

3847

SURVEY
L. R. A.
DEC 19 1921
AOS. No.

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

State: *S. E. Alaska*
11-5613

DESCRIPTIVE REPORT.

Topo Sheet No. *3847*

LOCALITY:

Stephens Passage
Limestone Islet
D. H. Arden

1921

CHIEF OF PARTY:

N. H. Heck

3847

Applied to Reconstruction of Chart 8235 270-40 by Chas R Bush Jr

LIMITS:

This sheet extends from north latitude $58^{\circ} 01'$ to $58^{\circ} 12'$, and from west longitude $133^{\circ} 56'$ to $134^{\circ} 17'$. It connects on both sides of Stephens Passage with the work done by Mr Ratti in the 1920 season. On the mainland the work starts at \odot LING about $1\frac{1}{2}$ miles north of Grave Point and extends north to a point $1\frac{1}{2}$ miles south of Point Greeley, the limit of the work done on this shore of Taku Inlet.

GENERAL DESCRIPTION OF SHORE:

The shore at \odot LING is a very steep cliff, broken by a small bight $1\frac{1}{2}$ miles north of the signal and then continuing well around the point into Slocum Inlet. From Slocum Inlet north the shore line is a series of rocky ledges separated here and there by sand and boulder beaches. At \triangle SLOCUM the shore is very steep cliffs which continue to the end of the work on this shore. Along this stretch of shore the rocks are highly colored, reds and browns prevailing.

On the Admiralty Island side where my work joined Mr Ratti's the shore is a flat boulder beach with rolling country in back. The beach marked boulders is made up of many large boulders many laying 30 or 40 meters from the low water line. At \triangle DOTY the shore is very steep again and from there into the next cove is a series of rocky points decreasing in height as the head of the cove is reached. This cove resembles Slocum Inlet in that it has a large tidal flat with grassy banks at the head. The shore from the head of the cove again grows steeper, and at Cove Point it

is a steep grass topped cliff. From this point to A CORNER, the only real high cliff is at point Arden, the rest of the shore is the series of rocky points and short beaches. The whole length of shore on this sheet is lined with trees.

LANDMARKS:

Cone shaped hill at Circle Point, hill is 1060 ft. high and covered with trees. The southern slope of the hill has been burnt over leaving the trees dead.

Point Arden, described in Coast Pilot.

INSHORE DANGERS

A large rock $\frac{3}{4}$ mile S.W. from Cove Point a small part is bare at all stages ~~to~~ the tide. This rock is connected to the mainland by a reef part of which is exposed at low water the rest has about 3' of water covering it at low tide. Rock is surrounded by kelp beds. Small boats going in the cove should give this rock a wide berth.

The shore for a mile north and a mile south from Signal SLOCUM is very reefy with here and there a rock lying 20 or 30 meters outside the low water line. In all cases bad spots are indicated by kelp beds.

ANCHORAGES:

Slocum Inlet 1 mile long $\frac{3}{4}$ mile wide, $\frac{1}{4}$ mile of the Inlet is bare at low tide. The Inlet is a possible anchorage for a SK but is not recommended.

SURVEY METHODS:

Points of control were recovered from previous work as follows: Triangulation stations, ROCK, STONE, KUPAK, GRAVE, (J. Senior 1920

CIRCLE, SLOCUM, GRAND, DOTY, COVE, ARDEN, ARDEN Lt., BISHOP, SALISBURY
TANTILLON, MARMION Lt. (F.S. Borden 1917).

Plane table positions, LING, STEP, HEN, (Mr Ratti 1920).

FOUND, END, marked with hydrographic disks and described on form 524.

The shore line was run in by traversing between triangulation stations and checking readings between stations by resections and three point fixes.

Form line work was carried right along with the shore line. The entire area covered with the form lines, with the exception of two small spots marked "bare", is thickly wooded.

On Admiralty Island the plan was to start at signal O NUS. I was unable to recover signal NUS, so started work at signal DOTY and traversed south for approximately $1\frac{3}{4}$ miles, this brought me to Mr Ratti's shore line but did not check. At the time I checked my position with all the signals visible. Several attempts were made to run on to the next station but weather was always unfavorable. As the shore at this point is a gentle sloping boulder beach, and the high water line is not well defined, I would suggest that the discrepancy be equally divided.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 24, 1924.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 3847

Stephens Passage, Alaska

Surveyed in 1921

Instructions dated February 17, 1921.

Chief of Party, W. H. Heck.

Surveyed and inked by B. H. Rigg.

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-half as many determined elevations as are called for. The limits of woods should have been indicated.
3. The plan and extent of the survey satisfy the specific instructions.
4. The junctions with adjacent surveys are satisfactory.
5. The triangulation datum of this sheet differs from that of T. 3849 which adjoins it on the north. The triangulation of this locality has not yet been adjusted, and this should be considered when using either sheet.
6. Except for the meager vertical control the character and scope of the surveying and field drafting are good.
7. Reviewed by E. P. Ellis, September, 1924.

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. 3847

State S. E. ALASKA
General locality S. E. ALASKA Stephens Passage
Limestone Islet to Pt. Arden
Locality . . . Stephens Passage (northern part)
Chief of party N. H. Heck
Surveyed by Benjamin H. Rigg
Date of survey . . . Season 1921
Scale . . . 1 to 20,000
Heights in feet above Mean sea level,
Contour interval 100 . feet.
Inked by B. H. Rigg . . . Lettered by B. H. Rigg
Records accompanying sheet (check those forwarded): Photographs,
Descriptive report, Horizontal angle books, Field computations,
Data from other sources affecting sheet

Remarks: Sheet No. 1.