof's dock but there is a 3 1/2 fathom spot, mud, 6 feet off the center of the dock.

FRESH WATER.

Fresh water can be obtained readily at Sklarof's dock in Port William. Fresh water is also piped to the Port Lawrence dock. Fresh water is obtained at the head of Shuyak harbor by skiff. Many streams make into Shuyak Strait and its bays.

Due to the land formation good drinking water streams even of small size are few on the west coastline of Shuyak Island.

PROVISIONS.

Emergency food supplies in limited quantities during summer may be obtained from the herring salteries.

FUEL.

Emergency gasoline supplies may be obtained at the salteries perhaps preferably from the Franklin Packing Co saltery barge. This company is the Standard Oil Agent at Port Ashton, Prince William Sound. Its motor vessel "Decorah" made frequent trips between these places during the summer. The "Decorah" carried the survey party fuel from Port Ashton to Redfox Bay as an accommodation, and made a very small carrying charge to the government.

TIDAL REFERENCE FOR ROCKS.

Rocks baring at part tide, such as $1/3$ tide, means $1/3$ of range from low and not from high water.

TIDE GAUGE AND STAFFS.

For this hydrographic sheet west of Cape Current Narrows an automatic tide gauge was established in Redfox Bay, Shuyak Strait.

For soundings in the Narrows a plain staff was erected there.

A plain staff was erected just west of Big Fort Id for soundings west of Cape Current in Perenosa Bay.

FISHING MATTERS.

Herring are caught principally in Redfox Bay. Last summer about all the shore line of this bay was lined with fish pounds where the herring are stored in these nets until a certain objectionable food in the stomach is all digested before salting. The pounds extend off shore perhaps a few hundred yards where the corners are anchored.

The shore salteries are all on the Shuyak Id side of the Strait. One floating saltery, the Franklin Packing Co barge, lies at the west side of and along Sklarof's dock.

Five floating salteries, sea-going schooners, anchored at the head of Bluefox Bay.

These arrangements are due to the nature of the Presidential Proclamation of the Afognak Reservation. (see next page.)

AFOGNAK RESERVATION.

A proclamation by the President of the United States, promulgated December 24th, 1892, created the Afognak Forest and Fish Culture Reserve, which is now part of the Chugach National Forest. The land and waters reserved by this proclamation are Afognak Id., Alaska, and its adjacent bays and rocks and territorial waters, including among others Sea Lion Rocks, and Sea Otter Island.

All persons are forbidden to enter upon, or to occupy, the tract or tracts of land or waters reserved by this proclamation, or to fish in, or use any of the waters herein described or mentioned.

See page 8 of Circular #251 - 12th Edition Laws and Regulations for Protection of Fisheries of Alaska, dated December 5th, 1925.

SURFACE TEMPERATURE.

It is understood that Captain Breyer of the Franklin Packing Co motor vessel "Decorah" recorded the surface temperature of Shuyak Strait for the Bureau of Fisheries during the past summer. Perhaps the Coast Survey office would like a copy of this data. This information has just been learned.

LAUNCH USED BY PARTY.

Wire-Drum Tender # 2, 30 foot long with a 28 horsepower high speed engine, was used by this party as its main launch.

A tiller was rigged on a stanchion just aft of the cock pit and from there standing on the after decking the helmsman steered with a clear view of the horizon over the launch canopy.

The sounding machine was placed on the port side abreast of the engine flywheel from which power was obtained by a belt. The sounding wire led up through a guide slot in a board secured across the sounding machine frame to a regular sounding sheave overhead under the canopy frame thence overboard on the port side to the regular registering sheave where one complete turn of the wire over the sheave prevented slipping. The zero of the registering device was constantly checked, and reset whenever required. All soundings were up and down casts.

Handlead sounding was taken on the starboard side where a sounding chair was secured at the forward end of the canopy. Practically all handlead sounding was with the copper centered leadline. A small amount was taken with the ordinary type of leadline - samson spotted sashcord.

Plotting was done on a small table secured to the under side of the launch canopy frame at the after end of the canopy on the port side. From here the recording sheave could be watched carefully for accuracy.

Angles were taken from the cockpit aft of the engine and canopy. Soundings were taken about 6 feet forward of the angle positions.

AIDS TO NAVIGATION.

Cape Current Narrows should be buoyed.

SAILING DIRECTIONS.

Ships entering Shuyak Strait from Shelikof Strait should stay outside the 20 fathom curve, raise Rocky Islet, and then pass north of the Islet 1 1/2 miles distant with Rocky Islet bearing 210 degrees true, and steering 120 degrees true to as far as abeam of the western tangent of Lighthouse

Point $3 \frac{1}{2}$ miles, and distant from that point about $\frac{1}{2}$ mile.

To enter Shuyak Harbor, from the above position off Lighthouse Point, steer 48 degrees true about 1 mile, passing through the western entrance mid channel heading for a small rock 5 feet above H W 300 feet off the east shore until abeam of the small wooded islet to the northwestward distant 0.15 mile, then head mid-channel, course 358 degrees true $\frac{1}{3}$ mile to head of harbor, and Svendsen's dock and herring saltery.

In entering the western channel to Shuyak harbor guard against the rocks which bare at L W about 250 feet west of the western high water rock at harbor entrance.

To enter Port Lawrence, from the above position off Lighthouse Point, steer 86 degrees true for about $1 \frac{1}{4}$ miles heading for the grassy islet in entrance, until the west point of Port Lawrence is abeam, then steer 28 degrees true for $\frac{1}{3}$ mile to San Juan Fishing and Packing Co dock and herring saltery. Rocks bare at L W 350 feet west of this grassy islet. There is an 8 fathom spot, rocky, 300 feet to eastward of the latter 28 degree course. This spot is on the line joining the entrance points of Port Lawrence.

To enter Port William, from the above position off Lighthouse Point, steer 101 degrees true for $1 \frac{1}{4}$ miles until H W rock at eastern point of Port Lawrence is abeam, distant $\frac{1}{3}$ mile to north, and also rocks which bare at about MLLW 0.1 mile south of this H W rock are abeam, then head $\frac{1}{2}$ mile on course 75 degrees true until western point of Port William is abeam distant 0.2 mile to northward, then steer 15 degrees true $\frac{1}{3}$ mile to Sklarof's dock and saltery.

On the 101 degree course there is a rocky pinnacle about 0.15 mile to southward with 7 $\frac{1}{6}$ fathoms of water.

To enter Redfox Bay, from abeam of the H W rock at the eastern point of Port Lawrence, as above to enter Port William, steer 179 degrees true for $1 \frac{1}{3}$ miles mid channel through the Redfox Bay western entrance, to the ship anchorage in 16 or 17 fathoms of water.

In the center of Redfox Bay entrance is an island partly wooded and partly grass covered, the latter the northern part. About 250 feet off the western shore of Redfox Bay abreast of the wooded islet a rock bares at MLLW.

The course entering Redfox Bay is mid channel between this rock and the wooded island, and is here distant 0.15 mile.

To pass through Cape Current Narrows, from abeam of the H W rock at the eastern point of Port Lawrence, as above to enter Port William, steer mid channel 120 degrees true for about 1.1 miles until eastern point of Redfox Bay is abeam to south westward distant $\frac{1}{3}$ mile, then steer 100 degrees true for about 2 miles to the middle of the western entrance to Cape Current Narrows.

The usual course then taken by herring boats is to steer 90 $\frac{1}{2}$ degrees True to within $\frac{1}{4}$ mile of the northeastern point of the Narrows and heading for this point, Here the course is midway between a rock bare at 4 feet above MLLW and the northern bank of the Narrows, that is about 280 feet off Shuyak Island. Then head 100 degrees true out into Perenosa Bay with the Shuyak Id. tangents at Δ Low and \odot Ken about on range astern. This latter course passes about 350 feet north of a 6 $\frac{4}{6}$ fathoms spot $1 \frac{1}{4}$ miles east of the Narrows. The shallowest water on this course is in the danger zone in the Narrows and is 6 $\frac{1}{6}$ fathoms.

From the middle of the western entrance to Cape Current Narrows some herring boats then steer 106 degrees true for 0.7 of a mile with the range tangents at Δ Low and Δ Karl open slightly. Favor the south side of this range as the exact tangent range runs through the rock dangers in the center of Cape Current. These rocks bare at 3 feet above MLW.

When this course meets the tangent range \odot Ko and Δ Andy astern run out into Perenosa Bay on this range which is 93 degrees true. About 300 feet south of the course 106 degrees true is a rock bare at LLW near where the change in course to 93 degrees true takes place. This rock is also about 150 feet south of the range \odot Ko and Δ Andy. The least depth on this latter series of courses through the Narrows is about the same as on the courses following the Shuyak Shore. The water except at slack is also more troubled with tide rips and swirls than along the Shuyak shore courses.

With big tidal ranges or northeast blows it is not advisable to navigate the Narrows except near slack water and especially not until the dangerous rocks are marked.

To continue to Seward, it is reported herring boats steer to pass off Posledni Cape $5/8$ of a mile north of the cape, and continue on this course for 12 miles from Cape Current clearing Sea Otter Islands and the Islets off Posleidni Cape to the north, and then head for Seward. The shore line here is only sketched and no courses are given.

To continue toward Kodiak, it is reported herring boats steer from the above position off Posleidni Cape toward Sealion Rocks passing 1 mile north of Tolstoi Point from which Point the course changes to clear Tonki Cape by 1 mile. Mid channel courses are steered through Marmot Strait, and then the usual courses to Kodiak through the surveyed water from Marmot Strait.

Charles Shaw

Charles Shaw

December 21st, 1926

(over)

9.

SHOAL PLOTTING in Port Lawrence.

When the 8 fathom spot at the entrance to Port Lawrence was plotted first on the smooth sheet by the plotter it was found later by me and after the sounding volume had been forwarded to the Office with the sheet H - 2 that this least water was plotted wrong. The correct position is latitude 58° 29.4 N and longitude 152° 37 W. The erroneous plotting is about 110 meters northeastward of this. The smooth sheet is corrected now.

Without having the sounding volume here to examine I believe it is a plotting mistake, or if not, it is a recording mistake.

The sounding is number 1 b in the cutter volume. It was originally entered in a wrong volume and then copied into the cutter volume.

As this shoal was examined by me on three different occasions and the last time by placing a buoy on known ranges on the shoal I know its correct location. On the three occasions all soundings on the boat sheet plotted on or hard by the above geographical position.

Charles Shaw
Charles Shaw

TABLE OF STATISTICS (Hydrographic sheet No. H-1)

Date 1926	Letter	Volume	Positions	Soundings	Miles (statute)	Vessel
June 24	A	1	89	266	14.0	Wire Drag Tender
26	B	1	91	215	7.5	No. 2
July 10	C	1	68	176	5.1	"
12	D	2	104	261	12.3	"
13	E	2	44	131	8.5	"
14	F	2	42	114	8.0	"
15	G	3	80	256	12.0	"
23	H	3	70	182	12.5	"
Aug. 4	J	3	105	285	14.5	"
5	K	4	56	99	9.2	"
17	L	4	29	55	4.5	"
19	M	4	107	349	20.0	"
26	N	4	36	99	5.5	"
Sept. 3	P	5	84	262	23.0	"
4	Q	5	50	219	9.0	"
8	R	5	93	327	15.0	"
9	S	5	25	66	4.0	"
10	T	5	2	2	0.0	"
	a	1	4	4	0.0	Cutter
	b	1	1	1	0.0	"
Totals			1180	3369	184.6	

Soundings in FATHOMS

PLANE OF REFERENCE - Mean Lower Low Water.

Red Fox Bay Gauge (automatic) used for Shuyak Straits as far as Cape Current
Latitude 58° 27' N Long. 152° 36' W. Narrows.

Mean Lower Low Water on staff = 4.13 Feet.

Lowest tide observed ---- = 0.9 "

Highest tide observed ---- = 21.7 "

Cape Current Narrows (plain staff) used for soundings at Cape Current

Latitude 58° 28' N Longitude 152° 31' W Narrows.

Mean Lower Low Water on staff = 3.19 Feet.

Big Fort Island (plain staff) used for soundings east of Cape Current.

Latitude 58° 29' N Longitude 152° 27' W

Mean Lower Low Water on staff = 1.83 Feet.

Section of Field Records

Report on H. Sheet No. 4585.

Surveyed in 1926.

Chief of Party - Charles Shaw.

Surveyed by - Field Party.

Projected by - H. W. Tyler.

Soundings Plotted by H. W. T.

Verified and inked by - H. E. MacEwen

1. The records for this survey were well kept and conform to all requirements of the general instructions, except that boat's heading by compass were omitted.
2. The surveyed area was well covered and all important shoals carefully developed.
3. The usual depth curves can be completely drawn.
4. The field drafting was complete.
5. No further lead line surveying is required to fully develop the area covered by this sheet.
6. Remarks: The wrong plane of reference for tides was used in the field causing change in depths throughout the survey.

The field draftsman did not reduce his fractions accurately in all cases, but this did not impede the progress of the office.

6 (cont)

drafterman since the changed plane of
reference for tides made it necessary
to change the depths plotted in the field.

7. Rating

- (a) Character & scope of surveying - Excellent
(b) Field drafting - Excellent.

Respectfully submitted

Date. Feb. 17, 1927

W. E. Mac Ewen
Drafterman

Received by:

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

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 25, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4585

Shuyak Strait, Shelikof Strait, Alaska.

Surveyed in 1926

Instructions dated March 27, 1926 (Shaw)

Chief of Party, Charles Shaw.

Surveyed by C. S.

Protracted and soundings plotted by H. W. Tyler.

Verified and inked by H. E. MacEwen.

1. The records conform to the requirements of the General Instructions except for the omission of boat's courses.
2. The plan and character of development conform to the requirements of the General Instructions. Practically all the sounding lines in the strait were run normal to the axis of the current. Mr. Crosby (a member of the surveying party) states that the current runs 6 or 7 knots, but that all sounding in areas affected by the current was done only at slack water.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate considering the uneven character of the bottom.
5. The information is sufficient for drawing the usual depth curves.
6. The field plotting was completed to the extent prescribed by the General Instructions.
7. The area to the east of this sheet has not been surveyed. The junction with the work to the westward (H. 4576) will be considered when the latter is completed.
8. This survey is a very complete one and gives all the information that could be expected with the use of the leadline. It is altogether probable that there are additional rocks and that less water exists on some of the shoals which can only be revealed by the drag.

9. The character and scope of the surveying and field drafting are excellent.

10. Reviewed by E. P. Ellis, March, 1927.

Approved:

Chief, Section of Field Records (Charts)

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVLY
L. & A.
DEC 27 1926
Ann. No. 1

REG. NO. 4585

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. H - 1

REGISTER NO. **4585**

State Alaska

General locality Shelikof Straits

Locality Shuyak Straits

Scale 1:20,000 Date of survey June 24th - September 10th, 1926

Vessel Shuyak Straits Shore Party (using wire drag tender no. 2)

Chief of Party Charles Shaw

Surveyed by Charles Shaw

Protracted by H.W. Tyler

Soundings penciled by H.W. Tyler

Soundings in fathoms ~~1000~~

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by -----

Inked by -----

Verified by -----

Instructions dated March 27, April 3, 1926.

Remarks: -----

February 2, 1927.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4585

Locality: S. W. ALASKA

Chief of Party: Charles Shaw

Plane of reference is M L L W

4.8 ft. on tide staff at Red Fox Bay
4.3 ft. do Cape Current Narrows
2.4 ft. do Big Port Island.

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.

