DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: S.E. Alaska.

DESCRIPTIVE REPORT
Topographic Sheet No. \( \frac{1}{2} x 4726 \)

Locality
Kenai Peninsula, S.E. Alaska
Pt. Turbot to Cosmos Cove
Eastern Coast; Baranof I.

1932

Chief of Party
G. C. Jones.
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "K"

KASNYKU BAY, S. E. ALASKA

1932.
INSTRUCTIONS:

The Director's Instructions dated March 24, 1932, required a survey of Kasnyku Bay, which is a small cove off Chatham Strait, along the East shore of Baranof Island.

LIMITS AND SCALE:

The survey includes the shoreline between Cosmos Cove, on the North (latitude 57°14', longitude 134°50') and Point Turbot on the South (latitude 57°09', longitude 134°47').

The scale of the sheet is 1:10,000, with the exception of Kasnyku Bay, which is surveyed on an insert of 1:5,000.

CONTROL:

Four triangulation stations, Kelp 2, Turbot 2, Rocky and Wash, were recovered. These stations were established as a part of the second order scheme executed by J. M. Smook, in 1925, in Chatham Strait.

"Kelp 2", at the entrance to Cosmos Cove, furnished control for the northern limit of the work.

"Turbot 2", located on White Rock at Point Turbot, furnished control for the southern limit of the survey.

The baseline "Rocky-Wash", on the eastern shore of Chatham Strait, was used to determine two stations (Round and North) at the entrance to Kasnyku Bay.

Kasnyku Light situated near the head of the Bay, was located as an intersection station by cuts from "Round", "North" and "Rocky".

In addition to the above, three signal cloth banners established by the signal building party were observed by single cuts from "Rocky" and "Wash". These three intersection stations, ("Tak", on a rock South of Turbot Point; "Bot", about one-half mile North of Turbot Point; and "Kas", near the head of Kasnyku Bay) although having no check cut did aid in the control of the topography and hydrography.
SURVEY METHOD:

Traverses were run between triangulation stations. With exception of the short traverse between station "Turbot" and station "Bot", all traverses closed well within the allowable standard of accuracy. When re-examined in the field, the traverse between station "Turbot" and station "Bot" was corrected. It was found that an error in rod reading had been made in the original traverse.

WEATHER AND WORKING DAYS:

With the exception of three days there was rain throughout the period of this survey. In order that the work might be finished as quickly as possible, thus avoiding the necessity of the ship making a long run for additional fuel and supplies, the work was carried on during all but the heaviest of rain squalls and on Sundays, if possible.

SHEET DISTORTION:

The variable weather caused unequal distortions in the sheet. This necessitated continual application of corrections to the rod readings.

UNFINISHED WORK:

Due to unfavorable weather and lack of time no form lines were obtained.

The topographer neglected to draw a magnetic meridian on the sheet.

JUNCTURE WITH PREVIOUS WORK:

This survey joins with chart No. 8243, on the South at Point Turbot. Due to the fact that this chart is on a scale of 1:20000 and to the unknown difference in datum on which it is constructed, we are unable to determine definitely the closure with the old work.

On Chart No. 8243, at the entrance to Cosmos Cove, are shown two small islands, in addition to the reef on which station "Kelp 2", is located. As shown by this survey there is but one island, in addition to the reef, at the entrance to Cosmos Cove. This island is entirely wooded except for a small neck of land between the Southwestern point and the rest of the island. This small neck or gap is grass covered. From the Southeastward the southwest point appears as a separate small island.
At the Southern point of the entrance to Cosmos Cove, where the present survey ends, it is believed that a satisfactory juncture has been made, but due to the unknown difference in datum this cannot be determined definitely. From this point South the shoreline shown on Chart 22250, is definitely wrong.

**GENERAL DESCRIPTION OF THE COAST LINE:**

From Point Turbot, to the head of Kasnyku Bay, the shoreline is in general rocky cliff, rising abruptly to irregular rocky peaks two to three thousand feet in elevation. These hills and peaks are wooded from the shoreline up to an elevation of approximately two thousand feet. The North shore of Kasnyku Bay and the shoreline between Kasnyku Bay and Cosmos Cove, is in general small rocks and boulders, with several points of rock cliff. The hills off the peninsula between Kasnyku Bay and Cosmos Cove are all wooded and rise to elevations of fifteen hundred to two thousand feet.

**LIST OF NEW NAMES:**

Well established local names: Hidden Falls, Ell Cove, Waterfall Cove, Round Island, and North Point.

Hidden Falls is the post office address of the place and therefore it is considered to be the official name.

Mr. E. F. Ficken, manager and part owner of the Hidden Falls Lumber Mill, stated that Ell Cove, Waterfall Cove, North Point and Round Island are local names by which the places (as shown on the sheet in pencil) are commonly known. Mr. Ficken has been living at Hidden Falls for five years.

**LIST OF OFF-LYING ROCKS AND DANGERS:**

On 1:10,000 scale:

1. Rock bare 7-1/2 feet at H.L.L.W., 245 meters S. 50° E. (true) of station "TURBOT 2", in Latitude 57°09', 1280 meters, Longitude 134°47', 917 meters.


3. Along the South shore of the entrance to "Ell" Cove a rock bares 9 feet at H.L.L.W., 136 meters S. 48° W. (true) of signal "LICK", in Latitude 57°12', 132 meters, Longitude 134°50', 323 meters.

On 1:5,000 scale insert:

1. A reef, about 15 meters long North and South, lies fifty meters off the Easternmost rock islet of the group of small islands forming the South side of the main entrance to Kasnyku Bay.

This reef covers one-half foot at M.L.L.W., Location:
77 meters N. 53° E. (true) of signal "OUT", in Latitude 57°12', 1110 meters, Longitude 134°49', 862 meters.

2. Rock bare one half foot at M.L.L.W., 65 meters, S. 19° E. (true) of signal "OUT", in Latitude 57°12', 998 meters, Longitude 134°49', 922 meters.

3. Rock bare one half foot at M.L.L.W., 92 meters N. 40° W., (true) of signal "OUT", in Latitude 57°12', 1130 meters, Longitude 134°49', 1001 meters.

4. Rock awash at three quarters tide, 245 meters, S. 65° E., (true) of triangulation station "ROUND", in Latitude 57°12', 956 meters, Longitude 134°50', 252 meters.

5. Rock bare five and one half feet at M.L.L.W., 185 meters, S. 53° E. (true) of triangulation station "ROUND", Latitude 57°12', 947 meters, Longitude 134°50', 328 meters.

6. Rock bare one-half foot at M.L.L.W., 100 meters, S. 70° E. (true) of signal "NINE", in Latitude 57°12', 1320 meters, Longitude 134°51', 252 meters.


9. Rock bare five feet at M.L.L.W., 296 meters, S. 37° E. (true) of Kasnyku Light, in Latitude 57°12', 1638 meters, Longitude 134°51', 660 meters. This rock is marked by spindle beacon with barrel top.

997 meters. This rock is marked by a spindle beacon with barrel top.

of Kasnyku Light, in Latitude 57°12', 1700 meters, Longitude 134°51',
955 meters.

12. Rock bare 5 feet at M.L.L.W., 226 meters, S. 66° W. (true)
of Kasnyku Light, in Latitude 57°12', 1786 meters, Longitude 134°52',
40 meters.

13. Rock bare 2 feet at M.L.L.W., 84 meters N. 21° E. (true)
of Kasnyku Light, in Latitude 57°13', 95 meters, Longitude 134°51', 810
meters.

14. Rock bare 5 feet at M.L.L.W., 52 meters, N. 69° E. (true)
of signal "AL", in Latitude 57°13', 280 meters, Longitude 134°52', 202
meters.

15. Rock bare 3-1/2 feet 274 meters N. 10° E. (true) of
Kasnyku Light, in Latitude 57°13', 285 meters, Longitude 134°51', 768
meters. There is foul area between the rock and the shoreline to the
Northward.

16. Rock bare 2 feet at M.L.L.W., 295 meters, N. 28° E. (true)
of Kasnyku Light, in Latitude 57°13', 280 meters, Longitude 134°51',
705 meters. There is foul area between this rock and the shoreline
Northward.

17. Rock bare 5 feet at M.L.L.W., 102 meters S. 46° E. (true)
of signal "STICK", in Latitude 57°13', 526 meters, Longitude 134°52',
8 meters.

18. Rock bare 4 feet at M.L.L.W., 89 meters, S. 38° W. (true)
of signal "MAN", in Latitude 57°13', 914 meters, Longitude 134°51', 906
meters. There is another rock which bares 2 feet lying 13 meters S. 62°
W. (true) from this position.

19. Rock awash at M.L.L.W., 200 meters, S. 58° W. (true) of
station "NORTH", in Latitude 57°13', 535 meters, Longitude 134°50',
603 meters.

20. Rock awash at M.L.L.W., 167 meters, S. 50° W. (true) of
station "NORTH", in Latitude 57°12', 534 meters, Longitude 134°50',
560 meters.
Respectfully submitted,

Henry E. Finnegar,
H. & G. Engr., C. & G. S.

APPROVED AND forwarded:

G. S. Jones,
Chief of Party, C. & G. S.,
REVIEW OF TOPOGRAPHIC SURVEY No. 4726

Title (Par. 56)  At Icubot to Comox Cove, E. Coast of Baranof I., Alaska

Chief of Party J. B. Jones Surveyed by H. C. Finnegan and by H. E. Finnegan

Ship Explorer Instructions dated March 24, 1932 Surveyed in Sept. 1932

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for -elevation-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.)

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) The legends use L.C. instead of caps to indicate the stage of tide.

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

10. The present survey shows the reef on which G. Knapp is located as a reef, coming to 2.5. The reef shown above it is an islet, and the demarcation of station above it is not shown. With the demarcation 12 feet above L.C., it should be charted as an islet.

11. Locations and elevations of summits are given. (Par. 16c.)

12. The tree line was shown on mountains. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DPs and DPs, 68.)

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) See letter 214/1933, no duplicate in Des.Rp.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate. Chart 5243.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) Some of the names in pencil.

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

The 1:0000 scale sheets are from 0.4 to 0.5 times too thick, which is much too heavy.

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review.

24. Remarks:

Reviewed in office by

Examined and approved:

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hyd. and Top.
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. [ ]

REGISTER NO. 4726

State...................... Alaska

General locality East Coast Baranof Island.

PT. TURBOT TO COSMOS COVE

Locality............................. [ ]

1:5,000 [Insert]

Scale 1:50,000 Date of survey September, 1932.

Vessel........... U.S.C. & G.S.S. EXPLORER

Chief of Party........... G. C. Jones

Surveyed by...................... Henry E. Finnegan

Inked by...................... Henry E. Finnegan

Heights in feet above M.W. to ground no form lines

Contour, Approximate contour, Form line interval 100 feet

Instructions dated March 24, 1932.

Remarks:

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GFD
The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cliff - Distinctive white cliff, pyramidal shape, 150 feet high, on shoreline</td>
<td>57 10 1568 134 48 775 U.A.</td>
<td>Plot - table cuts</td>
<td>8250</td>
</tr>
<tr>
<td>Waterfall - Top of large falls near shore line clearly visible to the North &amp; Northeastward</td>
<td>57 11 830 134 50 28</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Beacon - Spindle beacon with white barrel top</td>
<td>57 12 1638 134 51 650</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Beacon - Spindle beacon with white barrel top</td>
<td>57 12 1773 134 51 397</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Cliff - Graystone cliff on a prominent bluff point. (Position of white wash signal &quot;RCS&quot;)</td>
<td>57 14 372 134 50 363</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

* There is a smaller waterfall about one mile Northwest of the waterfall listed above.

The smaller waterfall lies about 600 meters inland and is visible through the trees over a small arc to the Eastward.

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.