

4761a

Diag. Cht. No. 8152-2

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

State: Alaska

11-5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 4761a

LOCALITY:
Tlevak Strait
View Cove and Coco Bay

1927

CHIEF OF PARTY:
H.A. Cotton

G. S. SURVEY
L. A.
MAY 5 - 1928
Acc. No.

4761a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
MAR 27 1928
Acc. No.

REG. NO. 4761a

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 1

REGISTER NO. 4761a

State ALASKA

General locality ~~SE Alaska~~, Tlevak Strait

Locality View Cove and COco Harbor

Scale 1-00000 Date of survey May & June, 1927

Vessel Steamer Explorer.

Chief of Party Harold A. Cotton

Surveyed by W. Weidlich.

Protracted by W. Weidlich.

Soundings penciled by W. Weidlich.

Soundings in fathoms feet

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated February 18th., 1927

Remarks:

DESCRIPTIVE REPORT

To accompany Hydrographic Sheet No. 1 476p

AUTHORITY: The hydrography on this sheet was executed under instructions of the Director of U.S. Coast & Geodetic Survey, dated February 18th 1927.

LIMITS: The entire area inside of a line drawn from HIGH POINT to REEF POINT was covered by this survey and connects with surveys done by the steamer "GEDENEY"

METHODS: Steamlaunch # 47 was used and was especially useful for this work on account of the steam sounding machine carried.

In shallow water up to 10 fathoms an eight lb\$ hand lead was used and for greater depths the sounding machine with stranded wire and a 14 lb\$. lead.

Lines are run in a northerly and southerly direction and spaced 150 meters apart, except in GREEN INLET? COCO HARBOR and adjacent waters, where the lines are spaced 100 meters and less depending upon the nature of the bottom.

On account of the narrow body of water in COCO HARBOR and other inlets the lines are run with the channel and therefore vary in direction.

CONTROL: Triangulation and topography furnish the necessary control.

BOTTOM: Bottom is very irregular, rocky, hard with occasional mud.

KELP: The only kelp noticed in this locality is in a small bight north of △ BAY, about 100 meters NW from ○ NOB. All obstructions located were free of kelp at that time.

DANGERS: This body of water is comparatively free of obstructions, except those listed below and a rock which bares at half tide and lies about 1000 meters 150° from REEF PT.

#1. A rock with a least depth found of 1-2/6 fathoms at M.L.L.W. lies 255 meters 355°40' from ○ WO. This rock is of small extent, surrounded by deep water and lies practically in midchannel of COCO Harbor. This is a pinnacle rock and not marked by any kelp.

#2. A rock with 2 feet over it at M.L.L.W. lies 270 meters 303°30' from ○ GAB. This rock is of small extent, with deep water around it; no kelp.

#3. A ledge extends in a NEly direction from ○ MAC & ○ HOW and about 55 meters further than shown by topography. See position # 17 e. and fix given on page 64, same volume.

#4. A ledge extends about 110 meters NNE from ○ ENT and another about 135 meter ENE from ○ NIN at the entrance to GREEN INLET, almost blocking the passage at the point. The positions given show the extreme edge of the ledges and the fixes were taken while signal building at very low tides.

ANCHORAGES: While working in this locality the steamer Explorer anchored most of the time east of △ VIEW, in 13 to 14 fathoms sticky and hard bottom, and also in a bight SW from △ VIEW in 19 fathoms hard bottom. Last named anchorage lies about 450 meters 5° from ○ TIN with a small stream south of it.

Upon arrival on working grounds the ship picked out the anchorage east of △ VIEW, but being exposed to SE winds and swells an attempt was made to find a better and more protected anchorage at the head of VIEW COVE, only to be disappointed as the winds blew much stronger as at the temporary anchorage..

Strange enough, although a gale was blowing at the entrance of BALDY BAY and at the head of VIEW COVE, there was a comparative zone of calm where the ship anchored and only the long SE swell forced the launches to seek shelter in more protected waters.

GREEN INLET was used a great deal to anchor the launches for the night and also when the ship left for Ketchikan to get coal and supplies. Although this inlet affords a fairly good anchorage for small boats, it can not be entered at low tides, it runs dry at minus tides between ○ SI and ○ IS. Signal Is was a banner lashed to a rock, bare about 3 feet at low tides.

Although the bottom is very sticky, launches were driven ashore by heavy williwaws, coming down the steep hills.

COCO HARBOR offers an indifferent anchorage on account of the heavy williwaws and same may be said of all other inlets and bights.

There is a small bight west of Δ BON, which might offer a fairly good anchorage for small fishing vessels. The entrance is very narrow and bottom is visible at the narrowest part.

Vessels should anchor in the center of the bight in about 4 fathoms, sticky bottom.

A rock with 2 feet over it at M.L.L.W. lies about 580 meters north from the entrance. (~~SEE~~ dangers #2.)

Another inlet lies south of Δ IN. This inlet is not shown on old charts (# 8148). The entrance to this inlet is very narrow and winding. Bottom is visible at the narrowest part all the way across. Current is very strong at the narrows, Power whaleboat had difficulties making this passage. Estimated strength of current 4-5 knots.

The inlet is very deep, too deep for any boat to anchor except at the edge of the flats.

WIND & WEATHER:

SE winds accompanied by heavy rain and occasional snow squalls were encountered during April and May. These winds were of considerable force, and made it quite uncomfortable for the smaller launches.

Usually the SE winds increase in force about 10-00 a.m. and moderate towards evening.

Although stiff SE winds are blowing in the open, conditions were quite different in the bights, inlets and at the head of COCO HARBOR. Here the winds came from all directions and in gusts.

During one SE blow the power whaleboat ventured into the inlet south of Δ IN to continue signal building, however was forced to turn about on account of fierce williwaws.

Westerly winds accompanied by fine clear, but cold weather were experienced at the head of View Cove for a few days, delaying work during the afternoon, and forcing the launch into a different locality.

Approaches:

View Cove is easily approached but it is quite different with COCO Harbor on account of the numerous rocks and ledges located by topography.

When entering View Cove, the steep shores of REEF Islands should be favored on account of the rock off REEF PT. which bares at half tides.

This rock is also a triangulation station, and as long as the signal was standing, it was a great aid to navigation.

This rock should be marked by a beacon, especially now as View Cove is visited by large steamer carrying limerock.

#4.

View Cove is wiredragged and found to be free of obstructions.

WATERSUPPLY:

There are numerous streams in this locality and most of them are at the head of the bights, inlets and coves, only accessible at high tides.

M. Heilich

STATISTIC SHEET # 1.

Date 1927	Letter	Vol.	Pos.	Sdgs.	Miles St.	Launch
May 4th.	a. red	1	63	104	5.2	# 47
" 5th.	b. "		126	205	17.2	# 47
" 6th.	c. "		138	302	18.2	# 47
" 13th.	d. "		118	297	13.0	# 47
" 14th.	e. "		31	65	4.0	# 47
" 16th.	f. "		105	306	13.7	# 47
" 17th.	g. "		138	405	16.0	# 47
" 19th.	h. "		152	196	17.0	# 47
" 20th.	j. "		147	423	16.2	# 47
" 21st.	k. "		100	293	12.0	# 47
" 23rd.	l. "		119	323	16.0	# 47
" 24th.	m. "		149	343	13.4	# 47
June 2nd.	n. "		118	330	13.4	# 47
" 4th.	p. "		74	193	6.9	# 47
TOTAL			1578	3785	187.2	

(11)

May 22, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
volumes of sounding records for

HYDROGRAPHIC SHEET **4761a**

Locality: **SENYAK STRAIT, S.E. ALASKA.**

Chief of Party: **H.A. Cotton, 1927.**
Plane of reference is **M.L.L.W.**
6.1 ft. on tide staff at **View Cove**

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.

G. Wade

Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. *4761-a*

The following statistics will be submitted with the
cartographer's report on the sheet:

Number of positions on sheet *1,578*
Number of positions checked *508*
Number of positions revised *98*
Number of soundings recorded *3,785*
Number of soundings revised *147*
Number of signals erroneously
plotted or transferred *7*

Date: *Jan 3rd 1929*
Cartographer: *J. Fleming*

Report on H. 4761-a

Pos. 59-d was plotted 40 meters inshore of true position and rocks awash were indicated in record at that position yet these were not shown on the sheet (near sig SHE top of sheet) In the closely developed area east of A View the rocks shown S.W. of Dit were plotted and drawn in the office (these were not shown on smooth sheet). As this appears to be an area of some importance a tracing was placed over this area and the positions and soundings ~~was~~ replotted.

The names of land and water features were ~~printed~~ ^{lettered} in the office.

The descriptive report for Wire drag refers

~~to~~ CLAM ISLAND on VIEW ISLAND Par. 2 Page 1

The pencil notes near Nin (entrance to Green Inlet) state that these rocks connect with shore but sounding lines show some depth at M. L. W.

SEE Wire Drags Soundings

200 meters	East of A View
300 "	S.E. " A VIEW
400 "	N.E. " O Ent
600 "	N " A SNOW

SEVERAL S.E. of Reef Point

Respectfully submitted

J. Fleming

Descriptive report for W.D. states that the shore east of Clam Island has been selected as a tentative dock site by the Pacific Coast Cement Co. It is considered important, therefore, that the status of the rocks S.E. of Dit be fixed and the shoal or ridge ~~of~~ ^{parallel} to the shore at this point be carefully noted.

J.F.

Field Records Section

Report on A. 4761-a — Surveyed in 1927

Chief of Party H.A. Cotton Surveyed by W. Weidlich

Projected by W. Weidlich Sounding Plotted by W. W.

Verified and inked J.F. Fleming

- ① Records Conform to requirements of G. I.
- ② Plan and Character of developments fulfill requirements of G. I.
- ③ Sounding line crossings are adequate.
- ④ Depth curves can be completely drawn.
- ⑤ Field plotting complete except as noted below

(a) 29 rocks had to be transferred from the topo sheet to the Hydro. sheet

(b) The names of signals were repeated in six instances examples Den, Is, Er, Don, Sab. SIS,
There was, however, little danger of confusion but the practice is a violation of G. I.

There are two rocks shown directly above sig Bos in Core Harbor. The North rock is not shown on the Topo or boat sheet but is shown on the Hydro. sheet.

Position 15-F is a 'resolver' and position on boat sheet did not agree with smooth sheet. This position was plotted back on course and agrees with boat sheet.

#31-m and 27-M plot close together but differ by 4 fathoms

Pos. 19-P and 73-h N.E. of Reef Islands present in unusual condition. Position and time were carefully checked but no discrepancy discovered.

Practically every position between 72-h and 94-h had to be replotted. The original sounding line was too close in-shore south of Reef Point. No rough could be assigned for this consistently erroneous plotting. The control was checked again and found OK. Some of the positions along shore were from 70 to 80 meters out.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON January 25, 1929.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4761a

View Cove and Coco Harbor, Tlevak Strait, Alaska

Surveyed in 1927

Instructions dated February 18, 1927 (EXPLORER)

Chief of Party, H. A. Cotton.

Surveyed by W. Weidlich

Protracted and soundings plotted by W. W.

Verified and inked by J. Fleming.

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 satisfy the specific instructions.
4. There were just a few sounding line crossings and they showed good agreement.
5. Depth curves from 10 fathoms, upwards, can be completely drawn.
6. The usual field plotting was done by the field party. There were 29 rocks on the topographic sheet that weren't shown on the hydrographic sheet, and these were transferred.
7. Practically every position between 72 h and 94 h was replotted by the office draftsman. The eastern end of the sheet was found to be badly distorted and after replotting, with allowance for the distortion, the original positions were found to be practically correct showing that the distortion had taken place after the sheet left the field party.
8. There are no contemporary sheets joining this one, but the junction with sheet 3417, executed in 1912, is very good.
9. The area within the limits of this sheet was developed in good shape and the scope of the surveying is excellent. A little more developing could have been done at the following places:

a. Around the 16 fathom sounding at Lat. $55^{\circ} 03'.7$, Long. $133^{\circ} 00'.6$. The locality was dragged later and that may account for the omission.

b. A split line should have been run in the channel leading to Coco Harbor, on the north side of Entrance Island, and a few more soundings taken between the Signals Ma and Sa just to the northward of this channel.

10. Remarks --

a. The boat sheet shows some sunken rocks off the point at Sta. Low, Lat. $55^{\circ} 01'.2$, Long. $132^{\circ} 59'.2$. These were not shown on either the topographic sheet or the smooth sheet, and no reference to them was made in the record. They were transferred to the smooth sheet as shown.

b. At Lat. $55^{\circ} 03'.5$, Long. $132^{\circ} 58'.2$, just south of Reef Point, two rocks awash were added to the smooth sheet, as noted in the record opposite positions 84 and 85 h, Vol. 3. These were not shown on the topographic sheet. There are two rocks shown on the boat sheet but these correspond in position to the rocks above H. W. shown on the topographic sheet. Sheet 3417 shows one rock awash outside of the rocks above H. W. which corresponds very closely to one of those added. The positions of these rocks should be checked up, though, when the adjoining survey is made.

c. There are two rocks shown at Lat. $55^{\circ} 02'.2$, Long. $133^{\circ} 04'.2$, the northern one of which is neither on the topographic sheet nor the boat sheet, and is not located in the records.

d. It appears that the names chosen for the signals on the sheet were done rather haphazardly. There are six names that were used twice on the sheet, namely, Den, Is, Er, Don, Sal and Sis, and there are several cases where adjacent signals had names that sounded very much alike and might easily have been mistaken for one or the other amidst the noise that is always present when the soundings are taken; namely Lob, Nob; Kol, Wol; Ben, Wen; Lon, Don; Ma, Sa.

11. Reviewed by J. M. Smook, January, 1929.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)