

4083

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

State: SW ALASKA  
11-5013

DESCRIPTIVE REPORT.

Topo. Sheet No. 1 4083

LOCALITY:

Alaskan Peninsula, Jute Bay

and Vicinity.

Shelikof Strait-Jute Bay

1874

CHIEF OF PARTY:

Clem L. Garner

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DESCRIPTIVE REPORT  
to accompany

TOPOGRAPHIC SHEET No.1, JUTE BAY and Vicinity, S. W. ALASKA.

Instructions to CHIEF of PARTY dated March 11, 1924

LIMITS.

The topography embraced on this sheet comprises a detailed survey of the shore line and contour forms of adjacent territory from Cape Unalishagvak on the east to a point 1 mile west of Jute Island, and in geographic position between latitudes  $57^{\circ} 29'$  and  $57^{\circ} 37'$  and longitudes  $155^{\circ} 44'$  and  $155^{\circ} 55'$ .

GENERAL COAST LINE.

The coast line has the general appearance of being rock bound and more than three quarters of it is rocky with a fringe of boulders, but in Island Bay and to the east of Station PIN there are a few short sand beaches. Steep rocky bluffs almost at the waters edge and ranging between 20 and 40 feet in height are very characteristic of this section of the coast, although away from the shore line the slopes are as a rule not particularly precipitous and are covered in grass and alders. This is the only vegetation in this section of Alaska.

LANDMARKS.

The area covered by this sheet contains only three topographic features which are of use to navigation.

1. A pinnacle rock (determined by triangulation as Station PIN), is a large, sharp top, detached rock, about 80 feet high and 100 meters from the shore line, which is quite distinct when within one or two miles of it. When seen from the distance or from the south it merges into the coast line and cannot be distinguished.
2. Jute Island and the other small islet at the entrance to Island Bay are each about 20 feet above high water, are covered with grass, and are easily identified within a reasonable distance of them.
3. Two lines of cliffs near station UNA. One borders the shore line only a short distance from the waters edge while the other extends in an almost straight course from station UNA to the shore line at Q Pal and has a steep slope. These formations together with the 1620 foot elevation to the north of station UNA form a series of three benches when seen from the eastward which are quite distinctive and important for general coast navigation.

INSHORE DANGERS.

These consist of the two islands at the entrance to Island Bay together with the fringe of kelp marked reef around them and two sunken rocks about 500 and 400 meters respectively from the coast line to the east of the two islands. With the exception of the rocks mentioned in the preceding sentence the entrance to Island Bay from the Southeast is clear.

INSHORE DANGERS. Contd.

The Bay forms a fairly good anchorage in moderate weather but is exposed to the worst direction for storms of the summer season and is not recommended for an anchorage from northwest winds as these are always accompanied by willi-waws and dragging of anchor may be expected as the bottom is hard.

SURVEY METHODS.

The main control for this work was the six Triangulation stations distributed over the area covered. The work west of station PIN was by a combination of three point fixes and plane table triangulation while <sup>in the</sup> to the east of station PIN was done by locating hydrographic signals from the ship, at least three cuts being taken on each signal, and the shore line sketched in while walking along the shore line. It is believed that the shore line and location of signals are accurate to within a few meters. A short section of the shore line around Cape Unalishagvak, probably three or four hundred meters, is very steep to at all stages of the tide and for this reason a traverse cannot be carried around the Cape.

STREAMS.

Several small streams enter the sea over the area covered by this sheet but are of no commercial importance because of shallow water at their mouths or exposure to the sea. The largest of these is at the head of Island Bay which is marked by a large water fall about 200 meters from the shore line and is quite conspicuous during the period of melting snow. This ~~used~~ was used as a hydrographic signal (Wat), It is about 60 feet high.

INDUSTRIES.

There are no inhabitants or industries in the area of this sheet.

Respectfully submitted.



H. W. Hemple  
H & G.E

Respectfully forwarded,



Clem L. Garner  
Chief of Party.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 25, 1925.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4083

Jute Bay, Shelikof Strait

Surveyed in 1924

Instructions dated March 11, 1924.

Chief of Party, C. L. Garner.

Surveyed by H. W. Hemple.

Inked by H. A. Paton.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development conform to the requirements of the General Instructions, except that there are only one-fourth of the specified number of determined elevations. Also the magnetic meridian was not shown.  
~~The elevations should have been referred to mean sea level instead of mean high water. See paragraph 154 of the General Instructions.~~
3. The plan and extent of the survey satisfy the specific instructions.
4. The usual field drafting was done by the field party.
5. The junction with the adjoining work is satisfactory.
6. No further surveying is required within the area of the sheet.
7. The character and scope of the surveying is good and the field drafting is excellent.
8. Reviewed by E. P. Ellis, February, 1925.

# LIST OF PLANE TABLE POSITIONS

To accompany Topographic Sheet No. 1.

JUTE BAY - Vicinity of PORTAGE BAY, ALASKA.

SIGNAL	Lat.	D.M.	Meters	Long.	D.P.	Meters	Approx Height	Remarks
⊙ Wat	57 34		1053	155 49		374	75 ft.	Water falls at the head of Island Bay
⊙ No	57 32		1071	155 44		145	40 ft.	Top of small grassy knoll on Cape Unalishagvak, not very prominent except within two miles.

# 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.

**SOUTHWEST**

Register No. (1) **4083**

State **A. L. A. S. K. A.** . . . . .  
 General locality **Alaska Peninsula** . . . . .  
 Locality **Shelikof Strait** . . . . .  
 Chief of party **Clem. L. Garner** . . . . .  
 Surveyed by **H. W. Hemple** . . . . .  
 Date of survey **June 1924** . . . . .  
 Scale **1 : 20,000** . . . . .  
 Heights in feet above **M. H. W.** . . . . .  
 Contour interval **100** . . feet.  
 Inked by **H. A. Paton** . . Lettered by **H. A. Paton** . . . . .  
 Records accompanying sheet (check those forwarded): Photographs,  
 Descriptive report, ~~Horizontal angles, bearings, and distances~~, ~~and computations~~  
 Data from other sources affecting sheet . . . . .

Remarks: