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

SW.
State: Alaska

11-5813

DESCRIPTIVE REPORT.
4388

Hydrographic Sheet No.

LOCALITY:

S.W. Alaska Peninsula

Chignik Bay and Castle Bay and

Vicinity to Anchorage Bay

1924

CHIEF OF PARTY:

Clem L. Garner.

DESCRIPTIVE REPORT.

(To accompany Hydrographic Sheet No. 4 , Chignik Bay, S.W. Alaska.)

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1. Limits & Connections.

The work on this sheet was executed under instructions to the Commanding Officer of the U.S.S. DISCOVERER, dated March 11, 1924, on scale 1:20000, and covers all of Castle Bay and the area for a distance 3 miles offshore from the southern end of Castle Bay to the southern end of Anchorage Bay. The southern extremity of the sheet connects with sheet No. 1, the northern end with sheet No. 3, and the eastern end with ship Sheet B.

2. General Description of Coast.

In Castle Bay the south shore has a gradual slope from the sea, with a sand and gravel beach, and rises to an elevation of about 1500 ft., except Castle Cape which is very precipitous and pronounced, rising to three needle peaks, two of which are very conspicuous, reaching an elevation of 1200 ft. and the other, between these two, being about 900 ft. high. The remaining shore line is very rugged and precipitous and rises straight up out of the water before extending to the inland. The shore between Castle and Anchorage Bays presents precipitous headlands, from 500 to 700 ft. high, which are from one to two miles apart, and the southern one of these (which is at the northern end of Castle Bay) is known as Jacks Point.

The high mountain peaks which are about 3000 ft. high are from 5 to 6 miles inshore from the line connecting Castle and Anchorage Bays. The only vegetation on the land covered by this sheet is grass and some scattering alders.

3. Outlying Dangers.

Aside from the reef, as shown at the northern end of Jacks Bay, no outlying dangers were noticed during the progress of the work.

4. Currents.

The only noticeable currents occur at the entrance to Castle Bay and are mainly tidal. The slight current in Chignik Bay is also tidal, but as it isn't very appreciable, no observations for same were taken.

5. Anchorages.

Castle Bay affords a very good anchorage for small boats at any of the following places: the northern arm of the northwest bight, the southwest bight, or anywhere along near the shore between stations "Cas" and "Bay". The bottom is predominately mud. Larger vessels could get protection in the southwest bight also, but would have to use a small lead on their anchor chain.

The "YUKON" was anchored in Castle Bay in all kinds of weather, and was least protected in southeast blows.

* *There is a reef near the head of the northwest arm of Castle Bay which should be avoided when going into the head of the arm. This reef extends out half the width of the arm at that point and is clearly shown on the sheet.*

6. Survey Methods.

Ten triangulation stations, eleven topographic stations which were cut in by triangulation, and a vast number of stations which were located by the topographic parties, were used in obtaining the sextant fixes, and afforded excellent control.

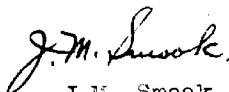
The work was executed by the YUKON and Steam Launch No. 47. A few hand lead soundings were taken near the shore and in the northwest arm of the northerly bight of Castle Bay, using a 12lb. lead, but most of the work was done using a Cosmos hand sounding machine, with a 20lb. lead. The vessels were stopped for all machine soundings, and the handlead soundings were taken while underway. The leadline used was Samson's No. 8 Mahogany Phosphor-Bronze wire center tiller rope, which gave excellent results.

The general scheme of the sounding was to run the lines normal to the shore, spacing them 300 meters up to 20 fathoms, and 600 meters beyond this depth. This was not adhered to in the bights of Castle Bay, where the lines averaged about 300 meters apart, or where an area was developed for a shoal.

7. New Place Names.

The names of the smaller bays shown on the sheet were taken from topographic sheet No. 2, and for notes about them see descriptive report accompanying said sheet.

Respectfully submitted,



J.M. Smook,
Lieut.(j.g.)

Approved and forwarded:

Clem L. Garner,
Lieut. Comdr., Comdg.

STATISTICS SHEET NO. 3 (Chignik Bay)

Date, 1924	Letter	Vol.	Positions	Soundings	Miles Statute	Vessel
July 14,	a	1	153	967	26.5	M. S. #8613
" 15	b	1	151	970	26.3	do
" 15	b	2	17	89	2.6	"
" 16	c	2	152	890	24.4	"
" 24	d	2	157	698	25.1	"
" 25	e	3	120	756	22.2	"
" 28	f	3	27	146	3.7	"
Aug. 28	g	4	96	828	17.0	"
July 30	a	1	15	58	3.5	Str. Yukon
" 31	b	1	143	557	33.1	do
Aug. 1	c	1	52	138	15.0	"
" 7	d	1	59	120	18.3	"
" 11	e	2	65	117	21.7	"
" 29	f	2	24	92	4.0	"
TOTALS			1231	6426	243.6	

Area in sq. statute miles=64.8

February 17, 1925.

~~Division of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 4388

Locality: Chignik Bay, S. W. Alaska

Chief of Party: Clem L. Gerner in 1924

Plane of reference is mean lower low water

5 ft. on tide staff at Chignik Bay, S. W. 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.

Hyd. Sheet No 4388

The records of this work are well kept and conform to the requirements.

The protracting of the sheet and plotting of the soundings was very well done, except that in a few places, where the time was irregular between positions, the soundings were spaced evenly

P. L. Johnston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON April 29, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4388

Castle Bay, Alaska Peninsula

Surveyed in 1924

Instructions dated March 11, 1924.

Chief of Party, C. L. Garner.

Surveyed by W. T. Combs.

Protracted and soundings plotted by J. M. Smook.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of the development satisfy the General Instructions.
3. The plan and extent of development conform to the requirements of the specific instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party. The work was good except in a few places where the time intervals between soundings were not adhered to.
7. The junctions with the adjoining surveys are satisfactory.
8. There are no shoal soundings requiring further leadline development, but the character of the shore formation indicates the possibility of rocks near the shore that can only be revealed by dragging.
9. The character and scope of the surveying and field drafting are excellent.
10. Reviewed by E. P. Ellis, April, 1925.

L.O.P.
ALB

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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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. (2) 4388

S.W.
State, A.L.A.S.K.A.

General locality S.W. Alaska Peninsula

Locality Chignik Bay— Castle Bay and Vicinity to Anchorage Bay

Chief of party Clem L. Garner

Surveyed by W. T. Combs

Date of survey May, June and July 1924

Scale 1 : 20,000

Soundings in Fathoms

Plane of reference Mean lower Low Water

Protracted by J.M. Smook. . Soundings in pencil by J.M. Smook

Inked by - - - R.L.G. . . Verified by - - - R.L.G.

Records accompanying sheet (check those forwarded):

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

Sounding books, ~~Wire and tag books~~, ~~Photographs~~.

Data from other sources affecting sheet

Remarks: