

10/21/47  
L.A. No. 1

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: *S. E. Alaska*

11-5813

DESCRIPTIVE REPORT.

*Top* Sheet No. *3690*

LOCALITY:

*L*

191*7*

CHIEF OF PARTY:

*A. J. Jackson*

Sheet "F"

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

E. Lester Jones, Superintendent.

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DESCRIPTIVE REPORT

of

Topographic Survey 3690

Of Cape Fanshaw  
and Vicinity.

Frederick Sound, S.E. Alaska.  
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Compiled by

George L. Bean, Aid.

Nov. 6, 1917.  
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WIRE DRAG PARTY No. 3

A. Joachims, Chief of Party.

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## Plane Table Survey of Cape Fanshaw and Vicinity.

Sheet "F" S.E. Alaska.

Wire prag Party No.3 July 1917. A. Joachims, Chief of Party.

Survey by A.L. Shalowitz, Aid.

Introductory notes.

This survey which was on a 20,000 scale, was made principally during the month of July. The south end of Storm Island was not completed due to continued rain and the necessity to take up other work.

Limits of the sheet

On the south shore of Frederick Sound, this sheet starts about three and one-half miles west of Portage Island, at the western limit of sheet "E", and continues westward to a point about one and one-half miles west of triangulation station Flat.

On the north shore of Frederick Sound it starts at the western limit of sheet "E" and continues westward to Cape Fanshaw, and then north to Mc Nairy Point.

It also includes Whitney Island and the north half of Storm Island.

Control of sheet.

The control of this sheet is based upon a triangulation scheme including the stations Fan, High, Shore, Flat, and Bill Point. With these stations well distributed over the sheet very good control was obtained and the work checked at all points. A number of topographic signals were used, including Storm, Rat, Pass, Creek, Front, So, Bit and Oak.

Method.

In surveying the south shore of Frederick Sound traversing was made use of in the main. The traverse was checked at stations Shore and Flat and by resections upon High and Fan.

On the north shore of the sound the same method was employed. From Cape Fanshaw a traverse was run to Mc Nairy Point and checked by tying to Bill Point.

Whitney and Storm Islands were done by traversing.

### Nature of shoreline.

On the south shore of the Sound the shore line is low with wide sand and gravel beaches. Here and there outcropping ledges and large boulders are found. Much of the way a short stretch of grass separates the high water line from the tree line.

On the north shore, from the eastern limit of the sheet to station High the shoreline is bold. Steep shores and rocky beaches are encountered except at the mouths of streams, where low sand beaches occur. From Point Highland west to Cape Fanshaw the points are bold with boulder beaches while the bays have low sand and gravel shores.

From Cape Fanshaw to Point Mc Nairy a bold shore line is found most of the way. At intervals sand beaches are found but ragged ledges and boulder beaches predominate. The tree line comes to the high water line.

Whitney and Storm Islands are bounded by steep rocky shores. Practically no low beaches are found.

The rocks in the vicinity of this sheet are mainly slate and granite, of a very hard nature. Some trap rock is found and here and there small deposits of quartz occur.

### Flora.

Fir and yellow cedar trees form the greater part of the vegetation. In most localities a dense tangle of undergrowth is found, consisting of berry bushes, alder, devil's club and ferns.

On the Mitkof Island side the land is low and cut up by small meadows covered with swamp grass and small stunted trees.

### General resources.

A great deal of lumber, consisting of medium sized fir and cedar is found. This lumber is used principally for piling and rough building purposes.

The principal industry in this vicinity is salmon fishing. Many salmon are caught in the locality of Cape Fanshaw and on the south side of the sound.

### Coast pilot.

Three small rocks are located 100 meters offshore at the eastern limit of the sheet on the north. These rocks are awash ~~at half tide~~ <sup>at low tide</sup>.

A dangerous reef extends out into the small bay located about one-fourth mile west of triangulation station High. It is awash at half tide and marked by kelp.

A reef extends about 100 meters off Cape Fanshaw. A reef extends about three hundred meters off the west side of the south end of Cleveland Passage. This is marked by kelp and awash at low tide.

A reef with several bad rocks are found on the north end of Whitney Island, and a reef and several rocks are located off the north end of Storm Island. One of these rocks which is about 400 meters offshore, is marked by kelp and awash at half tide.

On the south from triangulation station Shore to the western limit of the sheet, kelp is found in thick patches from 50 to 200 meters offshore.

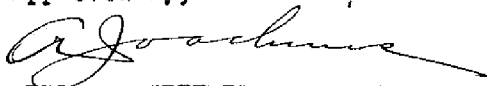
Small patches of kelp are found all along the north shore of the Sound, Cleveland Passage and around Whitney Island.

A secure anchorage for boats up to 100 tons is found in Cleveland Passage near the south entrance.

Conclusion.

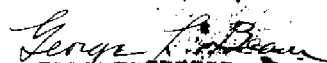
The south end of Storm Island and Bird Rocks were left undone due to bad weather and the sudden termination of the season.

Approved by,



Junior Hyd. & Geodetic Engr.  
Chief of Wire Drag Party No. 3

Compiled by,



Aid, C. & G. Survey.

## 3699

	0	1	meters	0	1	meters
Run	57	03	521	132	37	854
Banner	57	02	814	132	32	445
Bit	57	08	1169	132	25	301
So	57	09	1291	132	29	431
Front	57	10	1280	132	31	542
Creek	57	11	1452	132	31	181
Rat	57	13	21	132	31	603
Pass	57	14	686	132	30	499
Storm	57	13	343	132	33	651
Oak	57	01	543	132	27	199

## Statistics.

Miles of shore line: 35.3

Area: 39 square miles.

Miles of creeks: 1.1

Plane Table Survey of the Vicinity of Th Cape Fanshaw  
and Vicinity

Sheet "F".

S.E. Alaska

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

Introductory Notes:

This survey, made on a 20,000 scale, was done principally at odd times while running to and from the working grounds. So the work while actually begun in July, continued until late in September. The work in Cleveland Passage and around Whitney Island was mostly done in rainy weather and under the most unfavorable conditions. And Owing to the fact that practically the entire sheet had to be traversed, the continued interruption in the work by dispatching the party topographic party to other localities, proved a constant menace. The south end of Storm Island and the Bird Rocks, were not completed due to continued rain and the necessity to take up other work.

Limits of the Sheet.

This sheet includes both shores of Frederick Sound from a point about three and one-half miles west of Portage Island on the south shore, where it joins sheet "E", to a point about one and one-half miles west of triangulation station Flat.

On the north shore, it starts at the western limit of sheet "E" and continues westward to Cape Fanshaw, and thence northward to McNairy Point taking in the whole of Whitney Island and the northern half of Storm Island.

Control of Sheet and Method of Survey.

A few recovered stations and a Primary Scheme of triangulation run by Mr. Eickleberg furnished the main control of the sheet. A few of the topographic stations established were also subsequently used.

The distance of the signals made traversing imperative. On the south shore traverse lines were run in both directions from  $\Delta$  Shore and Flat. The discrepancies were within the prescribed limit, and so an adjustment was made. The entire north shore from  $\Delta$  Fan to the eastern limit of the sheet was traversed. From  $\Delta$  Fan to  $\Delta$  High, no adjustment was necessary.  $\odot$  Near  $\odot$  Bit a mark.

was left for continuing the traverse, but the work was again resumed after so long a lapse of time, that the mark was destroyed. It being the last day of the season and no other being available, it a point was assumed as the recovered one and the traverse continued to and closed on a point established at the western limit of sheet "E". An adjustment was made.

A traverse was started at  $\Delta$  Fan and run into Fauschaw Bay, but the character of the shore line was such as to render this impracticable. Consequently the west shore of Whitney Island was traversed and  $\odot$  Creek established on the mainland. From here the traverse was continued to Mc-Navy Pt. tying in with  $\Delta$  Bill Point. The east shore of Whitney Island was surveyed by three point fixes based on points established on the mainland.

#### Nature of Shore line.

The south shore of the Sound is <sup>generally</sup> <sup>wide</sup> low with gravel and boulder beaches. In the vicinity of  $\odot$  Oak, grass covered cobble stones are found in large numbers.

From  $\Delta$  Shore, westward to the limit of the sheet, the low water line is characterized mainly by rocky, kelp covered ledges that extends from 100 to 300 meters off shore. Coarse gravel beaches with sprinklings of rock outcroppings are also encountered. The beaches around the larger creeks are of fine sand. Along much of this shore, a short stretch of grass separates the high water line from the tree line.

~~The entire north shore from Cape Fauschaw to the eastern limit of the sheet, with the exception of about one mile of shore line in the vicinity of  $\Delta$  High,~~

The north shore, from the eastern limit of the sheet to just north about one quarter mile west of  $\odot$  Bit, the shores slope up at a very sharp angle, the region around Mt. Highland rising at almost an angle of 90 degrees. Gravel beaches with rock outcroppings are usually found except at the mouths of streams, where long sand beaches are usually encountered. The shore line from  $\Delta$  High to  $\Delta$  Fan is of a similar nature, but the slopes are much more gentle.

From  $\Delta$  High extending eastward for about a mile, the shore



line is bold and precipitous. There is very little low water line, and in the main consists of rocky ledges. Kelp lines the entire shore.

From Cape Fanshaw extending into Fanshaw Bay for about one mile and a quarter the shore line is extremely rugged, bold and rocky. The low water line consists of rocky ledges that extend out but a very short distance. From here all the way to McNairy Pt. the shoreline is low and consists of sand and gravel beach with rock outcroppings. Long sand spits make out from all of the larger streams. The ~~main~~ mountain slopes along this stretch are fairly steep.

A number of old docks are located ~~at~~ on the east side at the southern entrance to Cleveland Passage. Two docks are also located in the same vicinity, the one furthest to the north having a tide staff fastened to it.

Whitney and Storm Islands are bounded mainly by bold rocky shores. In one or two places there is a small stretch of gravel beach sprinkled with rock outcroppings. The low water line extends for a short distance out in the form of ledges.

The rock formations along these shores are of slate and granite. Here and there small deposits of quartz occur.

#### General Appearance of Country

The country in this locality is very heavily wooded. On the north shore of the Sound, in contrast to the south shore, mountains rise to a height of over 3000 feet. Most of these have distinctive features and can easily be distinguished. Opposite Pt. Highland there is a <sup>large</sup> valley that has an elevation of several hundred feet. The mountain marked with an elevation of 2945 feet is conical ~~and~~ in shape and is one of the most prominent peaks in the vicinity. Its summit is bare and the timber line extends to a height of about 2500 feet. Mt. Highland shown on the sheet with an elevation of 2410 feet is the western end of the Mt. Highland Range, mentioned in the report of Sheet "E". Mt. Highland is a square topped, wooded mountain that rises from the water at an angle of almost 90 degrees. The Laflgren Peaks (two) are very prominent and are back of the first range of mountains. The tops of these are bare.

On the south shore of the Sound is ~~low and heavily wooded~~.

~~There is~~ a long stretch of low, heavily wooded country. A little way back from the shoreline it becomes slightly rolling, while far in the distance there is a low mountain range, but no prominent peaks.

Whitney Island is heavily wooded island about 400 feet high with bold and rocky shores.

Storm Island is a small wooded island.

### Contours.

The contours shown are at 100 ft. intervals. They are the result of a combination of the plane table and sextant cuts. When the east shore of Whitney Island was surveyed, weather conditions were of such a nature as to render it impossible to obtain elevations. It was hoped that an opportunity would be found to occupy Bird Rock, from which check cuts could have been obtained to the Fairview Range, but the sudden termination of the season prevented this.

### General Resources.

A great deal of lumber, consisting of medium sized fir and spruce trees is found. This lumber is used principally for piling and rough building purposes.

Fishing is probably the principal industry in this locality. A fish trap is located just to the west of  $\odot$  50. Many salmon are caught in Cleveland Passage and the south side of the Sound.

Numerous streams furnish excellent water supply. Considerable game can also be encountered in this section.

There is a possibility of a development of the region bordering the south shore of the Sound, owing on account of the flatness of the country. The land, however, was not investigated.

### Coast Pilot.

The entire south shore is marked by large rocky ledges. Small boats should not approach this shore too closely and should keep well outside of the kelp line.

On the north shore near the eastern limit of the sheet, three small rocks are located about 200 meters off shore. These rocks are awash ~~at half tide~~ <sup>and it was noted that</sup> the note could not be recovered on the sheet.

A dangerous reef extends out into the small bay located about one-fourth mile west of  $\Delta$  High. It is awash at half tide.

Just inside the south entrance to Cleveland Passage, there is a long sand spit terminating in a rocky reef. The outer limit of the reef is marked by kelp and is awash at low water. Attention is called to the fact that this reef is shown as bare at high water on Chart 8200.

A reef with several bad rocks are found on the north end of Whitney Island, and there are several rocks of the northwest side of Storm Island. About 400 meters offshore from Storm Island towards Whitney Island is a rocky reef awash at half tide.

On the south from  $\Delta$  Shore to the western limit of the sheet, kelp is found in thick patches from 50 to 300 meters offshore. Small patches of kelp are found all along the north shore of the Sound, Cleveland Passage and around Whitney Island.

A secure anchorage for boats up to 100 tons is found in Cleveland Passage just inside the south entrance.

### Conclusion.

In conclusion it might be stated that all of the work within the prescribed limits of this sheet is now completed with the exception of the southern half of Storm Island and the Bird Rocks. ~~There~~ These would have been completed were it not for the continued rain and the sudden close of the season.

Respectfully Submitted,

Aaron L. Shalwitz

Aid, G. & S. Survey Jan 7, 1917.

### Note:

The shoreline on this sheet was inked by me before leaving Seattle. I have therefore corrected the title sheet to conform.

A.L.S.