3852

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

11—5613

State: S. E. Alaska

DESCRIPTIVE REPORT.

Topo Sheet No. 3852

LOCALITY:

Lynn Canal

N. Whidbey to

Berners Bay

1921

CHIEF OF PARTY:

N. H. Heck

N 5388

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET NO. A 2[illegible]

Limits:

This sheet extends from north latitude 58° 34' 30" to 58° 42' and from west longitude 134° 51' to 135° 15'. On the eastern shore of Lynn Canal the work at the southern limit connects with that of Mr. Friedenberg of 1917; at the northern limit the topography was carried around Pt. Bridget. At the southern limit of the western shore the topography was carried around Pt. Whidbey; at the northern limit it connects with Mr. Hoskinson's topography of 1921.

General Description of Shore:

From a point 100 meters north of ⊙ Ben, where my work joins that of Mr. Friedenberg, the shore is a steep cliff for about 400 meters. At this point its character changes, and sand and boulder beaches prevail up to the point 1/4 mile south of △ Cut. Two small wooded islands lie 1/4 mile southeast of this latter point. Here for 3/4 mile north the shore is a cliff, extending to the low water line in the form of a ledge. From this point the shore is a series of sand and boulder beaches to a point 300 meters north of the northernmost point of Mab I. From here north a steep cliff extends all the way to Pt. Bridget, broken by a reef about 1/2 mile north of Pt. Bridget, extending approximately 125 meters off shore. The shore of Mab.I. is principally a ledge formation.

The western shore, with the exception of a large bight from △ Bay to △ Whid, and Boat Harbor, is composed almost entirely of cliffs, broken by an occasional sand or boulder beach. The above mentioned bight consists of a series of reefs and sand and boulder beaches. From Pt. Whidbey north to △ Bay and from △ Wil to △ Lost a rocky ledge extends considerable distance off shore.

Landmarks:

A prominent scar at station Scar, caused by the absence of trees on an otherwise thickly wooded hillside. The scar extends about 175 feet in height from the water and is in the shape of an inverted V.

A light on Vanderbilt reef, flashing white every 15 seconds, flash 1.5 seconds' duration, of 230 candlepower, on white house, on square, pyramidal, skeleton tower on concrete base on reef. Lat. 58° 35' 21.4", long. 135° 01' 03.0".

Anchorages:

Bridget Cove, described in Lynn Canal Coast Pilot Notes for 1921.

Boat Hbr., described in Coast Pilot.

Inshore Dangers:

On the eastern shore, about 1/2 mile north of △ Bridget, a reef extends 125 meters off shore and 300 meters in length.

A wide berth should be given the shore in rounding Pt. Whidbey, as a shelf here extends approximately 200 meters off shore. A rock, baring at 1/4 tide, lies 750 meters northeast of the extreme southern point.

About 200 meters southeast of △ Bay are three rocks, baring at 3/4 tide.

Half way along the shore from △ Bay to △ Whid are a number of rocks awash, the outermost lying about 225 meters off shore.

The shore from Pt. Whidbey north to △ Bay and from △ Wil north to △ Lost should be given a good berth by small craft, due to the shelf extending off shore.

Survey Methods:

The following points of control were established by triangulation: Stations Cut, Mab, Scar, Bay, Light. (A.M.Weber 1921.). Stations Bridget, Whid, Wil. (G.C.Jones 1921). Stations Boat, Lost (A.P.Ratti 1921.).

Plane table station Nor (B.Friedenberg 1917) was recovered. Plane table station Ben was established.

The shore line was run in by traversing between triangulation stations, with resection on stations and three point fixes as a check on the readings. At points Whidbey and Bridget a three point fix was secured about 1/4 mile from the end of the work and the remaining shore line traversed. After traversing south about 2 1/2 miles from station Out the shore line tied in within about 12 meters of Mr. Friedenberg's work of 1917.

The form line work was done after the completion of the shore line by taking one day to occupy the necessary triangulation stations on each shore.

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

October 25, 1924.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 3852

Lynn Canal, Alaska

Surveyed in 1921

Instructions dated February 17, 1921.

Chief of Party, N. H. Heck.

Surveyed and inked by A. M. Weber.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of the survey conform to the requirements of the General Instructions, except that there are only one-fourth the specified number of determined elevations. Only one day was spent in determining elevations and sketching formlines.

3. The plan and extent of the survey satisfy the specific instructions. Although not specifically ordered, the survey should have been carried into St. James Bay. There is an excellent topographic and hydrographic survey of this bay made in 1890 but it lacks control. The survey should have included Boat Harbor. The only information regarding this harbor is a sextant survey which also lacks control.

4. The junctions with adjoining contemporary surveys are satisfactory. Those with previous surveys of St. James Bay and Boat Harbor are inadequate.

5. No additional surveying is needed within the area of the sheet, other than suggested in preceding paragraphs.

6. The character of the surveying and drawing of the shoreline are good, but the scope of the work and the representation of form lines are only fair.

7. Reviewed by E. P. Ellis, October, 1924.

Form 537a
11—5813

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic 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. 3852

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

General locality . ~~S.E. Alaska~~ . . . . . .

Locality (Lynn Canal) . Pt. Whidbey to Berners Bay.

Chief of party . . N.H.Heck . . . . . .

Surveyed by Albert M. Weber . . . . . .

Date of survey . July, August 1921 . . . . . .

Scale . 1 - 20000 . . . . . .

Heights in feet above Mean sea level . . . . . .

Contour interval . 100 . feet.

Inked by . A.M.Weber . . . Lettered by . A.M.Weber . . . . . .

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet . . . . . .

Remarks: