State: S.E. Alaska

Locality:
Stephens Passage
Point Hobart to Windham Bay

Chief of Party:
M. A. Heck
Descriptive Report to Accompany Sheet #3.

Limits and Extent.

This sheet covers the coast line from Point Hobart north eastward into Hobart Bay for about 2½ miles, Entrance Island, the main coast from a point that looks into the bay to a point that looks into Windham Bay, Sunset Island, the Twins, and two small islands at the entrance of Windham Bay, shown on a sub-plan on the same scale of 1:20,000.

General description of the Coast.

The projecting points along the coast are rocky and steep. The bays and small indentations are generally of a sandy and gravel character.

The shoreline around Point Hobart is very steep and rocky. The west shoreline of Entrance Island is almost perpendicular for a height of 458 feet.

From topographic station WASH north the shoreline is very steep and is impossible to traverse at high water. The reefs west of topographic station MAC are covered at high water.

Rocky reefs from 10 to 50 meters fringe this section of the coast at low water.

Outlying dangers and islands.

Care should be taken in entering Hobart Bay. There is a reef about 200 meters northwest of a small island about 1 mile northeast of topographic station HAP which should be given wide berth. Reefs covered at low water extend out in a northwest direction from A Foul. Reefs from 20 to 50 meters are visible around the Twins at low water.

A reef about 100 meters extends out on the east side of the largest island where topographic station is located, in the entrance to Windham Bay. It is covered at high water. There are three rocks on this reef that are awash at about half tide.

Landmarks.

The Twins are two small, wooded islands off the entrance to Hobart Bay and about two miles off main shore. The south tangent to the west Twin should be due range with the north tangent to the east Twin in entering Hobart Bay.

Sunset Island is a large thickly wooded island (400 feet high) about three miles southward of the entrance to Windham Bay and 1½ miles off the main shore. The nature of its shore is rocky and steep. There is a reef that is awash at half tide south of it and about 30 meters off shore.

There is an island in the middle of Windham Bay that is thickly wooded and 167 feet high. At high water the island is divided into a large and small island; it is about ½ mile off shore in a northwesterly direction.

A reef makes off on its east side about 100 meters. There are several rocks in this vicinity that are awash at half tide.

Augustus P. Ratti

Jr. H. & F. E.
Northwest of this island there are two islets (wooded). The most northerly one is 97 feet high while the one to the south is about 50 feet high. There are two fish traps in the vicinity of Point Hobart.

A fish trap is located about two miles north west of Entrance Is. in Hobart Bay; one three miles northwest and another about four miles northwest of Entrance Island.

A large, square, brown scar on a steep, rocky cliff on the mainland is located about two and one half miles southeast of Sunset Island. It is described on form 524. Another scar is located on the west side of Entrance Is. on the steep, rocky cliff. It is described on form 524.

System of Control.

Points of control were established by tertiary triangulation by Jack Senior, H.& G.M. The main scheme stations are as follows: Hobart, Han, Foul, Crow, Tot, Bash, Sunset #2, Twin 1917, Isle. Topographic station established were: Map, Bink, Brown, Scar, Mac, Trout.

Methods.

The coast was surveyed by traversing entirely and checks were obtained by resection on A Isle, A Sunset #2, and A Windham. Small discrepancies between stations were corrected in the field.

Form lines were obtained by occupying A Windham, A Sunset #2 and A Isle.

Augustus R. Rattl

N. V. E.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS.

REPORT ON TOPOGRAPHIC SHEET No. 3806.

Surveyed in 1920.


1. This survey conforms to the General Instructions with the following exceptions:
   a. The magnetic meridian is not shown.
   b. The plane of reference should be mean sea level instead of high water.
   c. There are not as many determined heights for controlling forms lines as prescribed.
   d. Elevations of detached islets should be given.
   e. Except for a narrow strip alongshore the character of vegetation is not indicated.

2. The junctions with adjoining sheets are satisfactory except at the entrance to Windham Bay. The representation of the islets east of Pt. Windham does not agree with that on topographic sheet No. 3812 nor with chart No. 8218. An additional survey should be made of these islets.

3. The extent of the survey satisfies the specific instructions.

4. The character of the surveying is good and inking of the sheet is passable.

5. Reviewed by E. P. Ellis, April 22, 1921, and two copies of this report to be sent to Division of Hydrography and Topography.

An extra contour was drawn on several islets due to inexperience of topographer. The surveying is passable as far as charts are concerned. This has been done.

Approved

N.M. Arch

ST. L.

F.H.M.
To: The Director, Coast and Geodetic Survey

From: Commanding Officer, Str. EXPLORER

Subject: Discrepancy in topographic sheets.

1. Your letter of April 23 which was received on May 14 (owing to present mail conditions) resulted in a careful investigation of the discrepancies mentioned. Both officers involved have been asked to explain the discrepancies and I have made a personal investigation of the locality to decide whether the shoreline should be rerun. The enclosed tracing shows my conclusion as to the exact conditions and it is my opinion that it is unnecessary to rerun the area.

2. Taking first the northern group of rocks in the entrance to Windham Bay, I find that the northern group of two was carefully run by Mr. Senior at low tide in full detail. The same group was unfortunately placed on his sheet by Mr. Ratti without complying with the requirement that he should actually run any work shown on his sheet. He is in fault to that extent. It is my recommendation that this be stricken from his sheet with proper remarks. The small detached rock shown on his sheet is correct in position and was carefully run after a point on it was located from two stations. The whole difficulty rose from departure from the rule usually observed that all overlapping of shoreline should be at triangulation points.

3. The next point is the number of islands in the group at the middle of the entrance to Windham Bay. The whole difficulty here is the nature of the topographic features. This region consists of strata of rather soft rock lying at an angle of nearly 45 degrees with the vertical. In many places the softer part has washed away. The result is that this group is one island at low tide and can be considered any number from two to five at high water. That is the eastern island of the group has several narrow breaks through it none of which are ten meters wide and therefore scarcely to be shown on the scale of the sheet. The topography as shown gives the best interpretation. A casual glance in passing indicates three islands as one of these narrow pillars has a break in the trees on each side of it and this adds to the effect of separation. It should be noted that Mr. Ratti was given special instructions last year to examine this area at low tide to make sure that the rocks to the eastward were correctly shown.

4. With reference to paragraph 3 your letter, I consider Mr. Weber at fault in verifying a projection that contained an error. I find that the reason the error was not discovered was because it caused no error. It will be noted that Station Windham was plotted from the parallel to the south and that the position is identical on both tracings. This in no way excuses Mr. Weber, and if he were still under my command the matter would be called to his attention.

5. It should be understood that topography in exact compliance with the instructions for field work is one of the aims of the present season. For the present only one party will be at work and shoreline and form lines will be carried on continuously.
6. It is hoped that if any other discrepancies develop, however minor, they be referred to me as the entire region is being covered to a certain extent a second time by reason of the "clean-up" wire drag work and the precise triangulation. I am for example repeating all the magnetic observations of last year whenever practicable as they were done with an inferior instrument and am resuming all levels.

7. It is my opinion that any discrepancies in last year's work were due rather to defects in system than in the work of individuals. It required the season's work and study of the results last winter to iron out the defects. It is believed that this has been accomplished except that the shortage of one officer from the normal complement throws work on me which should be done by another officer and I therefore am not able to put as much time on examining results as I would prefer. I further consider that the zeal with which Mr. Senior carried on topography in addition to his duties as Executive Officer, the latter by no means small during the period of organization and labor unrest, and of Mr. Ratti, without previous experience in Alaskan topography was highly praiseworthy, even if in a few cases their work failed to reach the high standard which is so essential in work which is intended to be final. The fact that topography is the one branch of Coast Survey work in which I have had least experience of course had its effect last year.

N. H. Heck
Commanding Str. EXPLORER
Above Topography is correct except small island marked (97). This is correctly shown on Mr. Senior's sheet. Parallel 57°34' is error but no topographic work is affected. 

N.H. Hack
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. 3806

State: S. E. Alaska

General locality: Stephens Passage

Locality: Point Hobart to Windham Bay

Chief of party: E. H. Heck, H. & G. A.

Surveyed by: Augustus P. Ratti

Date of survey: August, 1920

Scale: 1:20,000

Heights in feet above M.W.

Contour interval: 100 feet

Inked by A. P. Ratti. Lettered by A. P. Ratti

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

Remarks: