4430

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. (23) Office No. 4430

LOCALITY

State Alaska.

General locality Baranof Island

Locality West Coast.

1924

CHIEF OF PARTY

A. M. Sobieralski

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)++

4430

C. & G. SURVEY
FEB 24 1925
Acc. No.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET #23

Whale Bay & Necker Bay

Baranof Island

S.E.Alaska

Surveyed by party from

U.S.C.& G.S.S.SURVEYOR

A.M.Sobieralski, H.& G.E., Comdg.

Sept.11 to Oct.4, 1924

Scale 1 - 20,000

Instructions dated Feb.6, 1924

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET #4.23

Instructions for this work dated February 6, 1924.

The area embraced in this sheet covers the locality inshore from the ship's work from Pt. Lauder at the southern entrance to Whale Bay to Beale Is., on which Fish is located, and includes a part of Whale and Necker Bays.

The work was done on a scale of 1-20000.

The COSMOS, in charge of R.R.Moore, completed most of the outside work and the deeper soundings in Whale and Necker Bays; H.B.Campbell did some development with the COSMOS. Whale Bay and the harbors in Whale Bay were done by H.E. Finnegan with the DELTA, while Necker Bay and the inshore soundings between Necker Bay and Crawfish Inlet were done by R.W. Woodworth with the ship's gas launches.

This report covers only the work done by the COSMOS, separate reports being attached for the work done by H.E. Finnegan and R.W.Woodworth.

In accordance with the instructions the lines were spaced 300 meters apart. Numerous indications had to be developed as the bottom is very irregular, but no dangers were found. In many places, the bottom drops so suddenly that adjacent soundings do not appear to check, but later development verified the soundings.

GENERAL DESCRIPTION OF SHORE.

Whale bay has its entrance between Point Lauder and North Cape, and is about 4 miles wide at the entrance, narrowing rapidly to a width of 1 ¾ miles. It extends about 4 miles in a northeasterly direction, then divides into two arms. The southeastern shore is indented by several bays, described in supplemental report. Two breakers lie about ¾ mile 126° (true) from North Cape, and a dangerous breaker lies about 0.57 mile 346° (true) from the islet at the entrance to Port Banks. The middle of the bay is deep and clear.

POINT Lauder is low and wooded. A chain of rocky islets extends northwestward forming one side of Still Harbor.

NORTH CAPE is a conspicuous landmark; it is a wooded island with three hills, the middle one, 205 ft. high, being the highest.

About 3 miles northward of North Cape is a small bay whose entrance is obstructed by reefs and islets.

THE GUIBERT ISLETS consist of a group of three grass covered rocky islets about 60 feet high and one rock about 5 feet high, lying off the entrance to Necker Bay and about 3 miles northwestward of North Cape.

YAMANI ISLETS are a group of irregular shaped wooded islets lying close to shore and form the northwest entrance point to Necker Bay. Rocks and ledges extend about 250 meters southeastward from these islets.

SLATE ISLETS are a group of bare rocky islets lying parallel to the shore between Necker Bay and Crawfish Inlet.

A rock awash at high water lies about ¼ mile 150° (true) from the southern extremity of the most southerly of these islets.

NECKER BAY has its main entrance between the Yamani and the Guibert Islets. There is also a channel between the Guibert Islets and the mainland. While there is broken bottom at the entrance, no dangers were found. The Yamani Islets should be given a berth of at least 300 yds. There is a rocky patch 0.45 miles North (true) from the northernmost of the Guibert Islets which is reported to break in heavy weather. Ten fathoms was the least water found on it.

CRAWFISH INLET has its southern entrance about two miles northwestward of Necker Bay. The southeastern entrance point should be given a berth of at least ¼ mile.

SCOW ISLAND lies about 1½ miles westward of the entrance to Crawfish Inlet. It is wooded and about 150 ft. high.

A rock on which it breaks in moderate weather lies about 1/3 mile 90° (true) from the extreme southern point of this island.

BIALI ROCK is the most westerly point of the islets off Crawfish Inlet, and lies almost two miles westward of Scow Island. It is a large bare white rock about 113 feet high. Rocky islets extend about 1 mile northeastward.

There are a number of dangerous reefs in the vicinity of this island, as follows:

Breakers extend ½ mile 237° (true) from Baili Rock.

A rock awash at high water lies 5/8 mile 213° (true) from Baili Rock.

A group of rocks awash at ½ tide lies 7/8 mile 180° (true) from Baili Rock.

NORTH CAPE is a conspicuous landmark; it is a wooded island with three hills, the middle one, 205 ft. high, being the highest.

About 3 miles northward of North Cape is a small bay whose entrance is obstructed by reefs and islets.

THE GUIBERT ISLETS consist of a group of three grass covered rocky islets about 60 feet high and one rock about 5 feet high, lying off the entrance to Necker Bay and about 3 miles northwestward of North Cape.

YAMANI ISLETS are a group of irregular shaped wooded islets lying close to shore and form the northwest entrance point to Necker Bay. Rocks and ledges extend about 250 meters southeastward from these islets.

SLATE ISLETS are a group of bare rocky islets lying parallel to the shore between Necker Bay and Crawfish Inlet.

A rock awash at high water lies about $\frac{1}{4}$ mile 150° (true) from the southern extremity of the most southerly of these islets.

NECKER BAY has its main entrance between the Yamani and the Guibert Islets. There is also a channel between the Guibert Islets and the mainland. While there is broken bottom at the entrance, no dangers were found. The Yamani Islets should be given a berth of at least 300 yds. There is a rocky patch 0.45 miles North (true) from the northernmost of the Guibert Islets which is reported to break in heavy weather. Ten fathoms was the least water found on it.

CRAWFISH INLET has its southern entrance about two miles northwestward of Necker Bay. The southeastern entrance point should be given a berth of at least $\frac{1}{4}$ mile.

SCOW ISLAND lies about $1\frac{1}{2}$ miles westward of the entrance to Crawfish Inlet. It is wooded and about 150 ft. high.

A rock on which it breaks in moderate weather lies about 1/3 mile 90° (true) from the extreme southern point of this island.

BIALI ROCK is the most westerly point of the islets off Crawfish Inlet, and lies almost two miles westward of Scow Island. It is a large bare white rock about 113 feet high. Rocky islets extend about 1 mile northeastward.

There are a number of dangerous reefs in the vicinity of this island, as follows:

Breakers extend $\frac{1}{2}$ mile 237° (true) from Baili Rock.

A rock awash at high water lies 5/8 mile 213° (true) from Baili Rock.

A group of rocks awash at $\frac{1}{2}$ tide lies 7/8 mile 180° (true) from Baili Rock.

Another group, awash at H.H.W., lies 7/8 mile 135° (true) from Baili Rock.

A rock awash at low water lies 7/8 mile 110° (true) from Baili Rock.

A group of rocks bare at low water lies about 7/8 mile 80° (true) from Baili Rock.

The area among these rocks has not been surveyed and should be avoided.

PLANE OF REFERENCE.

All soundings were taken in fathoms and reduced to M.L.L.W.

The Sitka tide gauge was used for the offshore area, while Port Banks was used in Whale Bay and Toy Harbor(Necker Bay) was used for reducing soundings in Necker Bay.

SITKA TIDE GAUGE.

Plane of Reference,	M.L.L.W. reading on gauge	9.8 ft.
Highest Tide Observed	" " "	21.2 ft.
Lowest " "	" " "	6.7 ft.

PORT BANKS TIDE GAUGE.

Plane of Reference,	M.L.L.W. reading on gauge	5.6 ft.
Highest Tide Observed	" " "	16.7 ft.
Lowest " "	" " "	5.5 ft.

NECKER BAY TIDE GAUGE.

Plane of Referance,	M.L.L.W. reading on gauge	6.9 ft.
Highest Tide Observed	" " "	18.0 ft.
Lowest " "	" " "	5.9 ft.

Supplemental

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET #

Still Harbor, Port Banks, Rakevoi Bay.

Vicinity of Whale Bay

Baranof Island

S.E.Alaska

Surveyed by party from

U.S.C.& G.S.S.SURVEYOR

A.M.Sobieralski, H.& G.E., Comdg.

Sept.11 to Oct.4, 1924.

Scale 1 - 20,000

Instructions dated Feb.6, 1924

SUPPLEMENTAL REPORT
to accompany

HYDROGRAPHIC SHEET # 23

This report refers to the work done by the steam launch DELTA on sheet # 23.

Instructions, dated February 6, 1924, cover the work.

The limits of this work extend from Pt. Lauder (on the south side of Whale Bay) and from the point of North Cape (on the north side of Whale Bay) to △Put up the Great Arm and to ⊙Hot up the Small Arm; and includes Still Harbor, Port Banks and Rakovoi Bay. From Pt. Lauder on the south side and from North Cape on the north side into Whale Bay to a line about abeam of Port Banks, the work consisted of filling in (on both sides of the bay) between the beach and the work done by the COSMOS party.

A steam sounding machine was used thruout the work, except to sound a part of Still Harbor and in one or two cases to get the least depth on shoals where a hand lead was used.

In general, a system of 300 meter lines were run in Whale Bay, including the Great & Small Arms; and a system of 150 meter lines on an average were run in Still Harbor, Port Banks and Rakovoi Bay. Considerable developement work was necessary especially in the following places;-, at the entrances to Port Banks, at the entrance to and in Still Harbor, and just south of North Cape.

LANDMARKS

North Cape has three small wooded hills, the middle one one of which is the highest, having an elevation of about 205 feet. The cape is visible for several miles to the southward and northwestward.

The position of Still Harbor is easily identified by the line of small, bare rock islets which mark the SW side of the Harbor for about 2/3 miles from the entrance.

The very small rock, on which ⊙Ile is located, in Still Harbor, serves as an aid in passing a reef bearing ExN (true) and at a distance of 110 meters from ⊙Ile. This reef bares at

lower low water and is marked by growing kelp.

A small wooded island, just inside and a little to the west of the middle of the entrance to Port Banks, is a valuable aid in entering this bay.

The Makhnati Islands are a group of four small islands extending in a SSW direction from the eastern entrance to the Small Arm for a distance of about 3/4 miles. The most southerly of this group is wooded and is a rather conspicuous landmark on entering Whale Bay.

DANGERS

1050 meters 120° (true) from △Whale is a sunken rock which breaks in a moderate swell. The least depth obtained on this breaker was 5 fathoms. This breaker is about 550 meters offshore abeam of the point on which ⊙Tit is located. A reef extends offshore from this same point in a SSW direction for about ~~550~~ 250 meters.

Approximately 325 meters south of the above mentioned breaker is another breaker to which three sextant cuts were obtained in very heavy weather when it was difficult to distinguish between the breaker and the white-caps of the short steep seas. The position of this breaker as determined by these cuts is 1190 meters 134° (true) from △Whale. However, considerable developement in this vicinity gave no indication of a breaker, the least depth obtained being 16 fathoms.

In the area between triangulation stations Whale and Bay and extending offshore for about six tenths of a mile the seas pile up very dangerously during bad storms, especially in the vicinity of the above mentioned breakers.

215 meters 327° (true) from ⊙Hamp is a reef which makes out from the north point of the rock island on which ⊙Hamp is located. This reef is awash at low water.

360 meters 28° (true) from ⊙Hamp is a rock that bares at 3/4 tide.

110 meters 75° (true) from ⊙Ile is a reef which bares at lower low water and which is marked by heavy growing kelp.

230 meters, NxW (true) from ⊙Point, in Still Harbor, is a sunken rock on which the least depth obtained was ~~10~~ 6 feet.

In the area between Point Lauder and the entrance to Still Harbor for a considerable distance offshore moderate swells hump up noticeably.

630 meters, 38° (true) from △Port is a rock which bares at low tide and which breaks at all stages of the tide in a light swell. This rock, which is marked by growing kelp, is the offshore end of a reef extending NW from the western point of the entrance to Port Banks.

860 meters, 256° (true) from △Banks is a sunken rock, marked by growing kelp, which breaks in a moderate swell. The least depth obtained on this rock is 3 fathoms.

There are rocks awash off both sides of the small wooded island in the entrance to Port Banks. The location of these rocks is as follows;- 108 meters, 25° (true) from signal Joy is a rock awash at half tide, off the east side of the island. Seventy six meters, 295° (true) from signal Joy is a rock awash at half tide off the west side of the island. Forty eight meters, 292 degrees true from signal Joy is a rock awash at half tide off the west side of the island.

110 meters, 23° (true), from △Arm is a rock which bares at low water.

70 meters 229° (true) from ⊙Be in Rakovoi Bay is a rock which bares at low tide.

A small boat can pass from East Rakovoi Bay to West Rakovoi Bay by hugging close to the beach on the south side of the narrow passage just south of ⊙Sis. There are three rocks awash on the north side of this passage, one bareing at about 3/4 tide, another at 1/2 tide, and the third at low tide.

ANCHORAGES

Still Harbor.

The head of this bay affords an anchorage for small craft, with good protection from the sea, in a depth of 6 fathoms with a mud and sand bottom.

In a moderate swell short steep seas are encountered

at the narrow entrance to Still Harbor, making it rather difficult to enter, and during a heavy storm it would not be advisable for a boat to attempt to make this bay.

PORT BANKS.

An excellent ship's anchorage in 16 fathoms, muddy bottom, with good protection from sea and wind, may be had near the head of Port Banks opposite the bight about 1.6 miles from the entrance to the bay. The best channel of approach to enter Port Banks is found by keeping the sunken rock which is 860 meters, 256° (true) from Banks, on the starboard hand.

RAKOVOI BAY.

East Rakovoi Bay varies little in depth for its entire length and anchorage can readily be found in from 18 to 20 fathoms, mud and sand bottom.

West Rakovoi Bay has depths from 14 to 21 fathoms, soft bottom, but the entrance, altho clear, is rather narrow having an average width of only about 100 meters for approximately a quarter of a mile.

Respectfully submitted,

Henry E. Finnegan

Henry E. Finnegan
Jr. H. & G. Eng'r, C. & G. Survey.

STATISTICS SHEET NO 23

1924	Letter	Vol.	Positions	Soundings	Miles Stat.	Vessel
			Whale Bay			
Aug. 21	a	1	40	75	12.5	Cosmos
" 22	b	1	57	114	16.0	"
" 23	c	1	32	64	8.0	"
" 25	d	1	73	150	18.3	"
" 26	e	1	83	156	19.5	"
" 27	f	2	86	164	21.7	"
" 28	g	2	81	143	22.3	"
" 29	h	2	14	27	3.5	"
Sept. 5	j	2	52	104	13.0	"
" 6	k	2	22	42	4.0	"
" 8	l	2	42	89	11.0	"
" 9	m	3	116	260	35.1	"
" 10	n	3	63	124	18.3	"
" 11	p	3	102	194	23.7	"
" 12	q	3	33	59	7.5	"
" 16	r	4	82	139	17.5	"
" 18	s	4	73	73	10.0	"
" 19	t	4	76	114	13.7	"
" 23	u	4	58	104	10.6	"
" 24	v	4	85	151	9.3	"
" 30	w	5	77	107	14.0	"
Oct. 1	x	5	98	207	10.0	"
" 4	y	5	12	15	1.0	"
" 14	z	5	112	164	16.5	"
" 15	aa	5&6	124	198	17.1	"
Sept. 11	a	1	23	44	4.2	Delta
" 15	b	1	82	170	11.8	"
" 16	c	1	82	163	13.4	"
" 17	d	1	42	86	5.7	"
" 18	e	1	90	171	16.2	"
" 19	f	2	115	239	13.7	"
" 22	g	2	126	223	12.9	"
" 23	h	2	93	190	16.7	"
" 24	j	2&3	130	289	16.9	"
" 25	k	3	111	206	9.3	"
27	l	3	35	63	3.2	"
" 29	m	3	99	191	15.2	"
" 30	n	3	37	69	3.4	"
Oct. 3	p	4	55	100	9.3	"
" 4	q	4	84	174	10.0	"

STATISTICS SHEET NO 23 continued

1924	Letter	Vol.	Positions	Soundings	Miles Stat.	Vessel
			Whale Bay			
Sept.23	a	1	81	131	16.0	G.L.#4
24	b	1	66	113	14.0	"
25	c	1	86	158	20.0	"
" 27	d	1	38	71	10.0	"
" 29	e	1	97	156	19.0	"
Oct. 3	f	2	105	141	16.5	"
" 11	g	2	32	32	5.0	"
" 14	h	2	75	126	17.0	"
" 15	j	2	90	147	17.5	Delta
" 16	k	2	46	79	6.0	"
Total			3913	6569	657.0	

STATISTICS SHEET NO 24

			[redacted]			
Sept.30	a	1	82	152	11.1	Delta
Oct. 1	b	1	102	186	12.7	"
" 2	c	1	101	189	13.6	"
" 3	d	1	50	96	8.0	"
" 7	a	1	40	77	8.0	G.L.#4
" 8	b	1	103	142	17.0	Gig
" 9	c	1	83	135	10.0	"
" 10	d	1	34	55	7.0	"
Total			595	1032	87.4	

Section of Field Records. February 28, 1925.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 4430

Locality: Vicinity Whale and Necker Bays, S. E. Alaska

Chief of Party: A. M. Sebieralski in 1924
Plane of reference is mean lower low water
9.5 ft. on tide staff at Sandy Bay, Baranof Island, S.E.Alaska
6.9 " " " " " Necker Bay, " " " " "
5.6 " " " " " Port Barnes, " " " " "

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

G Rude

Chief, Division of Tides and Currents.

Hydrographic Sheet No. 4430.
Baranof Island, "Alaska"

The surveyed area covered on this sheet is good work and developes conditions satisfactorily and no additional work appears necessary at this time. Future development of the Country may necessitate some Wire Drag Survey.

Protracting found practically correct, but few errors being found although owing to the short lines and numerous turnes better than 50% of the protracting had to be checked.

Pencil plotting developed numerous errors in verification.

Records not complete as to time and signals. In time the minutes generally omitted and when some signals were used a number of continuous positions signal names entered only at beginning and letter -S- substituted.

Quality of paper very poor and sheet too large for convenient handling.

John D. Torrey.
May 15. 1925

8.05.

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 June 24, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4430

Southwest Coast, Baranof Island, Alaska

Surveyed in 1924

Instructions dated February 6, 1924

Chief of Party, A. M. Sobieralski.

Surveyed by H. B. Campbell, R. R. Moore, R. W. Woodworth, H. E. Finnegan.

Protracted by A. W. Skilling.

Soundings plotted by R. W. Knox.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions except as follows:

(a) In the work of the Cosmos, the heading by compass was not always given and where it was, it was given in points instead of degrees. Also page after page of names of signals were omitted and either the word "same" or "S" used. This practice should be discouraged as it increases the possibility of error and delays the plotting. T he names of the signals should be given at least at the top of each page.

(b) In neither the work of the "Delta" nor of launch No. 4 were boats heading by compass given.

2. The plan and character of development satisfy the requirements of the General Instructions except that some of the shoaler soundings should have been more closely developed.

3. The plan and extent of development satisfy the specific instructions. The soundings were taken with wire and hand lead. No tubes were used.

4. An inspection of the survey discloses the extreme irregularity of the bottom which probably explains the many suspicious looking soundings and lines.

All of the important shoals with 10 fathoms and less have been well developed.

GPO

A 13 fathom sounding about 1/3 mile southwest of Yamini Islets lies in surrounding depths of 20 to 28 fathoms. This should be better developed.

In Whale Bay in approximate lat. 56° 36', long. 135° 03' the leadline struck at 11 fathoms but glanced off into 100 fathoms. A subsequent development disclosed nothing less than 100 fathoms. However, the development is not considered sufficiently close to disprove the existence of the 11 fathom spot and until further evidence of its non-existence comes to light 11 fathoms will be charted. This spot if existing is doubtless a sharp pinnacle and should be wire dragged to determine the least water. Disproved (See letter of Schierolski Aug. 13, 1925)

5. The information is sufficient for drawing in the usual depth curves.

6. The usual field plotting was done by the field party.

7. The junction with H. 4432 on the west and south is adequate.
The junction with H. 4431 is good.
The junction with H. 4429 on the south will be taken up in the review of that sheet.

8. No additional lead line development seems necessary at the present, but owing to the very irregular nature of the bottom the entire area should be wire dragged.

When the work is extended to the northward it will doubtless be extended in Crawfish Inlet.

9. Some of the rocks in the vicinity of Biali Island had to be transferred from the boat sheet by the office cartographer as they were not shown on the topographic sheet nor were cuts given to them in the records.

At 64 b (Launch No. 4) in vicinity of lat. 56° 39', long. 135° 10', the record says "rock 10 m. port". This is close to a 58 fathom sounding. The next sounding runs close to the rock on which ⊙ Del is located and it is possible that an error was made in recording. However, a sunken rock will be charted here for the present, but the matter should be referred to the Chief of Party. Rock removed see letter of Schierolski Aug. 13, 1925

10. The character and scope of surveying is excellent.
The protracting was excellent and the sounding plotting was good.

11. Reviewed by A. L. Shalowitz, June, 1925.

E.O.E.

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 November 28, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4430 (Additional Work)

Southwest Coast Baranof Island, Alaska

Surveyed in 1925

Instructions under Director's letter of June 29, 1925 (Surveyor)

Chief of Party, A. M. Sobieralski.

Surveyed by A. M. S., H. A. Cotton, A. P. Ratti.

Protracted by P. R. Hathorne and F. M. Albert.

Soundings plotted by P. R. H.

Verified and inked by F. M. A.

1. The additional work on this sheet comprises a wire drag examination of an 11 fathom spot in Whale Bay supposed to have been found by this party in 1924, and also a hydrographic examination of a supposed rock in the vicinity of ⊙ Del (lat. 56° 39', long. 135° 10'). This much was covered in the specific instructions to this party and the results definitely disprove both the 11 fathom spot and the supposed rock.

   A drag with an effective depth of at least 70 ft. (there was considerable sag between buoys) was passed over the spot without grounding. It is therefore safe to assume that no such sounding exists, and justifies removing it from the sheet.

   In the vicinity of ⊙ Del a number of soundings were taken, all ranging from 42 to 55 fathoms, without any indication of a shoaling. This, together with the explanation given by the Chief of Party (see Descriptive Report H. 4430 Additional Work, Paragraph 4), is sufficient proof that no such rock exists, and warrants removing it from the sheet.

GPO

2. In addition to the above work a drag with an effective depth of 36 ft. was passed over a 10 fathom spot in Necker Bay which was reported to have been seen to break. The drag cleared without grounding which shows that the report was unfounded.

3. The work and records are satisfactory.

4. Reviewed by A. L. Shalowitz, November, 1925.

(Add'l. Work)

Descriptive Report
to accompany.

Hydrographic Sheet 4430

West Coast of Baranoff Island.

OCT 12 9 07 AM 25
16

This report covers the work done on this sheet by the party from the Str. Surveyor during 1925 in accordance with Director's letter #7-mcs dated June 29, 1925, subject: Revision Work. The work has been plotted on tracing cloth and can easily be transferred to the original sheet.

The 11 fathom spot in Whale Bay mentioned in paragraph of above letter was dragged over, using whale boats for towing the drag. There was therfore considerable sag and while the length of up-rights was only 72 feet, the drag was tested to 18 fathoms.

A 10 fathom spot in Wecker Bay was dragged over, as I had heard a report that it was seen to break. No tidal reduction was applied to the drag depth for this day's work as the tidal data had been transmitted to the office. I request that the tidal reductions be entered and applied before plotting on the smooth sheet. The tide gauge at Sitka was used, and the reading on the staff corresponding to the plane of M.L.L.W. is 9.8 feet.

Enough soundings were taken in the vicinity of the supposed rock near ⊙ Del mentioned in paragraph 3 of above letter to disprove its existence. The note mentioned in this paragraph should have been opposite the 13 fathom sounding. The name "Del" was applied to a small low rock-no signal was built on it, and it was not used as a signal by the party which did the hydrography in the immediate vicinity of the rock, so it would not be unnatural for the recorder to refer to it as a rock rather than as ⊙ Del.

On the bromide furnished to me there is a buoy shown off Port Banks, This was a temporary affair placed for the convenience of the ship when enetering Port Banks and has now disappeared. It should not be placed on the chart.

Respectfully submitted,
A. W. Sokinalski
Chief of Party, C. & G. S.

W.W.B. NOV 20 1925

Division of Hydrography and Topography:

✓ Division of Charts:

Tide reducers are approved in
3 additional volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4430

Locality: W. Coast Baranof I. - Alaska

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

Plane of reference is
9.6 ft. on tide staff at Sitka

For reduction of soundings, condition of records satisfactory
except as checked below:

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

H A Marmer
Acting Chief, Division of Tides and Currents.

Report on verifying and Inking Additional Hydrography and Wire Drag Examination H4395.

This work was received in the office on tracing vellum. Since there was so much distortion in the tracing the work was replotted on the original sheet.

The two wire drag strips are in Necker Bay and Whale Bay. The strip in Whale Bay disproves the 11 fathom sounding obtained in 1924. The strip in Necker Bay carried 36 feet over a ten fathom spot.

The hydrography disproves the supposed existence of a rock near signal DEL.

The records and notes are excellent. The field plotting is excellent.

F. M. Albert, Draftsman,
Section of Field Records

Nov. 27, 1925.

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 23 4430

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

General locality . ~~W.Coast~~ Baranof Island, ~~—~~ SW.Coast .

Locality . . . . . Pt. Lauder to Slate Islets, including Whale and Necker Bays ~~Whale Bay and Necker Bay.~~ . . . . . .

Chief of party . . A.M.Sobieralski . . . . . .

Surveyed by ~~R.R.Moore~~, H.B.Campbell, R.R.Moore R.W.Woodworth & H.E.Finnegan.

Date of survey . 1924 (Aug. to Oct.) . . . . . .

Scale . . . . . 1-20,000 . . . . . .

Soundings in . . . Fathoms . . . . . .

Plane of reference MLLW . . . . . .

Protracted by A.W.Skilling Soundings in pencil by R.W.Knox

Inked by J.D.Torrey. . . Verified by J.D.Torrey . . . . . J.R

Records accompanying sheet (check those forwarded): 3

Des. report, ... Tide books, ... Marigrams, 4 Boat sheets,

12 Sounding books, ... Wire-drag books, ... Photographs.

Data from other sources affecting sheet . . . . . .

Remarks: Sitka
Necker Bay
Port Banks.

4430

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic / *Hydrographic* } *Sheet No.* H4430
Add'l Work (1936)

State S. E. Alaska

LOCALITY

Baranof Island

Still Harbor

1936

CHIEF OF PARTY

H. Arnold Karo

U. S. GOVERNMENT PRINTING OFFICE: 1934

4430 Add'l Work (1936)

Form 537
Ed. Dec., 1930

REG. NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. .....

REGISTER NO. H-4430 (Add'l. Wk., 1936)

State South East Alaska

General locality Still Harbor

Locality Baranof Island

Scale 1 : 5,000 Date of survey Sept. 8, 1936, 19

Vessel ~~The~~ Westdahl

Chief of Party H. Arnold Karo

Surveyed by H. Arnold Karo

Protracted by W. R. Jackson (in office)

Soundings penciled by W. R. Jackson (in office)

Soundings in fathoms ~~xxxx~~

Plane of reference ~~M.~~ Mean Lower Low Water

Subdivision of wire dragged areas by .....

Inked by W. R. Jackson

Verified by W. R. Jackson

Instructions dated August 7, 1936

Remarks: .....

U. S. GOVERNMENT PRINTING OFFICE: 1931

POST-OFFICE ADDRESS: 601 Federal Office Bldg., Seattle, Washington.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

22 MP 82 IO CKG

1936 OCT - 8 - AM 11:53

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY M.V. WESTDAHL

Wrangell, Alaska, Sept. 12, 1936.

To: The Director,
U. S. Coast and Geodetic Survey,
Washington, D.C.

From: Commanding Officer,
U.S.C.& G.S.M.V.WESTDAHL.

Subject: Investigation of reported sunken rock in Still Harbor, Baranof Id.
Chart Letter #547 (1936).

Reference: 22-AA 1995 WE 4 8/7/36.

In accordance with above reference, the WESTDAHL proceeded direct from Juneau to Still Harbor arriving there on the afternoon of Sept. 7th, 1936. The remainder of that afternoon and all of the next day was spent in the investigation of this reported sunken rock.

Four of the 1924 topographic signals - Ile, Kan, Point, and Jus - were recovered and used to control the hydrographic work. A topographic traverse on a 1:10,000 scale (attached to D.R.) was run between these signals and was used for boat sheet control. This was later expanded to a 1:5,000 scale (attached to D.R.) for smooth plotting, which sheet is respectfully transmitted herewith. All soundings were reduced for the predicted tides at Port Banks.

All sounding was done from the small boats of the WESTDAHL. The reported rock was marked by kelp and was clearly visible, especially at low tide, as were the other rocks located. A buoy was placed on the top of this rock and a regular system of sounding lines run in this area, after which considerable time was spent in drifting over the rocks located and feeling for the least depth, using two hand leads. Sufficient positions were taken and plotted to assure that the areas were covered and the least depths obtained were recorded. As the bottom was visible, it is believed that the least depth on these rocks was obtained. Due to the presence of growing kelp a drag could not be used.
plotted on sheet, not noted in records. [illegible]

A list of the positions on which the least depth was obtained are listed below. These can be plotted on the original hydrographic sheet of this area.

Date	Time (135th Merd.) P.M.	Depth fms.	Depth ft.	Depth reduced for tide. fms.	Depth reduced for tide. ft.	No. and fix.		
9/8/36	4:03:30	2	5	1	2	(55)	Kan	53 01
							Point	
							Jus	65 22
"	4:05:20	2	5	1	2	(56)		54 47
							Same	
								58 49

Date	Time (135th Merd.) P.M.	Depth fms.	Depth ft.	Depth reduced for tide. fms.	Depth reduced for tide. ft.	Pos.No. and Fix.			
9/8/36	4:25:40	2	2	0	5	(65)	Kan Point	50	10
							Jus	52	14
"	4:41:00	2	5	1	2	(70)		28	43
							Same		
								69	48
"	4:45:00	2	5	1	2	(71)		30	37
							Same		
								67	11
"	4:52:00	2	5	1	2	(74)		29	11
							Same		
								70	43

H. Arnold Karo
Comdg M.V. WESTDAHL

135° 02' 00" (Approx.)

01' 30"

STILL HARBOR

BARANOF ID., ALASKA

Sept. 8, 1936

SCALE 1:5,000

Boat Sheet H-4430 Ad Wk.

NOTE

Signals used were recovered 1924 to
Signals. Soundings reduced using predicted
tides for Port Banks. Topo traverse ran between signals on
1:10,000 and expanded to 1:5,000 for smooth plotting.

T-4104

Ile (1924)

TOOH

Pos. 65
Least depth $\frac{5}{6}$ fm

Positions 70, 71, 74
Least depth $1\frac{3}{6}$ fms

Pos. 56
Least depth $1\frac{3}{6}$ fms

Pos. 55
Least depth $1\frac{3}{6}$ fms

Point (1924)

56° 33' 00" (Approx.)

56° 33' 00" (Approx.)

Jus (1924)

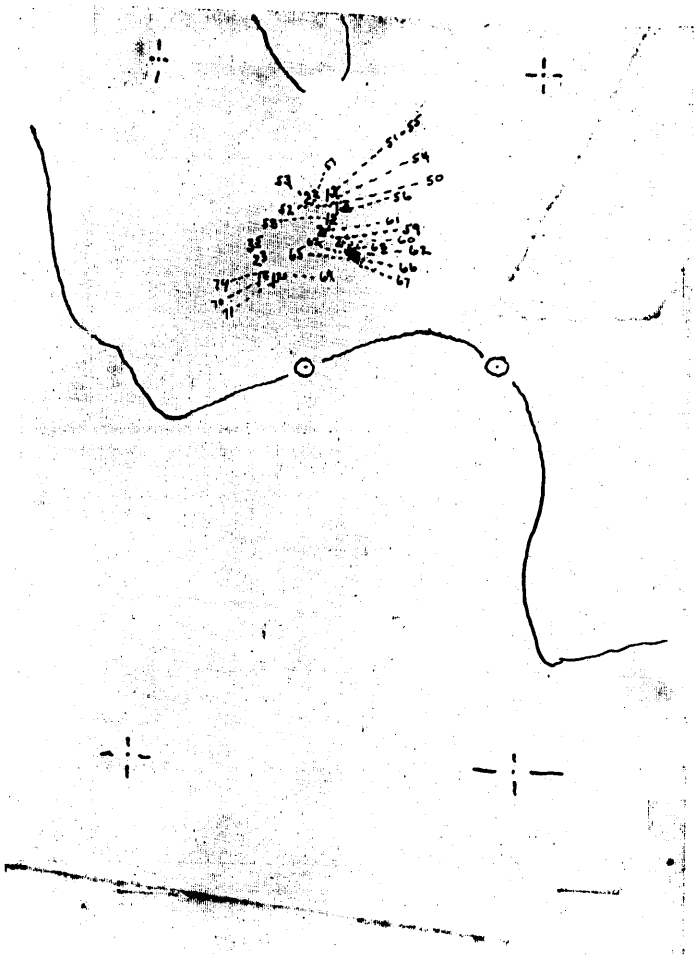
135° 02' 00" (Approx.)

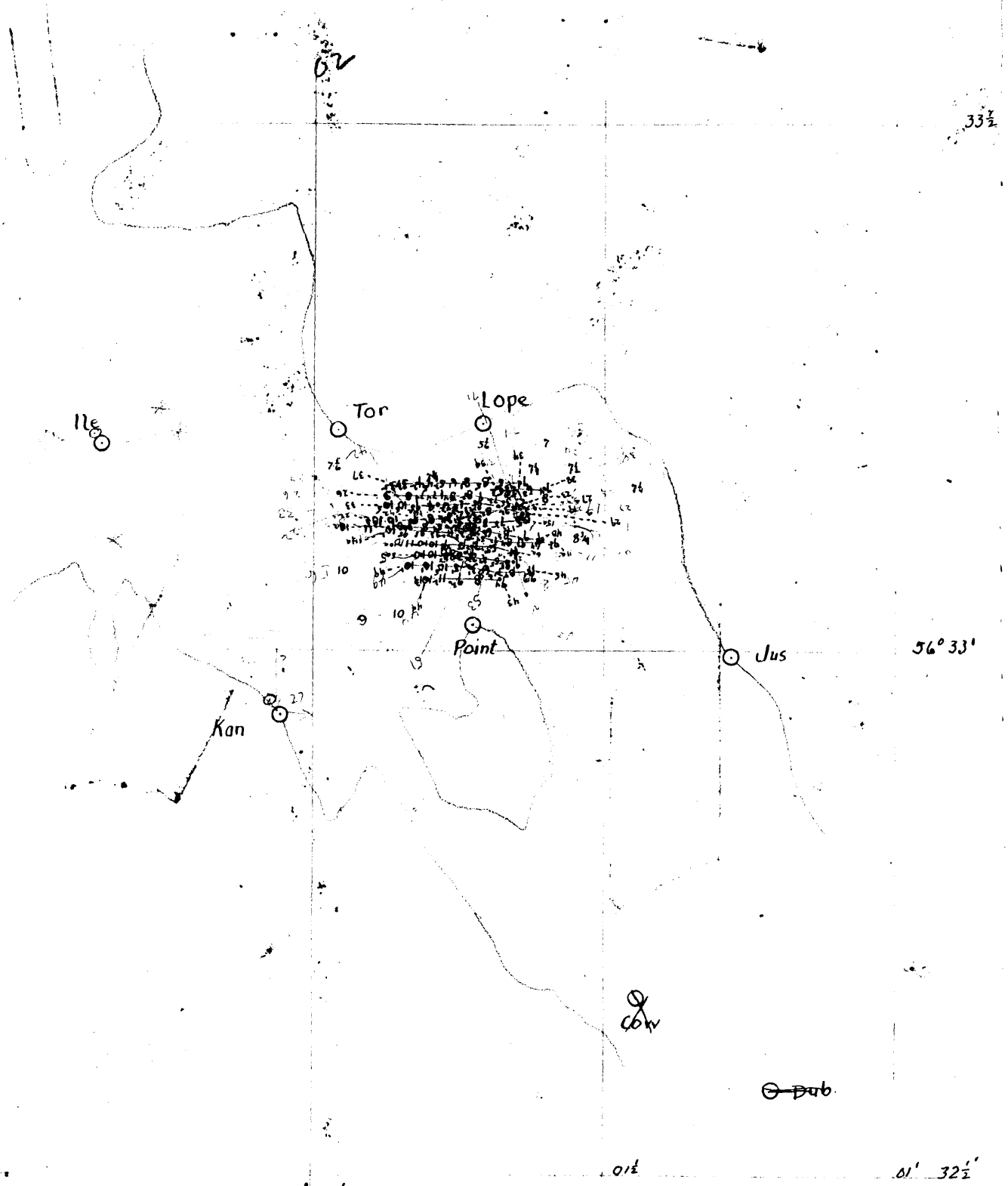
01' 30"

Kan (1924)

H4430

Additional Work, 1936





BOAT SHEET

STILL HARBOR, BARANOF ID., ALASKA.

M.V. WESTDAHL 9/8/36

Scale 1:10,000.

H4430

Additional Work, 1936

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H4430 Add'l. Work (1936)

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

Number of positions on sheet	...74.
Number of positions checked	....8.
Number of positions revised	....0.
Number of soundings recorded	..154.
Number of soundings revised	....3.
Number of signals erroneously plotted or transferred	....0.

Date: Nov. 9, 1936.

Verification by W. R. Jackson Time: 27 hrs.

Review by Harold W. Murray Time: 4½ "

Ver. Corrections by " " ¾ "

Report On H-4430 (Addional Work)

The additional work was plotted on a 1:5000 scale as an inset to H-4430.

The soundings in blue were taken from the 1924 Records rather than from the sheet and replotted on the inset. The positions were transferred from H-4430 to the inset. The more critical positions were replotted on the inset by extending the projection and using the original fix.

The additional work agrees with the 1924 survey.

The depth curves were completely drawn, but do not agree with the 1924 Survey. No changes made in original work on main sheet.

The least depth of 1 fm. on the 1924 Survey was plotted on the additional work inset and found to agree perfectly with the 1 fm. of the additional work development.

Respectfully Submitted,

William R. Jackson

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H 4430
Add'l Work (1936)
~~NO. 1~~

received Oct. 8, 1936
registered Oct. 29, 1936
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	C. K. Green

RAC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

October 31, 1936.

Division of Hydrography and Topography:

Division of Charts: Att: Mr. E. P. Ellis

Tide Reducers are approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET 4430 Additional Work 1936

Locality Still Harbor, Baranof Island, S. E. Alaska

Chief of Party: H. Arnold Karo in 1936
Plane of reference is mean lower low water from Sitka predictions
ft. on tide staff at
ft. below B.M.

Height of mean high water above plane of reference is 9.1 feet.

Condition of records satisfactory except as noted below:

Kane Schureman

Acting Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO.4430 (ADDITIONAL WORK,1936) FIELD NO. H-4430 (ADD'L WK.,1936)

Still Harbor, Baranof Island, S. E. Alaska.
Surveyed in 1936, Scale 1:5,000.
Instructions dated August 7, 1936. (Westdahl)

Hand Lead Soundings. 3 Point fixes on shore signals.

Chief of Party - H. Arnold Karo
Surveyed by - H. Arnold Karo
Protracted by - W. R. Jackson (in office)
Soundings plotted by - W. R. Jackson (in office)
Verified and inked by - W. R. Jackson

1. Purpose of Additional Work.

The purpose of this additional work was to investigate a reported sunken rock (Chart Letter 547 of 1936 and L. H. N. to M.34 of 1936) with a least depth of 1 2/6 fms. reported to have been struck by the Halibut Schooner NEPTUNE in Still Harbor (about midway between the large island and the mainland on the north-northwest). The rock was spotted on a section of Chart 8254 from which it was charted as a sunken rock.

2. Results of Additional Work.

The reported sunken rock was confirmed both in position and in depth. The rock in question is actually a ledge and is a continuation of the shoal area with least depth of 1 fm. found on the 1924 work about 75 m. to the north-northwestward. A least depth of 5/6 fms. was found on the present survey in the latter area.

An additional rocky area, entirely detached from the above, was also found about 130 m. northeast of the reported rock, several least depths of 1 2/6 fms. being obtained here.

3. Approximate Projection.

Four topographic signals established on the 1 to 20,000 scale survey, T-4104 (1924) were recovered by the present field party. A traverse was run between these signals on a scale of 1:10,000 and and enlarged to the scale of 1:5,000 for plotting purposes (both attached to D. R.) The distances between the signals differ slightly from those shown on the 1924 survey. Since no triangulation stations existed in the area of the present work, no rigid projection could be laid down. The projection has therefore been marked approximate; however, this will not introduce any material discrepancies when the work is applied to the chart.

4. Reviewed by - Harold W. Murray, Nov. 10, 1936.

Inspected by - A. L. Shalowitz

Examined and approved:

C. K. Green,
Chief, Section of Field Records.

L. O. Colbert
Chief, Division of Charts.

Fred. L. Veacock
Chief, Section of Field Work

G. Rude
Chief, Division of H. & T.