

4427

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Form 504

DEPARTMENT OF COMMERCE,
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. S. S.
FEB 10 1925

State: S.W. ALASKA

31-4813

DESCRIPTIVE REPORT.

HYDROGRAPHIC Sheet No. 4 4427

LOCALITY:

CHIGNIK BAY, Northwest Coast

1924
191

CHIEF OF PARTY:

Clem L. Garner

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET #4

Southwest Alaska, Chignik Bay, Northwest Side.

Clem L. Garner, Chief of Party - - - - - Instructions Dated March 11, 1924.

This sheet is a 1 : 20,000 polyconic projection covering the northwest side of Chignik Bay, from Chignik Lagoon to a point 2 miles south of Hook Bay. Its limits are Lat. 56 - 21 to 56 - 30 N., and Long. 158 - 05 to 158 - 30 W. It joins with sheets # 2 and 3 to the south, sheet #5 to the north, and ship's sheet "B" to the east, and contains the balance of the Chignik Bay hydrography not included on these sheets. The YUKON did all but 2 days of the hydrography on this sheet, these 2 days were done by the DISCOVERER using tubes. Control was by triangulation and signals located by plane table triangulation and traverse. Soundings were up and down casts with hand lead and hand sounding machine.

COAST AND LANDMARKS

The N.W. coast of Chignik Bay goes from a shoal low shore into rolling hills that sweep back for several miles to the bases of the high mountains. The most prominent landmark in this section of the Bay is Angvik Island, lying 2 miles off the north shore of the bay and 9 miles N.E. of Chignik Lagoon. The north shore from this island eastward is steep and broken.

DANGERS

The whole of the N.W. side of Chignik Bay is shoal and generally foul to approximately $\frac{1}{2}$ mile off shore. The north shore has 2 prominent reefs making out each terminating with conspicuous bare rocks, one north of Angvik Island, the other 4 miles to the E.N.E. From the old coal tipple on the N.E. side of Thompson's Valley extending for $2\frac{1}{2}$ miles N.E. a bad shoal and reef makes out as much as $\frac{3}{8}$ mile off shore. The shore along here is low and sandy and extreme caution in smooth weather would have to be exercised to bring 2 fathoms to within $\frac{1}{3}$ mile of this old coal tipple. A rock bares $\frac{3}{5}$ mile off the north shore 1 $\frac{3}{5}$ mile 26° true from a "Ang" on Angvik Id., and another bares 250 meters S.E. of this one, forming the western limit of the prominent reef at this point. (Small craft can obtain a fair anchorage just west of this reef in ordinary weather). A long reef extends for 1 mile east from Angvik Island, and seas are usually breaking heavily over it. Practically all dangers are marked by kelp, and by mid-cunner a heavy growth extends for $\frac{1}{4}$ to $\frac{1}{2}$ mile off the west and north shores of Chignik Bay.

(to Mine)

ANCHORAGES

There are no protected anchorages on this sheet. Small craft may in favorable weather anchor in the lee to north of Anguvik Island. The south side of this island and the long reef making to eastward of it is deep close up. The YUKON anchored in 5 fathoms, sand, just west of the reef making from the main shore 2 miles north by east from Anguvik Island.

WIND AND CURRENTS

During the summer months a strong westerly breeze was prevalent in this section of Chignik Bay, particularly as the sun approached meridian and on a clear day. Strong currents were experienced between Anguvik and the north shore, and in the vicinity of the 27 foot spot 3 miles N.E. of Rigger Head. Tide rips were at times encountered from here toward the mouth of Chignik Lagoon.

STATISTICS

A table of statistics for sheet #4 is attached hereto.

Approved and Forwarded;

Glen L. Garner

Glen L. Garner
Lt. Comdr.,
Chief of Party.

Respectfully Submitted:

W. T. Combs

W. T. Combs
Lt., J. G.
Hydrographer.

STATISTICS SHEET
TO ACCOMPANY HYDROGRAPHIC SHEET #4

Sheet 1

<u>DATE 1924</u>	<u>LETTER</u>	<u>VOLUME</u>	<u>POSITIONS</u>	<u>SOUNDINGS</u>	<u>MILES STAT.</u>	<u>VESSEL</u>
August 12	a	1	128	452	31.0	YUKON
" 13	b	1	139	474	35.6	"
" 15	c	2	125	373	32.0	"
" 16	d	2	38	84	8.5	"
" 18	e	2	36	98	10.6	"
" 19	f	2	49	132	17.8	"
" 23	g	2	53	54	16.5	"
" 24	h	5	99	165	31.5	"
Sept. 4	A	1	103	256	36.0	DISCOVERER
" 8	B	1	29	70	10.9	"
Totals --	10	4	799	2158	230.4	

Area = 48.4 Sq. Statute miles.

Report on Hyd. Sheet #427

Surveyed in 1924.

C The character and completeness of the records accompanying this sheet were satisfactory.

The plotting was good.

The plotting of soundings was good except near the shore where the soundings began to get thick, in a number of cases soundings were omitted. In these cases the omissions appear to have been due to avoid overcrowding of the figures, but no such difficulty was experienced in supplying the omitted figures in most cases as shown on the sheet. Attention might be called at this point of the failure of noting on smooth sheet the bottom characteristics.

The sheet was clean, legible and ~~free~~ free from features marking poor draftsmanship.

Respectfully submitted,

B. J. J. J.

April 8, 1925.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

April 29, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4427

Dhignik Bay, Alaska Peninsula

Surveyed in 1924

Instructions dated March 11, 1924.

Chief of Party, C. L. Garner.

Surveyed by W. T. Combs.

Protracted by W. T. Combs and C. Pierce.

Soundings plotted by C. Pierce.

Verified and inked by G. Risegari.

1. The records conform to the requirements of the General Instructions except that no bottom characteristics were obtained with the vertical soundings made in connection with the tube sounding.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the requirements of the specific instructions with the exception that there are several offlying shoal spots that were not developed.
4. The sounding line crossings are adequate, and the information is sufficient for drawing the usual depth curves.
5. The usual field plotting was done by the field party. It was faulty in that soundings near shore were unnecessarily omitted, and also bottom characteristics were not placed on the sheet.
6. The junctions with the adjoining sheets are satisfactory.
7. Additional leadline development is needed on three or four offlying shoals or, what would be better, the larger part of the area of the sheet should be swept with the drag.
8. The character and scope of the surveying and field drafting are good.
9. Reviewed by E. P. Ellis, April, 1925.

L. O. R.
A. L. G.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. (4) 4427

State **SOUTHWEST** ALASKA
 General locality **Alaska Peninsula**
 Locality **Chignik Bay — Northwest Coast**
 Chief of party **Clem L. Garner**
 Surveyed by **W. T. Combs**
 Date of survey **August and September 1924**
 Scale **1 : 20,000**
 Soundings in **Fathoms**
 Plane of reference **M. L. L. W.**
 Protracted by **W. T. Combs** Soundings in pencil by **Chas. Pierce**
 Inked by Verified by
 Records accompanying sheet (check those forwarded):
 Des. report, Tide books, Marigrams, Boat sheets,
 Sounding books, Wire-drag books, Photographs.
 Data from other sources affecting sheet

Remarks: