

4971

Diag. Chart No. 8502-2 & 8556-1

| | |
|--|---|
| <p>Form 504 Ed. June, 1928</p> <p>DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. PATTON., Director</p> | |
| <p>State: ALASKA.</p> | <p>LIBRARY MAR 31 1930 Acc. No.</p> |
| <p>DESCRIPTIVE REPORT</p> <p>Topographic } Sheet No. 2 4971 Hydrographic }</p> | |
| <p>LOCALITY</p> <p>KODIAK ISLAND. ALASKA.</p> <p>ALITAK BAY. Entrance</p> | |
| <p>1929</p> <p>CHIEF OF PARTY</p> <p>R. R. LUKENS.</p> | |

1267

DESCRIPTIVE REPORT.

to accompany
HYDROGRAPHIC SHEET # 2.

Scale 1:20,000

Str. SURVEYOR.

R. R. Lukens, Commanding.

INSTRUCTIONS.

The survey of the entrance to Alitak Bay on sheet # 2 was executed in accordance with instructions dated March 14-th, 1929.

Lazy Bay, Kempff Bay, and the inshore hydrography between Lazy and Kempff Bays was not resurveyed, as hydrographic sheet # 2864 covers these areas.

SURVEY METHODS.

The survey was executed with the use of the Wildcat, launch # 3, the Motor Sailer, and a skiff propelled by an outboard motor.

Three-point fixes were taken on triangulation, topographic, and hydrographic signals.

COMPARISON WITH PHOTOSTAT OF SHEET H 2864.

In latitude $56^{\circ} 52'$ N, longitude $154^{\circ} 12'$ W. a 19 fathom sounding is shown on a photostat of hydrographic sheet 2864. A careful development was made of the vicinity of this sounding. Twenty eight fathoms was the least depth found. The existence of a 19 fathom sounding appears doubtful, as no development was made on the previous survey.

In latitude $56^{\circ} 53'.1$, longitude $154^{\circ} 14'.2$ an island is shown on a photostat of sheet 2864. At H.H.W. this rocky island is awash. Several high points on this rocky islet show as separate rocks at H.W.

In latitude $56^{\circ} 53'.2$, longitude $154^{\circ} 15'.1$ a small island is shown on a photostat of sheet 2864. At three quarters tide, this rock is awash. At high tide, with a smooth sea, the location of this rock is not visible until it is approached very close.

In latitude $56^{\circ} 53'.6$, longitude $154^{\circ} 12'.9$ two rocks are shown awash on the photostat of sheet H 2864, and sunken on sheet T 2867. These rocks are awash at extreme low tides. An additional rock which is covered bears $1\frac{1}{2}$ feet at M.L.L.W. was found near the two shown on the previous survey in latitude $56^{\circ} 53'$ 1134 meters, longitude $154^{\circ} 12'$ 992 meters.

In latitude $56^{\circ} 53'.8$ N. longitude $154^{\circ} 10'$ W. a 12 fathom shoal shown on the photostat of sheet 2864 was developed. 11 fathoms was found on this shoal.

The island shown off Alitak Point in latitude $56^{\circ} 50'.4$, longitude $154^{\circ} 18'.95'$ was found to be smaller in area.

See 10110 p. 11 per le. RW

In latitude $56^{\circ} 54.05' N$, longitude $154^{\circ} 12.6'$, two rocks awash were found. The southern rock bares 2.5 feet at M.L.L.W., the northern rock bares 0.5 feet at M.L.L.W., these rocks were not shown on photostat of sheet 2864.

SHORELINE.

The shoreline was transferred from topographic sheets B & C (1929) and a photostat of topographic sheet 2807. The photostat was badly distorted.

DANGERS.

A sand bar extends south and east of Cape Alitak. The five fathom curve is one and one half miles off Cape Alitak. The ten fathom curve is 3 miles off Cape Alitak.

In Lazy Bay in latitude $56^{\circ} 53'$ 794 m. longitude $154^{\circ} 14'$ 753 m the least depth found was five fathoms. A $9\frac{1}{2}$ fath spot on H 2864 was not found.

In latitude $56^{\circ} 48'$ 1450 m, longitude $154^{\circ} 06'$ 825 m, a rock which bares 7.5 feet at M.L.L.W. and lies about 0.6 mile off the shore. This rock is the farthest offlying danger on the ~~west~~ ^{east} shore of Alitak Bay on this sheet.

In latitude $56^{\circ} 48'$ 1133 m, longitude $154^{\circ} 05'$ 915 m. are a group of rocks which bare 8.5 feet to 9 feet at M.L.L.W.

In latitude $56^{\circ} 46'$ 1058 m., longitude $154^{\circ} 06'$ 20 m., a kelp patch marks a sunken rock with $1\frac{1}{2}$ fathoms at M.L.L.W. Numerous rocks, reefs, and kelp were found along the east coast of Alitak Bay.

DESCRIPTION OF COAST.

Cape Alitak is the southwest point of Alitak Bay. The shoreline at the point is rocky. One half mile northeast of the point is the first of a series of low hills and valleys which form a peninsula (Tüntüvik) bounded by Alitak Bay on the east, Lazy Bay on the north, and Rodman Reach on the west. The peninsula is partly covered by moss. There is much bare rock on the tops of the hills. The narrow strip of land north of Cape Alitak which separates the outer coast from Rodman Reach is a series of sand dunes.

The shoreline from Cape Alitak to east true of Tanner Head on Alitak Bay is rocky at the numerous points with sandy stretches between. From east true of Tanner Head to latitude $56^{\circ} 53'$ the coastline is sandy. (fine black sand). At this point a western arm of Alitak Bay known as Lazy Bay extends westwards nearly to longitude $154^{\circ} 16'$. At very high tides a group of rocky heads are awash near the southeast point of the entrance to Lazy Bay. At low water these rocky heads appear as one large rocky island and two small rocky islands. At the northeast entrance to Lazy Bay are several islands. The largest one, Egg Island, is rock bound, grass covered and marked by a white square beacon, about 10 feet high. A white light surmounts the structure. It is kept lighted during the fishing season. The cannery is located on the north side of Lazy Bay. A wooden deck projects from the north shore. Near the head of Lazy Bay are numerous rocks only one of which is bare at all stages of the tide. A southern arm of Lazy Bay known as Rodman Reach extends $2\frac{1}{4}$ miles in a general south westerly direction, then branches true north for three miles.

Rodman Reach is navigable for launches for one and one quarter miles at all stages of tides. Beyond this, flats and rocks bar the passage much of which is bare at low water.

The western shore of Alitak Bay on this sheet north of Egg Island is bordered by rocks, except for Kempff Bay.

Between Alitak Bay and Kempff Bay are twin peaks partly grass covered on their lower slopes, and rocky for three hundred feet below the top. Kempff Bay extends for three miles westward of the main body of Alitak Bay. The northern side of Kempff Bay is very irregular. A channel extends north of the bay and west of Round Hill to the native village of Akhiok.

Round hill on the western shore of Alitak Bay, one hundred and ninety three feet high, is moss covered, and a very prominent landmark. The western shore of Alitak Bay is bordered by kelp, rocks, and rocky ledges. The shoreline is generally steep. The land is low rolling hills and valleys generally moss covered. There are no harbors, and only a few stretches of sand and gravel beaches. Three quarters of a mile off the shoreline the water is deep and safe for large draft vessels.

CHANNELS.

Alitak Bay.

The main body of Alitak Bay shown on this sheet is deep. The shore S. of Cape Alitak may be approached within one quarter of a mile in smooth weather.

^{there is} S.E. of Cape Alitak, a sand bar on which heavy tide rips break in rough weather and when the wind is against the current. This sandbar is 5 fathoms deep, one and one half miles S.E. of Cape Alitak, and 10 fathoms deep three miles S.E. of Cape Alitak. The draft of a ship, and the condition of the weather and current, largely determine safety in crossing this bar. Three miles off Cape Alitak is a safe distance.

Lazy Bay.

The shore south of the entrance to Lazy Bay is clear if given a berth of $\frac{3}{8}$ of a mile, except for the shoal S.E. of Cape Alitak. Egg Island at the entrance to Lazy Bay may be approached to within one fifth of a mile south of the island.

A cannery with a wharf, located on the north side of Lazy Bay, has a face of 87 feet and a least depth of 25 feet at M.L.L.W. alongside. The northern part of Lazy Bay beyond the sandspit N.W. of the dock, consists of mud flats and rocks.

Rodman Reach.

Rodman Reach, which extends south and west of Lazy Bay, is navigable only by small boats and launches. At M.L.L.W., it is navigable for about one and one quarter miles. Beyond this, flats and rocks block further passage.

Egg Island to Signal Ref. (= White Rk. - SWM₂)

A passage for launches exists northwest of Egg Island and east of signal Ref. Three rocks awash at extreme low water one quarter of a mile N.E. of Egg Island are not marked. Because of these rocks only persons with local knowledge use the passage.

West of signal Ref. a rock bare at all stages of tides; there is a launch

passage among the reefs. This passage is used only by persons with local knowledge.

Kempff Bay.

The entrance to Kempff Bay is between signal Ref and the island on which signal Mud is located. The waters of Kempff Bay are deep and not especially desirable for an anchorage. North of the island on which signal Mud is located are rocks and flats. There are no developments in the Bay. The bay is used chiefly as the south entrance to the native village of Akhiok, through a channel which branches from the north side of Kempff Bay. The soundings executed in Kempff Bay were taken to investigate a rock which was erroneously reported to be in the vicinity of the development shown on sheet # 2.

ANCHORAGES.

The main anchorage on this sheet for large ships is in Lazy Bay in 9 to 15 fathoms between the cannery and the eastern entrance point of Rodman Reach. During easterly gales, the wind blows directly into the bay. In case of dragging or parting of cable, there is danger of going ashore. Kempff Bay may be used for an anchorage in 18 fathoms near the head of the bay. The water is too deep for a convenient anchorage.

Sunflower Cove, one sixth of a mile south of the east entrance point to Rodman Reach, is an excellent launch anchorage in four or five fathoms.

Only emergency anchorages are available along the east coast of Alitak Bay on this sheet.

TIDES.

To determine a plane of reference for reducing soundings, a tide guage was established on the dock in Lazy Bay. Missing tides were computed.

Respectfully submitted,

C.D. Meaney
C.D. Meaney, H. & C. E.

STATISTICS FOR FIELD SHEET NO 2.

" W I L D C A T "

| <u>DATE.</u> | <u>DAY.</u> | <u>VOL.</u> | <u>POSITIONS.</u> | <u>SOUNDINGS.</u> | <u>MILES STATUTE.</u> |
|--------------|-------------|-------------|-------------------|-------------------|-----------------------|
| July 12. | a | 1 | 95 | 179 | 19.8 |
| " 13. | b | 1 | 57 | 120 | 11.4 |
| " 15. | c | 1 | 76 | 213 | 24.5 |
| " 17. | d | 1 | 9 | 25 | 2.0 |
| " 17. | e | 1 | 19 | 56 | 6.1 |
| " 17. | e | 2 | 65 | 186 | 19.2 |
| " 22. | f | 2 | 80 | 216 | 20.5 |
| " 23. | g | 2 | 84 | 243 | 27.0 |
| " 24. | h | 3 | 88 | 249 | 29.6 |
| " 25. | j | 3 | 84 | 426 | 25.7 |
| " 27. | k. | 3 | 48 | 182 | 15.2 |
| " 29. | l | 3 | 20 | 75 | 6.2 |
| " 29. | l | 4 | 55 | 211 | 18.0 |
| " 30. | m | 4 | 60 | 191 | 21.5 |
| Aug. 1. | n | 4 | 65 | 279 | 20.9 |
| " 2. | p | 4 | 72 | 319 | 25.6 |
| " 3. | q | 5 | 32 | 90 | 9.5 |
| " 7. | r | 5 | 65 | 227 | 24.0 |
| " 10. | s | 5 | 47 | 126 | 13.5 |
| " 14. | t | 5 | 21 | 76 | 7.1 |
| " 26. | u | 5 | 57 | 161 | 15.7 |

TOTAL:-

1199

3850

363.0

| | | | | | |
|---------|---|---|--------------------|------------|---------------|
| Oct 6 | e | 8 | <u>LAUNCH # 3.</u> | | ? |
| Oct 5 | d | 8 | 17 | 55 | ? |
| Aug. 5. | a | 1 | 86 | 179 | 9.7 |
| " 8 | b | 1 | 180 | 276 | 17.2 |
| " 9 | c | 1 | 51 | 481 | 8.6 |
| | | | <u>317</u> | <u>962</u> | <u>35.5</u> ? |
| | | | 390 | 1196 | |

TOTAL:-

SKIFF.

| | | | | | |
|---------|---|---|------------|------------|-------------|
| Aug. 12 | a | 1 | <u>153</u> | <u>385</u> | <u>13.4</u> |
|---------|---|---|------------|------------|-------------|

MOTOR SAILER

| | | | | | |
|--------|---|---|-----|-----|------|
| Oct. 3 | a | 1 | 110 | 780 | 15.4 |
| " 4 | b | 1 | 46 | 157 | 7.0 |
| " 5 | c | 1 | 52 | 233 | 9.9 |
| " 2 | d | 1 | 53 | 214 | 7.0 |
| " 2 | d | 2 | 32 | 164 | 4.0 |
| " 4 | e | 2 | 7 | 13 | 0.1 |

TOTAL:-

300

1561

43.4

Grand Total:- 2042

6992

LIST OF SIGNALS IN HYDROGRAPHIC SHEET # 2.

| HYDROGRAPHIC NAME. | LOCATION. |
|--|-----------------------------|
| Is | Topographic Signal Sheet B. |
| Vi. | do. |
| Do. <i>Three signals named Do</i> | do. |
| Ne. | do. |
| Ar. | do. |
| Ke. | do. |
| Jan. | do. |
| Rin. | do. |
| Cor. | do. |
| Sis. | do. |
| Sum. | do. |
| Jap. | do. |
| Dad. | do. |
| Ma. | do. |
| Out. | do. |
| Cat. | do. |
| Roar. | do. |
| To. <i>Two signals named To</i> | do. |
| Four. | do. |
| Nut. | do. |
| Pod. | do. |
| Toy. | do. |
| Son. | do. |
| Sap. | do. |
| Tap. | do. |
| Tail. | do. |
| Sqa. | do. |
| Bod. | do. |
| Car. | do. |
| Dit. | do. |
| Scar. | do. |
| Hat. | do. |
| My. | do. |
| Lot. | do. |
| Top. | do. |
| Be. | do. |
| Sea. | do. |
| Rat. | do. |
| Ran. | do. |
| Boy. | do. |
| Key. | do. |
| Bin. | do. |
| low. | do. |
| Tor. | do. |
| Lit. | do. |
| Do. <i>Three (Two signals named Do-gw)</i> | do. |
| Mit. | do. |
| Now. | do. |
| Duke. | do. |
| Bug. | do. |
| If. | do. |

HYDROGRAPHIC NAME.

LOCATION.

| HYDROGRAPHIC NAME. | LOCATION. |
|--|-----------------------------|
| Hi. | Topographic Signal sheet B. |
| Say. | do. |
| Pog. | do. |
| Bag. | do. |
| Pic. | do. |
| Sub. | do. |
| Lap. | do. |
| Pan. | do. |
| Ro. | do. |
| Bat. | do. |
| Cry. | do. |
| Cot. | do. |
| Cy. | do. |
| Ber. | do. |
| Tog. | do. |
| Hip, | do. |
| To. <i>Two signals named "To" one named "Two"</i> | do. |
| Sam. | do. |
| Pil. | do. |
| Sud. | do. |
| Bluf. | do. |
| Sand. | do. |
| Tat. | do. |
| Pat. | do. |
| Net. | do. |
| Can. | do. |
| Tin. | do. |
| Vi. | do. |
| Do. <i>Three signals named "Do"</i> | do. |
| Fox. | do. |
| Bud. | do. |
| Eye. | do. |
| Gin. | do. |
| Ver. | do. |
| Tris. | do. |
| Two. <i>Two signals named "To" one named "Two"</i> | do. |
| Bak. | do. |
| Me. | do. |
| Rule. <i>Rye on T-4486 & BS-H 4971</i> | do. |
| Car. | do. |
| Tank. | do. |
| Pole. | do. |
| Rad. | do. |
| No. | do. |
| Yes. | do. |
| Rub. | do. |
| Pan. | do. |
| Icy, | do. |
| Stream. | do. |
| Ole. | do. |
| Del. | do. |
| Ware. | do. |
| Rob. | do. |

HYDROGRAPHIC NAME.

LOCATION.

| | |
|-------------|--|
| Jax. | Topographic Signal Sheet B. |
| Mud. | do. |
| Ref. | do. |
| Tar. | do. |
| Carl. | do. |
| Po. | do. |
| Tom. | do. |
| Joy. | do. |
| Gum. | do. |
| Mac. | do. |
| Wart. | Wart 1906. |
| Lou. | Lou. 1929. |
| Grassy. | Grassy.1929. |
| Emo. | Emo 1929. |
| Micky. | Micky 1929. |
| Mat. | Mat 1929. |
| Rodman. | Rodman 1929. |
| Alitak. | Alitak 1906. |
| Tanner. | Tanner 1929. |
| Mount. | Mount 1929. |
| Egg. | Egg 1929. |
| Round. | Round 1929. |
| North Twin. | North Twin 1929. |
| Sig. | Hydrographic Signal, Page 36, Sdg. record, volume 1. M/S. |

Section of Field Records.

April 29, 1930.

2cm
24e

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
10 volumes of sounding records for


HYDROGRAPHIC SHEET 4871

Locality: Alaska (Kodiak I., Alitak Bay)

Chief of Party: R. R. Lukens, in 1929
Plane of reference is mean lower low water, reading
3.6 ft. on tide staff at Lazy Bay
14.2 ft. below B. M. 1

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 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.


aty Chief, Division of Tides and Currents.

Section of Field Records.

Report on Sheet No. H 4971
 Chief of Party R. R. Lukens
 Produced by C. D. Meaney.
 Verified and Inked by J. T. Walker

Surveyed in 1929
 Surveyed by C. D. Meaney,
 P. L. Bernstein, J. C. Mathison,
 Soundings plotted by
 C. D. Meaney.

1. Sounding Records.

The records were neatly and legibly kept.

Most of the rocks and other dangers described in the remarks column of the records were adequately located and their elevations referred to high or low water.

at position 7 (green) to near signal Jay, a rock is mentioned in the records (rk 15 ME). a note on the smooth sheet in pencil said, "rock bares $1\frac{1}{2}'$ at M. L. & W. The tide at this time was $1\frac{1}{2}'$ below M. L. & W. Mr. Shalowitz advised that the rock be shown as awash, without any note.

2. Protracting.

The prick points at the positions were larger than necessary.

Very few positions were found erroneously plotted. Most of these were due to using the wrong signals, wrong numbering, and faulty setting of the protractor.

3. Soundings.

The soundings were plotted according to time.

The proper fractions were used.

The crossings were good.

Pencil soundings were too large, especially in open spaces.

4. Conformity to General Instructions.

Most of the geographic names were penciled on the sheet. These were inked in as well as a few additional ones. Names shown on the topo sheets in pencil were omitted.

The shoreline and the rocks were inked in when the sheet was received. Some of the rock symbols were carelessly made and had to be removed and put in more carefully.

The position of one triangulation station was given on the sheet. It was named Alitak but its position indicated that it was Δ "Round". The name was therefore erased and changed to "Round 1929".

The sheet was somewhat soiled when received and did not have a very neat appearance.

5. Overlap.

The only modern overlap is with H 4972. There is a good agreement of the soundings where the sheets really overlap. There should be more overlap in the middle of the bay so that the soundings could be more closely compared.

Of the old overlap sheets, H 2865 does not join H 4971 as shown on the diagram. Sheet H 2864 overlaps the western side of H 4971. The soundings on the new and old work agree fairly close. The 19 fath. spot (also mentioned in the descriptive report) shown east of © Sand on the old sheet has been developed in the new survey and the least depth found to be around 29 fathoms. The rocks shown on H 2864 have approximately the same position as those shown on H 4971. The areas in Lazy Bay, Kempff Bay, and between the two bays shown undeveloped on H 4971 have been developed on H 2864.

6. Curves.

The sheet is sufficiently developed so that the customary curves can be drawn.

The curves are as smooth and regular as can be expected in this type of bottom.

7. Development of shoals.

The shoal extending southeast of Cape Alitak has been sufficiently developed. The shoal in Lat. $56^{\circ}-53\frac{3}{4}'$ Long. $154^{\circ}-10'$ was developed and a least depth of 11 fath. found. These are the only two important shoals except several which occur near shore.

8. Comparison with other data.

The sounding records were gone through and all rocks, dangers, and kelp described in the remarks column were plotted on the sheet.

References to floating kelp were ignored at the advice of Capt. Sukers and Capt. Ellis.

A rock awash 160 m E by N of 16 (red) C was not plotted as it seemed to be the same rock as one 250 m away in the same direction plotted from a note at 83 (green) b day.

at position 62 (red) if a rock is described 250 m inshore in line with \odot Cor. The records do not give its elevation, but

the boat sheet records that it is bare 5' at H.W. and the smooth sheet bore a similar note in pencil. It was therefore shown as a bare rock with (5') alongside it.

a rock described in the records at position 40 (red) U as "rock about 150 m 120° C awash" was not shown on the boat sheet or smooth sheet. It was added with a note, "Dares 9' at M.L.L.W."

all the information contained on the boat sheet of permanent value has been transferred to the smooth sheet.

Tracings were made of the shoreline and rocks, from the topo sheets and they were carefully checked with the smooth sheet.

The only chart of this area is No. 8502 on a scale of 1:1 000 000. This is such a small scale that no attempt was made to compare it with H 4971.

On the first page of the descriptive report, the last sentence of the paragraph beginning "In latitude 56°-53.6'" says:

"an additional rock which bares $1\frac{1}{2}'$ at M.I.F.W. was found —". This rock was located from a fix in Vol. 10 page 11 pos. 1c which says "Position of rock — 2 ft. of water at this stage of tide." The tide was $\frac{1}{2}$ feet which would make the rock covered $1\frac{1}{2}$ ft at M.L.L.W.

On page 2 of the descriptive report the paragraph beginning "In Lozy Bay" mentions a 5 fath. depth. In this area the least depth is $5\frac{4}{6}$ fath.

9. Miscellaneous.

The division of tides gives H.W. in this vicinity as 10.6 feet above M.L.L.W. Where rocks were seen awash or covered the note on the smooth sheet refers them to M.I.F.W. When they were seen

7.

bare and were more than 10.6 feet above
M.F.F.W. the height above H.W. was
given.

Respectfully submitted

J. J. Walker
Sept. 6, 1930

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

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

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4971

Entrance to Alitak Bay, Kodiak Island, Alaska

Surveyed in 1929

Hand lead and machine soundings

Instructions dated March 14, 1929 (SURVEYOR)

Chief of Party, R. R. Lukens

Surveyed by C. D. Meaney, P. L. Bernstein, J. C. Mathisson

Protracted and plotted by C. D. Meaney

Verified and inked by J. T. Walker

1. The records are clear, well kept and conform to the requirements.
2. The plan, character and extent of the survey satisfy the general and specific instructions.
3. The sounding line crossings are adequate. The general agreement is good except in the irregular areas where perfect agreement is not expected.
4. The information is sufficient for completely drawing the usual depth curves.
5. The junction with H. 4972, the only contemporary sheet to join this work, is satisfactory, but a little closer overlap would have been desirable.
6. The general agreement with the survey of 1906, H. 2864, is fairly good but there are several shoal spots on the old survey which were not found.

The 19 fathom spot in Lat. $56^{\circ} 52'.05$, Long. $154^{\circ} 12'.1$ is the most important of these. A fairly complete examination was made of this area, the least depth found being 28 fathoms. It is doubtful if this spot exists.

A $9 \frac{1}{2}$ fathom spot in Lazy Bay, in Lat. $56^{\circ} 53'.35$, Long. $154^{\circ} 14'.5$ was not found and the existence of this spot also appears doubtful.

The 10 fathom spot shown on H. 2864 in Lat. 56° 53'.9, Long. 154° 12', should have been examined.

The 11 1/2 fathom spot shown on H. 2864 in the entrance to Kempff Bay, in about Lat. 56° 54'.1, Long. 154° 12' should have been further developed.

Shoaler depths are shown on H. 2864 in about Lat. 56° 54'.5, Long. 154° 11'.3.

While some of the above mentioned spots appear quite doubtful, there is no conclusive proof of their non-existence and these soundings have been added to this sheet, H. 4971, in blue and will be charted by direction of Chief of Field Records Section.

7. The usual amount of field plotting was accurately done by the field party but the figures used for the soundings and bottom characteristics were too large.
8. Character and scope of surveying -- The survey as a whole is considered excellent. The ground has been uniformly covered and complete information has been furnished about the numerous rocks. A few of the critical soundings on the old survey should have been more closely examined and apparently the work in Lazy Bay could have been connected with the main sheet with very little more effort.
9. No additional lead line work is recommended.
10. Reviewed by R. L. Johnston, Sept. 23, 1930.

Approved:


Chief, Section of Field Records (Charts)


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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.
4971

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. 2

REGISTER NO. **4971**

State ALASKA.

General locality ~~ALITAK BAY.~~ KODIAK ISLAND.

Locality ENTRANCE TO ALITAK BAY.

Scale 1 : 20,000 Date of survey July-Aug. and Oct., 1929.

Vessel SURVEYOR.

Chief of Party R. R. LUKENS.

Surveyed by C. D. MEANEY, P. L. BERNSTEIN, J. C. MATHISSON.

Protracted by C. D. MEANEY.

Soundings penciled by C. D. MEANEY.

Soundings in fathoms ~~FEET~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by _____

Inked by J. T. Walker

Verified by J. T. W.

Instructions dated MARCH 14-th., 1929.

Remarks See also one Boat Sh. filed 4972

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-IRM

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

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4971

Entrance to Alitak Bay, Kodiak Island, Alaska

Surveyed in 1929

Hand lead and machine soundings

Instructions dated March 14, 1929 (SURVEYOR)

Chief of Party, R. R. Lukens

Surveyed by C. D. Meaney, P. L. Bernstein, J. C. Mathisson

Protracted and plotted by C. D. Meaney

Verified and inked by J. T. Walker

1. The records are clear, well kept and conform to the requirements.
2. The plan, character and extent of the survey satisfy the general and specific instructions.
3. The sounding line crossings are adequate. The general agreement is good except in the irregular areas where perfect agreement is not expected.
4. The information is sufficient for completely drawing the usual depth curves.
5. The junction with H. 4972, the only contemporary sheet to join this work, is satisfactory, but a little closer overlap would have been desirable.
6. The general agreement with the survey of 1906, H. 2954, is fairly good but there are several shoal spots on the old survey which were not found.

The 19 fathom spot in Lat. $56^{\circ} 52'.05$, Long. $154^{\circ} 12'.1$ is the most important of these. A fairly complete examination was made of this area, the least depth found being 23 fathoms. It is doubtful if this spot exists.

A $9 \frac{1}{2}$ fathom spot in Lasy Bay, in Lat. $56^{\circ} 53'.35$, Long. $154^{\circ} 14'.5$ was not found and the existence of this spot also appears doubtful.

The 10 fathom spot shown on H. 2864 in Lat. $56^{\circ} 53'.9$, Long. $154^{\circ} 12'$, should have been examined.

The $11 \frac{1}{2}$ fathom spot shown on H. 2864 in the entrance to Kempff Bay, in about Lat. $56^{\circ} 54'.1$, Long. $154^{\circ} 12'$ should have been further developed.

Shoaler depths are shown on H. 2864 in about Lat. $56^{\circ} 54'.5$, Long. $154^{\circ} 11'.3$.

While some of the above mentioned spots appear quite doubtful, there is no conclusive proof of their non-existence and these soundings have been added to this sheet, H. 4971, in blue and will be charted by direction of Chief of Field Records Section.

7. The usual amount of field plotting was accurately done by the field party but the figures used for the soundings and bottom characteristics were too large.
8. Character and scope of surveying -- The survey as a whole is considered excellent. The ground has been uniformly covered and complete information has been furnished about the numerous rocks. A few of the critical soundings on the old survey should have been more closely examined and apparently the work in Laxy Bay could have been connected with the main sheet with very little more effort.
9. No additional lead line work is recommended.
10. Reviewed by R. L. Johnston, Sept. 23, 1930.

Approved:

Chief, Section of Field Records (Charts)

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

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4971

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

| | |
|--|------|
| Number of positions on sheet | 2042 |
| Number of positions checked | 739 |
| Number of positions revised | 34 |
| Number of soundings recorded | 6992 |
| Number of soundings revised | * |
| Number of signals erroneously plotted or transferred | 0 |

Date: Sept. 5, 1930

Cartographer: J. T. Walker

* Record of soundings revised lost during vacation. J.T.W.