Form 604
Ed. June, 1928
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
L. O. Colbert, Director

State: S.W. ALASKA

DESCRIPTIVE REPORT
Topographic Sheet No. 6652

LOCALITY
North Side of Sanak Island
Pavel Harbor & Vicinity
Northern Coast, Sanak Island

1939

CHIEF OF PARTY
Ray L. Schoppe
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. "I", 1939

REGISTER NO. T-6652

State: S.W. ALASKA

General locality: S.W. ALASKA - North Side of Sanak Island

Locality: Northern Coast, Sanak Island

Scale: 1:10,000

Date of survey: July - August, 1938

Vessel: DISCOVERER

Chief of party: Ray L. Schoppe

Surveyed by: Ira T. Sanders

Inked by: Ira T. Sanders

Heights in feet above M.H.W. to ground to tops of trees

Contour interval: 100 feet

Instructions dated: March 30, 1936; Supp. Instr., 19

March 30, 1937

Remarks:

Project H.T.-203
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET "I" 1939

REGISTER NO. T-6652

NORTHERN COAST, SANAK ISLAND

SOUTHWEST ALASKA

Ray L. Schoppe, Chief of Party

Season of 1938
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET "I" 1936

REGISTER No. T-6652

NORTHERN COAST, SANAK ISLAND

SOUTHWEST ALASKA

INSTRUCTIONS:

The work on this sheet was authorized by the Director's Instructions dated March 30, 1936, Supplemental Instructions dated March 30, 1937.

LIMITS:

The work on this sheet lies between North Latitudes 54° 27.78' and 54° 29.44' and West Longitudes 162° 40.11 and 162° 46.72'. The survey includes the shoreline between the west entrance point to Unimak Cove and Murphy's Crack.

This sheet joins Sheet Register No. T-6651 at Signal TED and Sheet Register No. T-6653 at Signal ROT. The formline junction with Sheet Register No. T-6650 is indicated by the solid pencil line through the high points of Sanak Mountain ridge, thence southward to the vicinity of the head of Unimak Cove.

CONTROL:

The work on this sheet was controlled by triangulation Stations PAV, NAK, GRANITE, established or recovered by the DISCOVERER'S party in 1936, and SANAK which was established in 1901.

These positions are the results of field computations on the Unalaska Datum and are unadjusted.
SURVEY METHODS:

This work was done by a party operating from the LAUNCH HELI-
ANTHUS. A combination traverse and resection method was used, beginning
at Triangulation Station CROW on Sheet Register No. T-6653 and ending at
Station NAK on this sheet. This work closed on NAK with an error in azi-
muth of 3 meters which was disregarded. The position of Signal RUM was
determined on Sheet Register No. T-6653 and transferred to this sheet,
and traverse continued to Station NAK.

The work between stations NAK and PAV was governed by graphic
control originating with the solution of the 3 point problem at elevation
70 near the head of Pavlof Harbor. This position was determined on Sheet
Register No. T-6650 and transferred to this sheet. Intermediate points
and set-ups as needed were established. All detail and the signals were
located by the usual plane table methods.

FORM LINES:

The form line junctions with Sheet Register No. T-6650 (1937)
is shown along the solid pencil line as indicated. Survey No. T-6650 was
done on a scale of 1: 20,000, and as the work on it covered the larger
portion of the inland area of this sheet, a junction as shown was decided
upon to avoid making the transfer to the larger scale.

Elevations for form lines were determined as follows: Where
possible to do so, two or more cuts, with vertical angles resulting in
elevations in close agreement, were taken to required points. The mean of
the values retained was used as the elevation of the point. Where inter-
sections to required points were impracticable the distance was determined
by stadia and the vertical angle measured with reversals of both the level
and the telescope. However, no elevations of over 200 feet were determined
by the latter method.
The heights of smaller and offshore rocks were determined as follows: Before beginning field work the telemeter rod was graduated on the back side in feet. The rodman was required to hold the rod on the high water mark and the elevation read in feet from the alidade telescope.

Rocks which appear on this sheet with the legend "Awash at HW" are bare 5 to 6 feet at MLLW. As the mean range of tide in this vicinity is 6 feet approximately, they are covered at extreme high tides.

COMPARISON WITH PREVIOUS SURVEYS:

The plane table survey Register No. 2553, made in 1901, is the only previous survey in this area. For the area covered by this sheet, the main features agree very well with the 1901 survey. Survey Register No. 2553 was compiled on a scale of 1: 40,000 and the detail shown limited accordingly. As this sheet shows much more detail, it is thought to be unnecessary to enumerate all the differences.

GENERAL DESCRIPTION:

This survey covers that part of the northern coast of Sanak Island between Unimak Cove and Murphys Crack, including Pavlof Harbor. With the exception of a short stretch of beach between signals HO and WIN at the head of Pavlof Harbor, the shore line is steep, rocky bluffs showing in many places. Except where these bluffs are delineated all slopes are grass covered to the storm high water line.

In the spring and early summer the top and steeper slopes of Sanak Mountain are bare. Toward the end of summer, the mountain becomes green except for small scattered rocky patches. Luxuriant grass grows on all the lower areas. There are no trees, but scattered clumps of stunted willow and alder are to be found along the more sheltered slopes.

The largest lake lies northwest of Pavlof Harbor and is approximately 60 feet above mean high water.
The most prominent inshore feature is Sanak Peak, with an elevation of 1740 feet. This peak is often obscured by fog, when the smaller peak marked by Station GRANITE is still visible.

Generally speaking the shore line is fringed with a narrow rocky ledge, with occasional detached rocks. A narrow fringe of kelp will be found close in. The three small detached rocky islets are of no practical value as land marks, being too close inshore. The most prominent bluff lies directly north of Station NAK and has an elevation of 102 feet.

The largest settlement on the island is at Pavlof Harbor. Some 15 families live there during the winter, but a general exodus takes place during the fishing season, and only a few of the older residents remain during the summer. A school is maintained for the local children.

The large wharf is kept in a fair state of repair by one of the local men, who, it is said, represents the Union Codfish Company, the owners. Commercial cod fishing has been abandoned for the time being. There is no water available on the wharf, but the spring at the head of the harbor affords good water.

The only means of communication with the "outside" is by way of the monthly mail boat to Sanak Harbor. A well marked foot trail leads to Sanak along the foot of the southern slope of the mountain.

The houses in Pavlof Harbor were shown to scale as nearly as possible to do so. Many of the smaller ones are sheds or shacks for storage and various other uses.

The small wharf at Signal WIN is in a very poor state of repair. The piling in this and in the large wharf are 6 x 6 steel angles.

**PROMINENT OBJECTS AS AIDS TO NAVIGATION:**

See "Land marks for Charts" for positions of two prominent peaks on Sanak Mountain.
The low hill with elevation of 253 feet, merging into the 102 foot bluff near Station NAK is quite prominent from a northwesterly or southwesterly direction. From other directions it blends into the foot of the mountain. The bluff is a greyish black color and not particularly striking in appearance.

The northernmost group of houses in Pavlof Harbor are visible and show up prominently from off the entrance to the harbor. The larger "L" shaped house is white with red trim.

**DISTORTION:**

Frequent checks during the progress of the work on this sheet disclosed no distortion.

**MAGNETIC OBSERVATIONS:**

Magnetics were observed at Triangulation Station NAK with declinatoire No. 197. This declinatoire was standarized at the Green Lake Magnetic Station in Seattle before beginning field work for the season. The magnetic declination at Station NAK was found to be $17^\circ 10'$ East on August 3, 1938. Normal.

**GEOGRAPHIC NAMES:**

All names which appear on this sheet are from Chart 9960 and are locally accepted names. None of the unnamed features have local names so far as could be ascertained from residents of Pavlof Harbor.

**APPROVED:**

Ray L. Schoppe,  
Lieut. Comdr., C&GS,  
Chief of Party.

**FORWARDED:**

G. C. Jones,  
Lieut. Comdr., C&GS,  
Commanding DISCOVERER.
STATISTICS

to accompany

TOPOGRAPHIC SHEET "I" 1938

REGISTER No. T-6652

Number of Statute miles of shoreline- - - - - - - - - - - - - - 9 1/2
Area surveyed in Square Statute miles - - - - - - - - - - - - - - 6
Number of elevations determined:
(a) Offshore points above M. H. W.- - - - - - - - - - - - - - - - - 30
(b) Point inland for form lines - - - - - - - - - - - - - - - - - - - - 92
MAGNETIC NOTE

The magnetic declination at the Green Lake Magnetic Station, Seattle, Washington, was observed with the Declinatoire used on this sheet, on April 8, 1938. The index error was found to be zero.

This error was not checked in the Fall as observations at Green Lake in October by Lieutenant Pfau indicated local attraction at that Station. The Declinatoire used on this sheet is part of the equipment for alidade No. 187. This alidade was returned to the Washington Office on November 4, 1938, which was prior to the establishment of the new Magnetic Station at Lincoln Park.
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<th>Chart Title</th>
<th>Datum</th>
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The positions given have been checked after filing.

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be declared charted.

Seattle, Washington
January 12, 1939

LANDMARKS FOR CHARTS
U.S. Coast and Geodetic Survey
Department of Commerce
<table>
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<td>540625</td>
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<td>USGS</td>
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<td>4</td>
<td>1740 ft main peak of Sanan Mts.</td>
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<td>Pacific Ocean</td>
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MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT
No. T*6652

received May 3, 1939
registered June 17, 1939
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO
82  T. B. Reed

/}
DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6652 (1938) FIELD NO. I
S. W. Alaska; North Side of Sanak Island;
Pavlof Harbor and Vicinity
Surveyed July - August, 1938
Scale 1:10,000
Instructions dated March 30, 1936; March 30, 1937 (DISCOVERER)

Plane Table Survey        Aluminum Mounted

Chief of Party - R. L. Schoppe.
Surveyed and inked by - I. T. Sanders.
Reviewed by - J. A. McCormick, December 17, 1940.
Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

Satisfactory junctions were effected with T-6651 (1938) on the east, T-8650 (1937-38) on the south and T-6653 (1938) on the west.

2. Comparison with Prior Surveys.

T-2553 (1901), 1-40,000.

T-2553 gives a good general idea of the area but its small scale does not permit the close detail of the present survey. Essential information on T-2553 is adequately covered on the present survey and T-2553 is, therefore, superseded in the common area.

3. Comparison with Chart 8860 (New Print of November 25, 1940)

Topography now charted in this area is from the present survey.


Satisfactory.

5. Compliance with Instructions for the Project.

Satisfactory.

6. Additional Field Work Recommended.

None.
7. **Superseded Surveys.**

T-2553 In part

Examined and approved:

[Signatures]

T. B. Reed  
Chief, Section of Field Records.

J. S. Brenan  
Chief, Division of Charts.

Raymond W. Byram  
Chief, Section of Hydrography.

John H. Member  
Chief, Division of Coastal Surveys.