

4807

U. S. COAST & GEODETIC SURVEY  
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4807

Form 504  
Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, Director

State: S. E. ALASKA

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. "C" 4807

LOCALITY

BOCA DE QUADRA

VIXEN BAY & MINK BAY

19 33

CHIEF OF PARTY

JACK SENIOR

DESCRIPTIVE REPORT  
TO ACCOMPANY TOPOGRAPHIC SHEET "G"  
VIXEN BAY AND MINK BAY  
S. E. ALASKA

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JACK SENIOR - CHIEF OF PARTY  
SEASON OF 1933

DESCRIPTIVE REPORT  
TO ACCOMPANY TOPOGRAPHIC SHEET "G"  
VIXEN BAY AND MINK BAY

S. E. ALASKA

AUTHORITY:

Authority for the survey was the Director's Instructions for Project No. HP-137 to the Commanding Officer, U.S.C. & G.S.S. EXPLORER, dated March 16, 1933.

PURPOSE:

The purpose of the topographic survey was to locate and show the nature of the shoreline, islands, rocks and reefs within the limits of the sheet. Also, to furnish control for the hydrography in this vicinity.

LIMITS:

The survey includes Vixen Bay and Mink Bay.

GENERAL DESCRIPTION:

In Vixen Bay the shoreline is low throughout. Some parts of the bay has narrow strips of grass between the tree line and water, and in other places, the trees overhang the water. The islands are all low and heavily wooded, with the exception of the two small islets in the head of the bay south of Gosling Island. These two islets are low and partly covered by grass. The mountains slope back gently close to the beach. Farther back they are steeper and more rugged. All are heavily wooded.

In Mink Bay the shoreline is steep; on the east side of the bay there are some vertical rocky cliffs from three to eight hundred feet in height. Outside of the cliffs the treeline is close to the beach, with trees and limbs overhanging the water. The mountains are very steep from the beach to the tops, and heavily wooded throughout. Cygnet Island and the island on the west side of the bay one mile from the mouth are low and heavily wooded. Grouse Rock is eight feet high and covered with grass.

The caretaker at the cannery reports that Mink Bay freezes over solid in winter, and all boats that are used during the winter are left outside of the bay. \_\_\_\_\_

Fresh water may be obtained on the dock at the cannery.

**CONTROL:**

The survey was controlled by third order triangulation, executed by the party during the season.

**SURVEY METHODS:**

Most of the signals were located by three or more cuts and resections from triangulation stations. The signals were used as set-ups to run in the shoreline and details. In Vixen Bay, traverses were run between most of the triangulation stations. On the west side of Vixen Bay around triangulation station "HANG" there was a stretch of shoreline that could not be located by planetable due to the steep shoreline and overhanging trees. This was located by taking sextant fixes and plotting them on the sheet.

In Mink Bay there was several places on both sides of the bay that could not be run in by planetable due to the vertical cliffs, steep and rounding shoreline and overhanging trees. These places were run in by taking sextant fixes and plotting them on the sheet, the shoreline was then drawn in between the sextant fixes.

Where traverses were run the signals were checked by rod readings.

the allowable limit. All traverses closed well within

The low water line, rocks and reefs were located by rod readings.

FORM LINES:

The form lines for this sheet were done on Form Line Sheet "F", 1933, scale 1:40,000.

COMPARISON WITH PREVIOUS SURVEYS:

The previous survey of this area was done on Sheet H2149. The outline is generally the same with some major changes in the head of Vixen Bay. This sheet seems to be more or less of a reconnaissance survey, with no control. The present survey is more in detail, and it is well controlled.

The sheet joins topographic sheet No. "E" at triangulation station "BAGO" and topographic station "JAK" at the mouth of Vixen Bay, and at triangulation station "STUMP" and topographic station "NOR" at the mouth of Mink Bay.

DISTORTION:

The sheet was frequently tested, and no appreciable distortion noticed while in the field.

MAGNETICS:

A magnetic observation was made at triangulation station "MINK", 1933 with the declinometer.

Observations were made at triangulation stations "PULL", 1933 and "SOAP", 1933 with the declinatoire.

Respectfully submitted,

*G. C. Mast*  
G. C. Mast,  
Jr. Hydro. & Geod. Engineer,  
U.S.C. & G.S.S. EXPLORER.

Approved and forwarded,

*Jack Senior*  
Jack Senior,  
Commanding Officer,  
U.S.C. & G.S.S. EXPLORER.

STATISTICS

Statute Miles of Shoreline ..... 26.0

DEPARTMENT OF COMMERCE  
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REG. NO.

Acc. No.

4807

TOPOGRAPHIC TITLE SHEET

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. "G"

REGISTER NO. 4807

State S. E. ALASKA

General locality BOCA DE QUADRA

Locality VIDEN BAY <sup>and</sup> MINK BAY *large* *212*

Scale 1:10,000 Date of survey AUGUST, 1933

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

Chief of Party JACK SENIOR

Surveyed by G. C. MAST

Inked by G. C. MAST

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval ----- feet

Instructions dated MARCH 16, 1933

Remarks:

Applied to drawing (compilation) of reconstructed Chart № 8075;  
Vixen Bay only is within limits of this chart. S.B.M. 1934

Applied to drawing (compilation) of new chart № 8053  
Mink Bay only is within limits of this chart S.B.M. Nov 1934

Applied to drawing of chart № 8102 S.B.M. 1934



REVIEW OF TOPOGRAPHIC SURVEY No. 4807

Title (Par. 56) *Vixen Bay and Mink Bay, Alaska*

Chief of Party *Jack Senior* Surveyed by *G.C. Mast* Inked by *G.C. Mast*

Ship *Explorer* Instructions dated *March 16, 1933* Surveyed in *August 1933*

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 -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.) *See T4801*
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) *See T4801*
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.) *None submitted*
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.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.) *See T4801*
12. The tree line was shown on mountains. (Par. 16g.) *See T4801*

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 aere-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 DMs and DPs, 68.) *None Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *None submitted*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) ✓
18. The geographic datum of the sheet is *North American 1927 (Adjusted)* and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. ✓
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
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.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~
24. Remarks:

Reviewed in office by *Chas. R. Bush Jr. May 8, 1933*

Examined and approved:

*C. K. Green.*  
Chief, Section of Field Records

*L. O. Polk.*  
Chief, Division of Charts

*Fred. L. Peacock*  
Chief, Section of Field Work

*G. H. de*  
Chief, Division of Hyd. and Top.