

4502

4502

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: <u>SW Alaska</u>	
<small>11-5413</small>	
DESCRIPTIVE REPORT.	
Hyd.	Sheet No. <u>4502</u>
LOCALITY:	
<u>Alaska Pen.</u>	
<u>Ghankliut I. & Vic.</u>	
1925	
CHIEF OF PARTY:	
<u>C. L. Garner</u>	

*Original of this
letter with column 25*

*File with Descriptive Rep.
of 4502 H.*

SAN FRANCISCO FIELD STATION

San Francisco, California,
November 22, 1926.

To: The Director, U. S. Coast & Geodetic Survey.
From: Robert W. Knox, Lieut.(j.g.) U. S. & G. S.
Subject: Hydrographic Sheet No. 4502
Through: The Inspector, San Francisco Field Station.
Reference: Director's letter of May 27, 1926, file 10 rs
(b) Commanding Officer's, Str. Discoverer, letter of Oct. 14, 1926
(c) Commanding Officer's, Str. Discoverer, letter of Nov. 10, 1926

Receipt of boat sheet number 4502 and copy of references (a) and (c) are hereby acknowledged, and the following information additional to that given in paragraph 2, reference (c) is furnished below.

It is the belief of the writer that the note in the remarks column on page 52, volume 1 which read, " Shoal 500 m. starboard makes out 1/4 mile, " was erroneously placed opposite position 16, d day, and should have been placed opposite position 17, d day; further, that the estimated distance of 1/4 mile was in error.

The boat sheet is being forwarded by registered mail under separate cover.

Robert W. Knox,
Lieut.(j.g.) U.S.C. & G.S.

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET #1

Vicinity Chankliut Island, Southwest Alaska.

Clem L. Garner, Chief-of-party

Instructions dated March 25, 1925

LIMITS. The work on this sheet comprises all the hydrography in the area bounded on the north by Castle Cape, on the west by a line drawn between lat. $56^{\circ}07'$, long. $158^{\circ}21'$ and lat. $57^{\circ}24'$, long. $158^{\circ}18'$, on the south by a line between the latter point and lat. $56^{\circ}09'$, long. $158^{\circ}03'$, and on the east by the westerly limits of Ship Sheet "B".

COAST LINE AND LANDMARKS. The coast line of the southern shore of Castle Cape forms the base of high, steep mountains, the tops of which are snow-covered the year around. Vegetation is sparse, and in many places entirely absent. A few alders and thin bunches of grass are occasionally found as high as the thousand foot contour. The most prominent landmarks are the high twin spires of gray rock at the extreme eastern end of Castle Cape, and the two heights on Chankliut Island. Of these the easterly is bare, and precipitous almost to the point of overhanging, especially on the east and south; while the one to the westward forms a grass covered cone with easy rises on all sides except the southward, which is somewhat steep and rocky.

DANGERS There are no offshore and but ²inshore dangers. The latter are both triangulation stations, Δ Rock (breaking) and Δ Rock. Both are within a quarter of a mile of the beach line, and are well marked with growing kelp.

SURVEY METHODS AND CONTROL A twelve pound hand lead was used for sounding within the ten fathom curve, while a steam sounding machine using stranded wire and a twenty pound lead was used in carrying the work into the deeper water. Lines were run by compass for the most part, and in directions normal to the coast line.

TIDES AND CURRENTS All the work on this sheet was reduced from the Anchorage Bay tide gauge.

No current observations were made in this area, but the slight drift of the launch during laying to periods indicated a lack of strong currents.

BOTTOM CHARACTERISTICS Depths are quite regular, and it is thought the spacing of lines according to instructions was close enough to sufficiently develop the area.

ANCHORAGES Small boats can find anchorage in either of the two larger bights on the Castle Cape shore which affords protection from north winds. An insecure anchorage can be had on the north side of Chankliut Island but it is not good in bad weather. The bottoms in all three are gravel and coarse sand, and consequently not good holding ground.

Respectfully submitted:

Approved and forwarded:

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

Robert W. Knox
Robert W. Knox,
Jr. H. & G. E.

Sheet Examined
6/27-28/17/24

STATISTICS SHEET
to accompany

Hydrographic Sheet No. 1

CHANKLIPT ISLAND

Date	Letter	Volume	Positions	Soundings	Statute Miles	Vessel
1925						
June 12	a	1	15	15	2.1	Anne W.
15	b	1	28	28	5.2	" "
16	c	1	124	124	17.7	" "
17	d	1	102	103	23.6	" "
22	e	1	18	18	4.5	" "
23	f	1	109	112	27.0	" "
24	g	2	106	113	29.6	" "
25	h	2	33	35	10.2	" "
26	j	2	101	105	25.3	" "
July 1	k	2	50	65	12.6	" "
2	l	2-3	135	159	24.1	" "
Totals	11	3	821	777	181.9	Totals

Area in sq. statute miles -- 46

To be attached to report on smooth sheet.

FEB 3 - 1926
W W B

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4502

Locality: S. W. Alaska

Chief of Party: Clem L. Garner in 1925

Plane of reference is M L L W
6.3 ft. on tide staff at Chignik

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 in 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.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 14, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4502

Chankliut Island, Alaska Peninsula

Surveyed in 1925

Instructions dated March 25, 1925

Chief of Party, C. L. Garner.

Surveyed by R. W. Knox

Protracted by R. W. K. and J. C. Partington.

Soundings plotted by J. C. P. and W. J. Chovan.

Verified and inked by F. M. Albert.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development conform to the requirements of the specific instructions. The kelp strewn shore doubtless accounts for failure to carry the work closer inshore. No indications of shoals were found on the main system of lines, so no split lines were necessary.
4. The sounding line crossings, as far as a comparison between adjacent lines could be made, are adequate.
5. The information was insufficient for drawing the depth curves inside the 20 fathom curve.
6. The usual field plotting was done by the field party and was carefully executed.
7. The junction with H. 4433 is satisfactory. The junctions with H. 4509 will be taken up in the review for that sheet.

8. This sheet is incomplete in the following respects:
- a. The work should be carried closer inshore if possible, at least to develop completely the 10 fathom curve.
 - b. Necessity Cove, the anchorage mentioned in the Coast Pilot, should be more thoroughly developed. Also the cove about 3 miles east of Necessity Cove.
 - c. On the south side of Chankliut Island the development from the shore to the 20 fathom curve is inadequate.
 - d. Additional development is necessary along the north shore of Chankliut Island.
Attention is called to the fact that there is some doubt as to where the anchorage on this side of the island is. The Coast Pilot speaks of the western cove, but the description as to depths and character of bottom seems to correspond to that shown for the eastern cove.
△ Rock off the western end of Chankliut Island is apparently on an offshore rock but no mention is made whether it is a bare rock or awash. It is not shown on the topographic sheet.
9. Attention is called to the fact that there is some doubt existing relative to the shoal making out from the point in vicinity of lat. $56^{\circ} 11 \frac{1}{2}'$, long. $158^{\circ} 11'$ (noted in Vol. 1, page 32). This has been referred to the Chief of Party and proper correction will be made when the information is received.
- Further, the boat sheet shows extensive kelp patches strewn along the shores of Chankliut Island and the mainland. It is questionable whether the kelp is as heavy as shown. This too has been referred for information.
10. Character and scope of field operations - good.
Field drafting - excellent.
11. Reviewed by A. L. Shalowitz, May, 1926.

Report of verifying and inking Hyd. Sheet 4502.

The records and notes are in general very good. The protracting and plotting of soundings were very well done.

The cuts on page 2 volume 1 and in other instances in the course of the work, do not accurately check the plotted positions of the signals to which the cuts were taken. The cause for this is not apparent.

Many positions and soundings were rejected without explanation. No effort was made, in verifying, to plot these. If some explanation had been given it might be possible to plot these by one of the methods usually adopted in the office.

To fully survey this area will require carrying the sounding lines closer inshore and development of shoal indications which are apparent in inspecting the sheets.

No boat sheet has been received to date. When it arrives it should be compared with the smooth sheet.

Feb. 12, 1926.

F. M. Albert, Cartographer
Section of Field Records.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No.

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

December 14, 1926.

△ Rock off CHANKLIUT ISLAND was determined by cuts on an offshore rock (without a signal erected) from 3 triangulation stations in 1920.

The position was erroneously computed and used by the hydrographer.

The position of the supposed rock on the topographic sheet, which Lt. Comdr. C. L. Garner recommends be used for plotting, throws the position of some of the soundings out of visibility from the rock.

Lacking a better location the work was accepted as plotted in the field.

L. O. Zolbert,
Chief Sect. Field Work

*See letter of Oct. 14, 1926 from C. L. Garner,
in files of H. & J. Div. regarding Δ Rock*

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

4502

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. 0 4502

State ~~South West~~ ^{SW.} Alaska

General locality ~~Alaskan~~ Peninsula

Locality Chankliut Island and Vicinity.

Chief of party Clem L. Garner

Surveyed by Robert W. Knox

Date of survey ¹² June, July, 1925.

Scale 1 : 20,000

Soundings in Fathoms

Plane of reference Mean Lower Low Water

Protracted by J.C.P. R.W. Knox . Soundings in pencil by J.C.P. & W.C. R.W. Knox.

Inked by J.M.a. Verified by J.M.a.

Records accompanying sheet (check those forwarded):

Des. report, 0 Tide books, * Marigrams, 1 Boat sheets, * 2 Sounding books, 0 Wire-drag books, 0 Photographs.

Data from other sources affecting sheet none

Remarks:

* Recd 3 sounding books - no boat sheet - BK Feb 1, 1926