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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2973

LOCALITY:

*Alimroak Bay, Afog-
nak Island*

1908

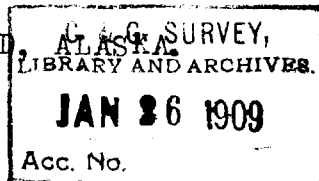
CHIEF OF PARTY:

W. C. Dibrell

2973

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO.

(FIELD NO. 2), ALIMVOAK BAY, AFOGNAK ISLAND,



2973

SCALE: 1- 20 000

1. In order to avoid the necessity of preparing another report referring to the same subject, the following Report is not restricted to information concerning the hydrographic sheet, but includes a complete description of Alimvoak Bay. A descriptive report accompanied the topographic sheet of this locality but it is not in detail. Bearings are true, distances are expressed in nautical miles and yards, elevations are in feet above high water.

2. Alimvoak Bay is a long arm making into the western side of Afognak Island from Shelikof Strait. The entrance lies about 13 miles north easterly from Kupreonof Strait and about 35 miles south westerly from the northern end of Shuyak Island. The middle of the entrance is in latitude $58^{\circ} - 14'$ N. and longitude $153^{\circ} - 08'$ W.

3. The inner part of the bay affords excellent anchorage for vessels of any size in any weather. The anchorage is commodious but practically land-locked. The entrance (to inner bay) is narrow but carries deep water and is easily made. There are few dangers.

4. The bay is $3 \frac{1}{2}$ miles wide at the entrance and 11 miles long, the axis lying very nearly east and west magnetic. At about the middle of its length an arm $2 \frac{1}{2}$ miles long branches off to the south eastward. The best anchorage is $7 \frac{1}{2}$ miles from the entrance, but in easterly weather, good anchorage may be had $4 \frac{1}{2}$ miles from the entrance.

5. This body of water is surrounded by high land, made up of ridges and several sharp summits. The slopes are in general steep but several valleys lead down to the bay. There are a number of

small streams, and usually no difficulty is experienced in boating off water to^a vessel. There is a growth of spruce in some of the valleys and near the head of the inner bay, otherwise the land is devoid of timber. In summer the country supports a rank growth of grass and alder brushes. The steepest slopes show bare rocks. When the snow is off the mountains, the crests of some of the ridges are given a ragged outline by exposed igneous rocks.

6. The entrance to Alimvoak Bay is well marked on the north by the high rounded mountains lying between Alimvoak and Paramanof Bays, and on the south by Steep Cape and a bold triangular bluff on the summit of which is "Trance" triangulation station. The two latter features are noticeable land marks from some distance out in Shelikof Strait and afford excellent land falls when making Alimvoak Bay in thick weather.

7. Steep Cape is marked by a rocky bluff about 1600 feet high with outer face sloping at about an angle of 45° . As viewed from off shore the top of the bluff is irregular in outline, but when seen from north or south the summit is very sharp. "Trance" has an elevation of a little more than 1000 feet. It is on a well defined summit at the edge of an almost sheer rock bluff. Between the station and the higher land interior there is a slight drop. Face of bluff is light grey in color and shows as a triangle, the inner (eastern) leg being short and steep and the outer (western) leg long, and sloping evenly nearly to sealevel. Bluff faces Cape Paramanof.

8. A dark pinnacle rock perhaps 50 feet high stands about 75 yards off the foot of Steep Cape. It shows only when clear of the land. At the south entrance to Alimvoak Bay is a noticeable pinnacle rock ("Ent" \odot ,) about 60 feet high. Low bare rocks extend 160 yards off the pinnacle. In a heavy swell the sea breaks only within

a few yards of the exposed rocks.

9. A Fourteen Fathom Bank, rocky bottom, lies between 1/2 mile and 1 mile north of the pinnacle referred to in last paragraph. The bank is a narrow ridge lying about north and south and there is deeper water between it and the shore. A number of lines were run across this bank and ^(13 reduced)fourteen fathoms (uncorrected for tide) was the least water found. A very heavy north westerly swell did not break here.

10. For convenience of description Alimvoak Bay may be divided into four parts, the outer bay, the inner bay, the narrow neck and the south-east arm.

11. The Outer Bay is broad, with great depth, the shores in general being rocky and steep to. Its deepest part is a little south ward of the center, the greatest cast obtained being 87 fathoms. The depth across the entrance is less, being from 30 to 48 fathoms. A rock bare at low water lies in the bight in the south eastern part of the outer bay 1/4 mile off shore and there are other rocks in this bight closer in-shore. This bight is not recommended as an anchorage. A rock awash lies 285 yards off the rocky point just to westward of the entrance to south east arm. This rock always shows, excepting perhaps at the highest tides. Other than those mentioned there are no dangers in the outer bay.

12. In northeast, east or southeast weather good anchorage may be had in the north-eastern part of the outer bay north-westward of the small island. There are no hidden dangers here excepting very close to shore. Head so as to give the island and the north shore about an equal berth and let go in about 15 fathoms sand bottom. This anchorage is about 4 1/2 miles from the entrance.

13. The Neck. At a point about five miles from its entrance Alimvoak Bay contracts sharply to a width of $2/3$ mile. In the center of this narrow part lies Fox Island marking the divergence of the south east arm from the main part of the bay. The channel north of Fox Island leads to the inner bay. The Neck is $1\ 1/2$ miles long and has a width between shores of from 600 to 750 yards. The navigable width is reduced to about 225 yards by some islets and sunken rocks.

14. Fox Island is 875 yards long by 350 yards wide and is irregular in shape with rocky shore line. There is a small beach on the south side. The island has a rounded summit, grass covered excepting for a noticeable patch of spruce. The island is prominent from the outer bay. For elevation see topographic sheet. ^(116 ft.) There is a prospector's cabin on the island ^(near S. pt. & beach) and the name is taken from the posted description of the mining claim. The island is said formerly to have been used for a fox ranch.

15. Between Fox Island and the main shore to south eastward there are a number of rocky heads that show at low water and the passage should be used only by boats and small launches.

16. Seven hundred and ten yards E.S.E. of Fox Island 220 yds. off the southern shore is a small grass covered islet about 30 feet high and 100 yards in diameter. A rock bare at low water lies 20 yards off the north side of the islet. There is good water close to this rock. The channel between this islet and the south shore should not be attempted by a vessel, as there are one or two rocky heads between the islet and the main shore to the eastward that bare at low water. 650 yards eastward of the islet and 60 yards off shore is a small rock that uncovers. For height above plane of reference see reduced soundings.

17. 400 yards northeastward from the islet is a large black rock about 15 feet above high water. The rock shows prominently when entering owing to its mid-channel position. A small patch of grass ^{grows} on top of the rock and a small detached rock but a few feet in height lies close to it on the north western side. The main channel, deep and clear of dangers, lies between this rock and the islet above mentioned. The rock is steep on the channel side.

18. Four hundred and twenty yards east south east from the "mid-channel" rock is a rocky head, a small portion of which uncovers at low water. For height above plane of reference see reduced soundings. This rock cannot be seen at high water, but it is out of the way of the main channel.

19. To pass from the outer to the inner bay proceed about in mid-channel between Fox Island and the northern shore, thence between "mid-channel rock" and the islet near the south shore, favoring "mid-channel rock" a little. When up to the rock set a course about parallel to the southern shore. When through the narrow part proceed to anchorage. There is a narrow but deep channel along the northern shore, but it is not recommended.

20. The Inner Bay is two miles long and has a maximum width of 1 1/4 miles. A long narrow arm 1/4 mile broad extends to the eastward more than two miles farther. This narrow arm is closed near the middle of its length at low water and is of no importance. At its western end the inner bay is too deep for anchorage but it shoals to the eastward and vessels may anchor wherever the depth permits. The best anchorage is off the bight in the northern part of the bay in 15 to 18 fathoms, sticky bottom with a gully at the left hand edge of a growth of spruce bearing north-east magnetic and the entrance (narrow neck) just closed. From the position a high sharp

peak is in range with a rock bluff on the shore line, bearing approximately north-east magnetic. The holding ground here is good.

21. The only danger in the inner bay is a rock awash in the eastern part of the bay 350 yards off shore. This rock is covered only at high water. There is a navigable depth up to within a short distance of the rock.

22. There are no sand beaches in the inner bay, the few beaches being gravel or shingle.

23. The South east Arm affords anchorage, but it is not recommended owing to the proximity of the other and better anchorage. The entrance eastward of Fox Island is narrow and the depth irregular. A rock bare at low water lies 100 yards off shore opposite the outer end of Fox Island. There is a beach at the head of the arm.

24. High and low water occur at Alimvoak Bay from 10 to 45 minutes later than at Kodiak. The range is about one and three quarters that at Kodiak. A tide staff was erected in the inner bay on the north side. Day and night readings were recorded from Sept. 11th to Sept. 17th, inclusive, and thereafter tides were observed only when hydrographic parties were at work. The lowest tide observed was 6.4 on the staff. High water on this day read 26.75 on the staff giving a maximum observed range for one day of 20.35 feet. The highest tide observed was 26.95 feet on the staff on Sept. 12th. A plane of reference may be obtained by comparison of staff readings with record of automatic gauge maintained by Assistant Hodgkins at Uyak, Kodiak Island.

25. The name (Alimvoak) of this bay is taken from Coast Survey charts, but it is not recognized at all locally. The local name is Molino (there is some doubt as to whether the last letter

should be o or a . It is given a short indistinct sound). The bay is unimportant commercially, the adjacent country being entirely uninhabited. Two deserted prospector's cabins are the nearest approach to human habitation noted.

26. The projection for this sheet was prepared in the field. The positions of the signals are furnished by the triangulation of this party and by the topographic sheet of Alimvoak Bay. The sheet is forwarded incomplete. All the positions of the close work have been plotted, but only a few lines in the outer bay have been put on the sheet.

27. The hydrography of the neck and the south-east arm was executed with the whale boat, that of the inner bay and along the shores of the outer bay was done with the launch, and the open part of the outer bay was developed with the ship. Mr. Bernhardt, Mate was in charge of the launch hydrography and the Chief of Party in charge of the ship and the whale boat work. In making the close developments time soundings were abandoned and soundings were made as rapidly as possible. Positions were frequently taken, in some cases on every cast of the lead . Owing to the fact that the soundings have not been plotted at the time this report is written, details in regard to depth cannot be given.

28. For magnetic declination in this region see magnetic observations of this party at station "Banner"

Respectfully submitted,

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Assistant, C. & G. Survey,
Chief of Party.

Exp Sheet No 2973

Mar 15, 1909.

The area within the limits of this survey is well covered. Shoals & channels have been carefully developed with the possible exception of the passage southeast of Tin Id.-

The records are clear & well kept.

H. L. Simpson

Ver: JGW
6-19-09

Applied to Chart No.
8534 (1935), 1:80,000. James W. A. Guire