

4386

Form 504  
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY  
L. & A.  
DEC 1 1924  
Acc. No.

State: S. W. ALASKA

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4386

LOCALITY:

Shelikof Strait, Jute Bay.

1924

CHIEF OF PARTY:

CLEM L. GARNER

4386

DESCRIPTIVE REPORT

Hydrographic Sheet No. 1

Southwest Alaska, Shelikof Strait, Jute Bay.

Clem L. Garner, Chief of Party

Instructions dated March 11, 1924

Limits. The work on this sheet includes the inshore hydrography of Jute Bay, from a junction with Hydrographic Sheet No. 4295, off Cape Kanatak, to Cape Unalishagvak, and extends  $1\frac{1}{2}$  miles off shore.

General Description of Coast. The shore of Jute Bay is bold and precipitous and is lined with steep cliffs in many places. The head of the Bay is flat sand beach.

Two small islands divide the Bay into an outer and an inner Bay; the part inside the islands is known locally as Island Bay.

Outlying Dangers. There are no outlying dangers.

Currents. No current observations were made and no very strong currents noticed. The tidal current in the entrance to Island Bay appears to set fair with the channel and to turn at approximately high water and low water.

Landmarks. The only prominent landmark is the pinnacle rock ( $\triangle$  Pinnacle) two miles west of Cape Unalishagvak; it is about 50 feet high.

Inshore Dangers. There are two extensive reefs, one completely surrounding the islands and one fringing the eastern shore of the Bay. Their limits are shown on the sheet. They are bare at low water, and are usually marked by breakers at all stages of the tide.

Anchorage. Anchorage may be had behind the larger island in 5 to 7 fathoms, hard bottom. This anchorage is exposed to the southeast, and on account of poor holding ground cannot be recommended for use during any bad weather.

Channels. The only channel into the inner bay navigable for ships is that east of the islands, with least depth of 7 fathoms. In entering by this channel steer  $315^{\circ}$  true keeping  $\frac{1}{4}$  mile off the eastern end of the larger island.

The channel to the west of the islands can be used by small boats. Boats using this channel should keep close to the mainland to avoid reefs and rocks making out from the islands.

Survey Methods. That part of the work west of  $\triangle$  Pinnacle was controlled by triangulation stations and topographically located signals. East of  $\triangle$  Pinnacle a number of natural objects were located by sextant cuts, these cuts are recorded in the sounding record.

Usual survey methods were used, soundings over about 15 fathoms being taken with hand sounding machine with the launch stopped and shoaler soundings taken with hand-lead with the launch underway.

The location of  $\triangle$  Pinnacle, 1920 was found to be in error, the 1920 cut

Descriptive Report:-

Hydrographic Sheet No. 1;

Sheet - 2

Survey Methods. Cont'd.

~~1920 cut~~ from  $\triangle$  Igvak being wrong. Another cut was taken from  $\triangle$  Lee, and the position computed with this cut and the 1920 cut from  $\triangle$  Jute. This position was verified by sextant cuts and by plane-table, and should be used in any future work.

Respectfully submitted.

*M. O. Witherbee*

M. O. Witherbee,  
H & G. Engineer.  
Hydrographer.

Approved and forwarded

*Clem L. Garner*

Clem L. Garner  
H & G. Engineer.  
Chief of Party.

STATISTICS SHEET NO. 1

Date, 1924	Letter	Volume	Positions	Soundings	Miles Statute	Vessel
June 18	a	1	139	263	25.0	M.S. 8613
" 20	b	1	143	285	23.0	do
" 26	c	2	81	167	13.2	M.S. 14812
" 30	d	2	96	328	11.7	do
July 1	e	2	61	112	9.8	"
TOTALS			520	1155	82.7	

12.5 Sq. Stat. Miles of Area.

Hydrographic Sheet No. 4386.  
Jute Bay. S.W. Alaska.

This survey appears to develop conditions of this area satisfactorily and no additional work is necessary.

The projecting and plating found practically accurate and the records clear

John D. Torrey  
Feb. 18. 1925

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 25, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4386

Jute Bay, Shelikof Strait

Surveyed in 1924.

Instructions dated March 11, 1924.

Chief of Party, C. L. Garner.

Surveyed by M. O. Witherbee and W. Weidlich.

Protracted and soundings plotted by M. O. Witherbee.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions except that boats' courses are omitted.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions, except that additional development should have been made on the 4 5/6 fathom spot southwest of Jute Island and on the 4 4/6 fathom spot northeast of Cape Kanatak.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was completed to the extent prescribed in the General Instructions.
7. The junction with the previous surveying to the westward is satisfactory. The adjoining work done in 1924 has not yet been plotted.
8. No further surveying of Jute Bay is needed except possibly development of the two spots noted in paragraph 3. The sounding lines of Island Bay and approaches are spaced 200 meters apart. Although no indications of shoals were discovered, with the exception of a 2 5/6 fathom spot in the southwest entrance to the bay, nevertheless the lines are spaced too far apart for a full development. Also the character of the shores indicates the probability of scattered rocks.
9. The character and scope of the surveying and field-drafting are excellent.
10. Reviewed by E. P. Ellis, February, 1925.

Section of Field Records.

February 10, 1925.

~~Division of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4384

Locality: Juts Bay, Shelikof Strait, Alaska.

Chief of Party: Glen L. Garner

Plane of reference is mean lower low water, which is  
6.3 ft. on tide staff at Kanatak Lagoon, Portage Bay, Alaska.

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks



Chief, Division of Tides and Currents.

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic 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. (1) 4386

State <sup>SW.</sup> Alaska . . . . .

General locality . Shelikof Strait . . . . .

Locality . Jute Bay . . . . .

Chief of party . . Clem L. Garner . . . . .

Surveyed by . M.O. Witherbee and W. Weidlich . . . . .

Date of survey . . June 1924 . . . . .

Scale . 1:20000 . . . . .

Soundings in . fathoms . . . . .

Plane of reference . M L L W . . . . .

Protracted by M.O.W. . . Soundings in pencil by M.O.W. . . . .

Inked by J. D. T. . . . . . Verified by J. D. T. . . . . .

Records accompanying sheet (check those forwarded):

Des. report, . . . . . Tide books, 3 Marigrams, 1 Boat sheets,

2 Sounding books, . . . . . Wire-drag books, . . . . . Photographs.

Data from other sources affecting sheet . . . . .

Remarks: