

4483

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. R. PATTON

Director

C. & G. SURVEY

L. & A.

FEB 17 1930

Acc. No.

State: ALASKA

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. "P"

4483

LOCALITY

WEST COAST KODIAK ISLAND

Halibut Bay

CAPE MIDDLE TO CAPE IKOLIK

SEPT

1929

CHIEF OF PARTY

R. R. LUKENS

U. S. GOVERNMENT PRINTING OFFICE: 1918

3
00
44
4

Polomac Co

Hubert 1873

DESCRIPTIVE REPORT
to accompany
Topographic Sheet 'P'.
West Coast of Kodiak Island --- Cape Middle to Cape Ikolik.

Str. SURVEYOR.

R. R. Lukens, Commanding.

Instructions dated March 14-th 1929.

4483

GENERAL DESCRIPTION.

This is a mountainous region. The ridges have moderate grassy slopes except where they terminate in precipitous cliffs at the shore. Most of the shoreline consists of bold rocky cliffs and headlands. There are several bights, however, with low sandy beaches.

CAPE MIDDLE consists of two headlands having smooth, grass covered slopes facing inland, and precipitous, rugged cliffs facing the sea. The north headland, a little over a thousand feet in elevation, is the larger and higher. Tombstone Rocks lie about one mile west of Cape Middle. A drumlike pinnacle rock, over one hundred feet high, is situated due west of the highest point of the Cape, about two hundred meters offshore. Between this pinnacle rock and the shore are two smaller pinnacle rocks. A series of reefs fringe the shore south from these rocks to the little bight in the middle of the cape.

The shore from Cape Middle to Middle Bay consists of bold cliffs fringed by a scattering of rocks and reefs. The most notable of these are Mushroom Reef and the pinnacle rock called Tuf.

MIDDLE BAY is a small bight having a broad sandy beach backed by earth banks and a grassy valley.

A precipitous headland lies between Middle Bay and Gurney Bay. A few rocks and reefs lie at the base of this headland.

GURNEY BAY is a protected bight with sandy bottom and shore. The slopes of the hillsides end close to the beach.

CAPE IKOLIK is a wedge shaped headland, the seaward slopes of which are grass covered above and bare and rugged below. The inshore slopes are grassy. The shoreline consists of rugged cliffs about five hundred feet high. At the northern end of the cape is a striking, double headed mound about four hundred feet high, separated from the larger part of the cape by a saddle about one hundred and eighty feet high. Sail Rock and Lighthouse Rock lie west of this cape.

ROCKS AND REEFS.

TOMBSTONE ROCKS lie one mile west of Cape Middle. They consist of two pillarlike rocks. The south one is 99 feet high, the north one about fifty feet high. $57^{\circ}21' - 154^{\circ}47\frac{1}{2}'$

MUSHROOM REEF lies $\frac{1}{3}$ mile offshore midway between Cape Middle and Middle Bay. It is a flat topped, black reef, somewhat resembling an inverted saucer. It bares 13 feet at M.L.L.W. $57^{\circ}20' - 154^{\circ}48'$

TUF PINNACLE lies about ninety meters offshore midway between Cape Middle and Middle Bay. It is a pillarlike shaft of rock, 170 feet high, and having slightly overhanging sides. $57^{\circ}20' - 154^{\circ}47'$

SAIL ROCK (OUTER SEAL ROCK) resembles a jib sail. It is 89 feet

high and lies $1\frac{3}{4}$ miles W.N.W. of Cape Ikolik. This rock is a rookery for sea-lions.

LIGHTHOUSE ROCK (INNER SEAL ROCK) lies about $1/3$ mile west of Cape Ikolik. It is a steep sided, bare, rock 141 feet high, surmounted by a rock nub which resembles a lighthouse. Lighthouse Rock is a rookery for sea-lions.

SURVEY METHODS

The shoreline between A Pin and O Top was surveyed by traverse. At many set-ups one or two triangulation stations and at some set-ups three triangulation stations were in sight. At no set-up was an error in position detected. In addition to the traverse, Tombstone Rock was occupied and cuts to whitewashes were taken from it. In traversing southward cuts were taken to whitewashes ahead. These were an added check on the work.

CONTOURS. Some cuts to peaks were obtained by plane table, but most of the cuts and elevations were obtained by sextant from a launch laying-to at points along the coast averaging about one mile offshore.

This sheet was distorted during much of its execution ($2\frac{1}{2}$ meters per 1000 meters the long way of the sheet, $1\frac{1}{2}$ meters per 1000 meters the short way of the sheet), but the ample amount of control signals usually in sight prevented errors from this cause. After the sheet was completed and had remained on board ship for several months, it was found further distorted (about 12 meters per 1000 meters the long way of the sheet and 8 meters per 1000 meters the short way of the sheet, on the portion of the sheet used in the survey.)

The magnetic meridian was omitted thru oversight.

COMPARISON WITH OLD SURVEY

Cape Middle and Gurney Bay were previously surveyed (Topo. #3781). The shoreline of the present survey differs but slightly from that of the previous survey. The greatest discrepancy was found to be in the little bight due east of Tombstone Rocks, where the shoreline of the present survey is about 15 meters east of its position on topographic sheet, #3781.

PHOTOGRAPHS

A photograph of Cape Middle is attached to this report.

*affirmed
R.P. Lusk*

L.S. Hubbard
L.S. Hubbard, Topographer

NEW PLACE NAMES

NAME SUGGESTED
BY FIELD PARTY

REASON FOR NAME

Cape Middle ✓

So named because it is
the middle of three capes
in this vicinity.
(Name is used in Coast Pilot)

*Middle Cape
to G.B.*

Tombstone Rocks ✓ To GE

So named because they somewhat
resemble tombstones
(Name used in Coast Pilot)

Mushroom Reef ✓ To GB

So named because the reef is
shaped somewhat like the head
of a mushroom.

Middle Bay

So named from proximity to
Cape Middle.

*This name is
objectionable because there
is a Middle Bay on the east
side of Ketchikan I. - The
middle arm of Chiniak B.
H.B.*

Gurney Bay ✓ OK

So named on old topographic
sheet (#3781)

Sail Rock** Outer Seal Rocks
(see C.P.)

So named because of resemblance
to a jib sail.

Lighthouse Rock** Inner Seal Rocks
(see C.P.)

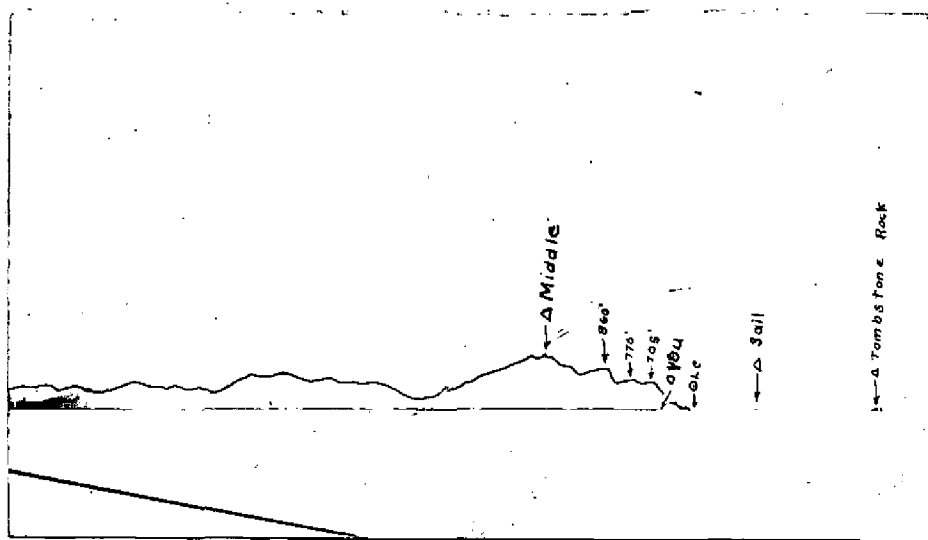
So named because of the nub of rock
on the islet, which is so easily
mistaken for a lighthouse.

** It is recommended that the names Outer and Inner Seal Rocks
for these ^{rocks} be discontinued, for the name, Seal Rocks, is a much
overworked word in Alaska, and does not distinguish these rocks
from the dozen other Seal Rocks in Alaska. Moreover there are
no seals on these rocks, only sea-lions.

*Retain old names "Inner and Outer
Seal Rocks". (See Geog. Dict. of Alaska,
Capt Lucens and C. Pilot.)*

PLANE TABLE POSITIONS

NAME AND DESCRIPTION	LATITUDE	D.M.	LONGITUDE	D.P.	HEIGHT	
					meters	feet
YOU, western face of pinnacle rock	57-21	1100 (756)	154-47	512 (491)		
LE, bronze disk, top of projection of rock, SW face of prominent rock 99 ' high, SW point of Middle Headland	57-20	1247 (609)	154-48	256 (748)		20
MUSHROOM REEF, highest point of reef	57-19	1520 (279)	154-47	674 (330)		
TUF, center of pinnacle rock	57-19	1530 (326)	154-46	895 (109)		170
NIT, bronze disk in rock of point, NE of entrance to Gurney Bay	57-18	428 (1428)	154-45	730 (275)		20
TOP, bronze disk on tip of small, toothlike, rock about 15 feet high, the northernmost of a group of islets	57-17	593 (1263)	154-47	765 (240)		15



CAPE MIDDLE

Taken by R.R.Lukens, September, 1929; at a position about $1\frac{1}{2}$ miles north of Cape Middle, and facing southward

T. 4583 by A.C. Thorson & G.M. Marchand (Fiskens Co. P.) in 1930 shows an elevation of 17 feet above mean high water for the group of rocks one mile northeast of Sattkinnak I., while the descriptive report of H. 5080 (Field No. 26) states that the elevation is 18 feet above mean sea level. There is a discrepancy of 3.6 feet between the two statements.

T. 4583 shows an elevation of 13 feet above mean high water for the group of rocks one-half mile northeast of Sattkinnak I., while the descriptive report of H. 5080 states that the elevation of the rocks is 13 feet above mean sea level. There is a discrepancy of 4.6 feet between the two.

As it is desired to show these elevations on the new chart it is necessary to remove the conflict in the data.

(Difference between m. s. l. and m. H. W. (T. H. C.) is 4.6')

It is noted that elevations on T. 4583 are referred to M. L. L. W., whereas the elevations on the adjoining sheet 4582 by the same party are referred to m. H. W.

E. P. Rehn, July 17, 1931

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

4483

TOPOGRAPHIC TITLE SHEET

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

Field Letter PREGISTER NO. **4483**State ALASKAGeneral locality WEST COAST KODIAK ISLANDLocality Halibut Bay
CAPE MIDDLE TO CAPE IKOLIKScale 1-20,000 Date of survey September 1929. 19Vessel Str. SURVEYORChief of Party R.R. LUKENSSurveyed by L.S. HUBBARDInked by L.S. HUBBARDHeights in feet above M.H.W. to ground to tops of treesContour Approximate contour Form line interval 100 feetInstructions dated March 14, 1929. -19

Remarks: