



U. S. SURVEY
NOV 21 1917
Acc. No.

3687

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

State: *S. E. Alaska*

11-5513

DESCRIPTIVE REPORT.

Map Sheet No. *3687*

LOCALITY:

1917

CHIEF OF PARTY:

A. J. ...

3687

Sheet 'C'

U.S. COAST AND GEODETIC SURVEY.

DEPARTMENT OF COMMERCE

E. Lester Jones, Superintendent.

Descriptive Report

of

Topographic Survey 3687

of

Frederick Sound in the Vicinity of
Wrangell Narrows.

S.E. Alaska.

Compiled by

George L. Bean, Aid.

Oct. 30, 1917.

WIRE DRAG PARTY No. 3

A. Joachims, Chief of Party.

Report of Plane Table Sheet "C" 3687

FREDERICK SOUND S.E. ALASKA

Wire Drag Party No.3

A.Joachims Chief of Party

Surveyed by A.L.Shalowitz, Aid

June-July, 1917

Scale 1/20,000

This survey was started in June and was carried on at different times when the drag party was operating in this vicinity.

Limits of the Sheet

Starting at a point on Kupreanof Island $\frac{1}{2}$ mile southeast of 10 mile creek, Frederick Sound, the work continues southeast to a point 1 mile north of the entrance of Wrangell Strait. At the south side of the entrance to the Strait, the work continues to a point about $1\frac{1}{2}$ miles west of Point Frederick.

On the Mainland side of Frederick Sound, The survey starts at Horn Cliffs and continues north to a point about $\frac{1}{2}$ mile southwest of Wood Point. Brwn Cove is omitted. The Sukoi and McDonald islands are all included.

Sheet "B" connects up with this sheet on its southern limits and sheet "D" with its northern Limits.

Controll of the Sheet

The old triangulation stations Cape, Take and Island and a ~~tri~~ triangulation scheme based on these furnished the controll for the survey.

Method of the Survey

In the main, rigid fixes and good resections were obtained. In an accasional stretch of shore line traversing was used.

Nature of Shore line

Along the Kupreanof Island side of Frederick Sound, covered by this sheet, the shore is covered with small boulders and an occasional outcropping ledge. It is generally about 100 metres between the high and low water lines.

In the vicinity of point ^{Agassiz} Agasey, between "Nook" and "South Base" sand beaches extend for several hundred meters down from the extreme high water mark. From South Base to Horn Cliffs, the shore is very steep (starting at high water mark) with gravel beaches extending down from high water mark.

Sukoi and McDonald Islands have rugged and precipitous shores.

North of point ^{Agassiz} Agasey is a wide marshy flat extending some distance back from the high water line

Flora

The trees consist of fir and yellow cedar with an undergrowth of alder, devil's club and various berry bushes. At point Agasey, a low flat country extends inland for several miles and is sparsely wooded and made up of swampy meadows. On the Kupreanof and Mitkof Island side, the area is covered by a heavy growth of medium sized trees. Small grassy are occasionally found.

General Resources

A great amount of timber suitable for piling and rough building purposes can be had in this vicinity. Game is plentiful, and large flocks of wild fowl can be found frequently on the lowlands in back of Point Agasey.

Good water supplies can be obtained, however there is no particular stream which could furnish much power.

The soil in back of point Agasey appears to be very rich and would probably be satisfactory for farming were it properly drained.

The western of the Sukoi Islands is used for a fox Ranch.

Coast Pilot

A rock awash at half tide is located about 200 meters off the shore of Kupreanof Island and opposite the southern end of Sukoi Island. This rock is marked by kelp.

Conclusion

This sheet was not completed owing to lack of time which was brought about by the sudden call from the field of the Party to meet the requirements of transfer of the personnel. Also constant rain retarded this work greatly.

Compiled by

George L. Bean
Aid C. & G. Survey

Revised by

Joachim
Junior H. & G. Engineer
Chief of Party Wire Drag No. 3

3687

Topographic Stations of Sheet "C"

Station	Latitude		D.M.	Longitude		D.P.
	°	'	meters	°	'	meters
Hole	56	48	664	132	54	841
White	56	52	9257 ³⁰	132	57	6154
House	56	52	1685	132	57	842
Small	56	55	316	132	58	662
Ag	56	56	553	132	53	131
Nick	56	53	330	132	55	896
Suk	56	53	284	132	54	371
Nook	56	51	722	132	54	376

Statistics

Number of miles of shore line:- 30.9

Area:- 8.0

Number of miles of creeks:- 0.7

Plane Table Survey of the Vicinity of Wrangell Narrows

Sheet "C".

S.E. Alaska.

Wire Drag Party No 3. June to September 1917. A. Joachims, Chief of Party.
Survey by A. L. Shalowitz, Aid.

Introductory Notes.

The survey of this area was made on a 20,000 scale. Work was begun in June and was continued at odd times during July, August and September when it least interfered with the wire-drag operations.

The work on McDonald Islands and the shoreline from Δ Cliff ~~Limits of the Sheet~~ to Brown's Cove was done under the not

the most unfavorable conditions - raining and blowing all the time. In an attempt to connect the work on this sheet with that of Sheet "D" the shore line from O Hook to the northern limit was run in on the last day of the season in the face of a strong Southeaster. The abruptness of the shore line in this vicinity increased the difficulties and what could not be gotten with the plane table was obtained by sextant angles and sketching.

Limits of the Sheet.

This sheet including both shores of Fredericks Sound as well as all the islands in between, starts on the south shore at a point about $3\frac{1}{2}$ miles east of Δ Lake, where it joins with sheet "B" to a point about $\frac{1}{4}$ mile west of Δ Lake. Then from a point about one mile north of the entrance of Wrangell Strait it runs in a general north west direction to about 3 miles northwest of Δ Noon joining Sheet "D". On the north shore of the Sound, the survey begins at Δ Cliff and runs to the south side of Brown's Cove and then from the north side of Brown's Cove it continues for about 1 mile northwest of O Hook, joining sheet "D".

Control and Method of Survey.

A number of recovered triangulation stations as well as additional established ~~stations~~ triangulation stations, together with a number of topographic stations furnished in the main the control for this sheet. Practically all of the stations established were later checked by a Primary scheme of triangulation carried down Fredericks Sound by Mr. Eickleberg so that it is considered that this sheet has excellent control.

In most cases rigid fixes were obtained and very little traversing had to be resorted to. The stretch of shore line from Δ Cliff to the

~~first prominent point to the northward~~ for about a mile to the northward was traversed. This was necessary owing to the weather conditions. ~~A~~ Long shots had to be taken on account of the abruptness of the shore line. This, however, was considered sufficient as a three point fix was obtained at the first point to the northward. The shore line from O Hook to the limit of the sheet was run in by a tangent cuts and sextant cuts and a few rod readings. At least two three point fixes were obtained ^{south of} the Sukor Islets.

Nature of Shoreline

On the south shore of the Sound, from the limits of the sheet to Wrangell Narrows the shore line is low and covered with small boulders. An occasional rock outcropping is seen and there are one or two rocky reefs that make out for a couple hundred meters off shore. Small patches of grass are found all along the shore close to the high water line. The tree line is but a few meters from the high water line. There is practically no sand beaches in this vicinity. From the north of the entrance to Wrangell Narrows to the limit of the sheet, the south shore is generally bold and rocky. Except in points here and there and particularly in bights do we find ~~sand~~ low shores. Here the ~~low shoreline~~ ^{beaches} consists of sand and gravel. In the main rocky ledges make out from the high water line. In the vicinity of O White shelving rock bounds. In the bight near O House there is a fairly good stretch of sand beach.

On the north shore of the Sound from Δ Cliff to the northward for a distance of about $1\frac{1}{2}$ miles the shore line is bold and rugged. The slopes of Horn Cliffs rising almost perpendicularly out of the water. There is very little low water line along this stretch, the little there is being composed of rocky ledges. In one or two places there is evidence of gravel. From here to the south side of Brown's Cove the shore is low except at points where they become bold. Coarse gravel and small boulders characterize this stretch in the main. Rocky ledges extend out a short distance from the points. The shore line in the bight just north of Brown's Cove is fairly low and flat with a good sand beach in the deepest part of the bight. As far as could be noted a large mud and sand flat ^{makes out for} covers the entire

depth of the bright at low water. Mud River, as it is called by the natives is located in this bright. A number of farms are located ~~here~~ along the west shore of this river. At high water a fairly good sized launch can navigate the river. The shore line in the vicinity of

Δ S. Bare is rocky and abrupt. There is very little low water line. From Δ S. Bare to just south of O Hook, ~~the shore~~ with the exception of the shore in the immediate vicinity of O Ag, the shore line is low, flat and very sparsely wooded. Sand beaches extend the entire length and the low water line makes out to over a quarter mile off shore. The shore around Point Agassiz is bold and rocky. ~~From here to northward to the end of the~~ bright, the shore line is cut up by numerous sloughs and creeks. A sand beach extends for a short distance back from the high water line and then the land becomes marshy and boggy. Although a few trees are scattered here and there near the high water line, the actual tree line does not start for over a quarter mile back from the shore. From just south of O Hook to the limit of the sheet, the shore again becomes bold and precipitous. The low water line consists in the main of rock shelving but in the brights there are small gravel beaches.

The Sukoi Islets have bold, and rocky shorelines in the main. Sedges extend out from the high water line except in some of the brights where gravel and small boulder beaches are found. On the west shore of the largest of the group, hard granite rock is to be found. Kelp is also found in patches around the islands.

The smaller of the McDonald Islands is a low, wooded island with flat, rocky shores intermingled with small boulders. The larger island is bold and precipitous. It is heavily wooded and is much higher than the smaller island. It spots the low water lines consists of coarse gravel and small boulders, but in the main it is rocky. Kelp surrounds both islands.

General Appearance of Country.

On entering Frederick Sound from Wrangell Narrows, the first impression received is that the country is heavily wooded and mountainous. And true it is when you do not bound yourself

by the limits of the sheet, for upon leaving the Narrows one is immediately confronted by that wonderful mountain range in the vicinity of Patterson Glacier. However, the ^{country, extending the} entire north shore from Brown's Cove to the western limit of the sheet is low, flat and sparsely wooded, except in the vicinity of Point Agassiz and O Hook where the country is somewhat higher. Point Agassiz is perhaps the most prominent point in the vicinity on account of its elevation and the thickness of the vegetation. Bordering each side of the ~~light~~ bay to the north of Brown's Cove are two knolls that rise to about 400 feet. In the vicinity of ~~Horn~~ ^{Horn} Cliff, Δ Cliff, the shores rise in the form of cliffs to a height of almost 1800 ft. Horn Mountain juts back of the cliffs rises to about 3000 feet and is one of the most prominent mountains in the vicinity particularly when approaching from the westward. In back of Horn Mountain there is a long flat ridge that descends on a very gentle grade, making the scaling of Horn Mountain a comparatively simple feat.

On the south shore of the ~~Is~~ ^{eastern} Sound, from the limit of the sheet to Wrangell Narrows the country is generally low and fairly well wooded. To the north of Wrangell Narrows and to the western limit of the sheet, a heavily wooded and mountainous country generally prevails. The timber line in most cases extend to a height of 3000 feet. The mountains are rugged.

The Sukoi and McDonald Islands are heavily wooded.

Fir and spruce trees ranging from sixty to one hundred and fifty feet predominate this region.

Contours.

The contours shown are at 100 foot intervals. Only two plane table cuts could be obtained but since both the elevations checked the location was accepted. The remaining area was not contoured on account of unfavorable weather conditions.

General Resources.

A great amount of timber suitable for pilings and rough building purposes can be had in this vicinity. Some is

plentiful, and large flocks of wild fowl can frequently be found in the lowlands in the region back of Point Agassiz. Fishing is excellent in the vicinity of Wrangell Narrows and in Five Mile Creek. A number of small farms are also located near this creek.

The soil in back of Pt. Agassiz appears to be very rich and may prove good farming land if properly drained.

Numerous creeks furnish fairly good water supply. About one mile and a quarter south of O Small there is a large waterfall that ~~could furnish~~ appears to be the outlet of a good sized lake. This, however, was not investigated.

The largest of the Sukoi Islets is used as a fox ranch.

Coast Pilot.

A rocky ledge that bears about 8 ft. at mean lower low water is located near Five Mile Creek and about ^{it is marked by kelp} 350 meters offshore.

The large creek near O House is known by natives as Five Mile Creek it being approximately five miles from Petersburg.

There are several rocks close to shore in the vicinity of the Sukoi Islands. These are awash at half tide. At low tide they are in most cases a part of the low water line.

A rocky reef near O Hole extends for about 200 meters offshore.

The only safe anchorage in the vicinity of this sheet is at Petersburg. A good fairweather anchorage can be found in Brown's Cove and in the bight just to the south of Brown's Cove, but even along here the ice ~~in~~ from Le Conte Bay is a common nuisance.

Conclusion.

About one mile of shore line from Δ Cliff to Δ Bob remains unfinished and the whole of Brown's Cove as well as about a mile of shoreline just north of Wrangell Narrows. These would have been completed were it not for the continued inclemency of the weather and the sudden termination of the season.

due to the transfer of the personnel to the Army and Navy.

Respectfully submitted,

Aaron L. Shalowitz,

Aid C. & G. Survey, Jan. 8, 1918.

Note:

all the inking on this sheet was done by ~~the~~ me before I left Seattle. Only the contours and lettering were left in pencil. I have, therefore, corrected the title sheet to conform.

A. L. S.