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U. S. COAST AND GEODETIC SURVEY
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State: ALASKA

DESCRIPTIVE REPORT
Topographic Sheet No. D 4655

LOCALITY

SITKALDAK STRAITS
KODIAK ISLAND, S.W. ALASKA
Puffin I., In. Old. Hbr., and Vicinity

1931

CHIEF OF PARTY

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET

NO. "D"
SCALE 1:20,000

Kodiak Island, Alaska
Sitkalidak Straits

Surveyed May June and July, 1931

F.B.T. Siems, H.& C. Engr., Chief of Party
George W. Lovesee, Jr. H.& C. Engr., Topographer
Date of Instructions, April 17, 1931

GENERAL DESCRIPTION OF LOCALITY: (see also Coast Pilot Notes)
(see also accompanying D.R. sheet 21)

The southern limit of this survey is near Black Point, on
Sitkalidak Island. This is a grass-covered point, slightly
less than 100 feet in elevation. It extends almost one mile
south of the high grass-covered hills. The shore-line is a
vertical rocky cliff, about 65 feet in elevation. (see
adjoining topographic sheet)

Puffin Island is a good landmark, when approaching
Sitkalidak Straits from the south and east. It is a grass-
covered island, with a rocky shore-line, and is about 75 feet
in elevation. About 0.7 of a mile, 237° true, from Puffin
Island, there is a rock which is 6 feet above high water.
From a distance, and against the horizon, this rock looks
somewhat like a ship.

North of Puffin Island, there is an open bay, semi-circular
in shape. This bay is known locally by the name of Rolling
Bay; named this, because boats lying at anchor roll with the
prevailing swell coming from the Southwest. This bay has a
large sand-beach, with a lagoon, back of low water, which extends
almost one mile in a Northeast direction.

North of Rolling Bay, there is a reef, which extends
about 0.8 of a mile out from the point. There are several
high-water rocks, the outer one being the largest. It has an
elevation of about 83 feet. From this rock, a reef awash
extends about 400 meters.

The head of the next bay is known locally as Sitkalidak
Lagoon. The bay itself is long and narrow, being about five
miles long, one mile wide at the entrance, and ½ mile wide
in the lagoon. The shore-line at the entrance is quite
rocky, but most of the bay has a flat sandy beach. The
entrance to the lagoon is very narrow, being almost blocked off
by a sand-spit, just above the storm-water line, which extends
from the south shore. There are extensive sand-flats at the
head of the lagoon.

The shore line between Sitkalidak Lagoon Bay, and Newman
Bay is very rocky, with jagged, vertical cliffs under 100
feet in elevation.

The topography of Newman Bay, as described in the Coast
Pilot is essentially correct. The Coast Pilot mentions a
point, or possibly a spit, on the southeast side of the upper
part of the bay. This is a point, the outer part of which has an
elevation of 50 feet. From a distance this point appears to be
an island, as the land between this point and the high hills is
only a few feet above high water. There are extensive sand flats
in the head of this bay.

From Newman Bay, the shore-line extends almost due northeast
for six miles. There is a continuous sand-beach along the entire
six miles.

There is a small bay on the opposite side of Sitkalidak
Strait from Old Harbor. This bay has a very flat sandy beach,
with some rocks. At triangulation station POINT, a junction with
the 1928 survey was made.

One mile southwest of Old Harbor, there is a bay which is
known locally by the name of Barling Bay. There are extensive
sand-flats at the head of this bay. There is a fish-trap off
the south side of the entrance to Barling Bay. Most of the
beach between Barling Bay and Three Saints Bay is very rocky,
with high grass-covered mountains rising from the shore-line.

Three Saints Bay is the largest and most important bay on
this sheet. There was a salmon-cannery here, which was destroyed
by fire on the morning of August 27-th. Part of the dock still
remains; but, unless the cannery is rebuilt, it will be impossible
to obtain fresh water at this dock. The lagoon mentioned in
the Coast Pilot notes is known locally by the name of Snug
Cove. This lagoon furnishes a very good anchorage for small
boats, as it is almost entirely landlocked, and very near the
entrance of Three Saints Bay. Chart #8502 shows a village in
this lagoon, named NUNAMIUT. The natives of this village have
all moved to Old Harbor. There remains only a small dock and
house, which is owned and occupied by one man.

LANDMARKS:

Black Point, the south end of Sitkalidak Island, extends
nearly one mile south of the high grass-covered mountains. It.
is marked by jagged cliffs, about 70 feet in elevation, and appears
darker than its surroundings. (See accompanying topo.-sheet of
outer coast of Sitkalidak Island, for complete shoreline around point)

Puffin Island is about 75 feet high at the highest point, and
is grass-covered. It is surrounded by pinnacle rocks, 10 to 30 feet
in elevation.

The reef extending off the north point of Rolling Bay is marked
by a rock about 83 feet in elevation. This rock has vertical sides
on all but the offshore slope; it is quite prominent.

There is a fish trap at Old Harbor, and another just south of
Berling Bay.

The entrance to Three Saints' Bay is marked by a small island
about ¾ mile off the north point. This island is about 90 feet
in elevation.

CHARACTER OF CONTROL USED:

Sixty-five triangulation-stations were used. Stations POOR,
HILL, MUN, and OLD HARBOR were established in 1928. Stations NATAL,
and BARCLAY were established in 1930. All other stations were
established in 1931. The triangulation stations plotted on this
sheet were based on Fort Hobron Datum, determined in 1928. Trans-
formation between Fort Hobron and Valdez Datum requires only a
constant correction for longitude and latitude, since distance and
azimuth of corresponding triangulation schemes were found to be
in practical agreement. (See under "Datum" descriptive Report sheet 21)

All traverse-closures checked, and no adjustment was
necessary.

METHOD:

Cuts were taken to all signals from triangulation stations,
in advance of traverse, which was then run between signals. All
peaks were located by graphic triangulation, with at least three
cuts and two elevations on each peak.

Form-lines were sketched after elevations and shoreline were
obtained. No offshore work to locate form-lines was necessary.

This survey was started in the bay just south of Old Harbor,
known locally as Berling Bay. When the junction with the 1928
survey was made at Old Harbor, the dock and shore-line was found
to be out about 30 meters in a westerly direction. Later, when
a connection was made on the opposite side of the strait, at the
point on which triangulation station POINT is located, the shore
line was found to be out about 20 meters in the same direction as
at Old Harbor; also the shore-line had apparently been sketched by estimation beyond the last topographic signal of 1928. A slight adjustment was also made on the form-lines below five-hundred feet, in the vicinity of triangulation station POOR - (1928).

A supplementary scheme of triangulation was then carried to the narrows. The church at Old Harbor, and the fixed light at the south end of the narrows, were located by triangulation. The 1931 position of the dock and shore-line was then checked, and found to be correct. The church at Old Harbor was the last topographic signal established in 1928. At the time, there was no steeple on the church (this information was obtained from the storekeeper at Old Harbor). Probably at that time the outer cable was located. The steeple is over the center of the church ridgepole, and the church is about 30 feet long and 20 feet wide. The church faces normal to the shoreline.

The fixed light at the narrows, located in 1928, was found to differ from the 1931 triangulation position by about 15 meters, also in a westerly direction.

Only 1931 topographic signals were used for hydrography in this area.

LIST OF NEW NAMES:

BARLING BAY - one mile south of Old Harbor - (local name)
SITKALIDAK LAGOON - one mile south of Newman Bay (local name)
ROLLING BAY - one mile south of Sitkalidak Lagoon - (local name)
*JOHN ISLAND - (recommended) Outer entrance Island, Three Saints Bay Chart.
SHIP ROCK - at triangulation station of same name. This name is recommended by field officers, inasmuch as the rock appears as a vessel from the distance when seen against the horizon.

Also, Swing Cove (Conserve Chart. - C.W.H.)

PROGRESS:

Work was started on May 16-th and completed on July 25-th.

STATISTICS:

Statute miles of high water line ................. 102.0
Statute miles of low water line .................. 90.0
Area in square statute miles .................... 68.0

All work was done by a shore party of one officer and four men, living in camp at Barling Bay, from May 16-th to June 8-th.

See Coast Pilot Notes in Desc. Report for Sheet 21 - (Hydrography)
and at Snug Cove, Three Saints Bay, from June 8-th to July 25-th. A launch and skiff were used for transportaion.

Respectfully submitted,

George H. Lovesee
GEORGE W. LOVESEE, JR. H.& G. Engr.,
U.S.C.& G.S.S. SURVEYOR.

APPROVED:

F.B.T. SIEMS, H.& G. Engr.,
Commanding Officer,
U.S.C.& G.S.S. SURVEYOR.

CWL/HH
## Plane Table Positions

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<th>Object</th>
<th>Lat. °</th>
<th>D M. Meters</th>
<th>Long. °</th>
<th>D D. Meters</th>
<th>Ht. feet</th>
<th>Remarks</th>
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<td>153 27</td>
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<td>CLOD</td>
<td>57 06</td>
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<td>153 28</td>
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<td>153 25</td>
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<td>153 23</td>
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<td>(1074) 762</td>
<td>153 19</td>
<td>(224) 787</td>
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<td>153 19</td>
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<td>56 59</td>
<td>(171) 1685</td>
<td>153 20</td>
<td>(767) 244</td>
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DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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 No. "D"

REGISTER NO. 4655

State... S.W. Alaska

General locality... S.E. coast of Kodiak Island

Locality... Stick Island Strait, Puffin I., to Old Hbr. and Vicinity

Scale 1:20,000........ Date of survey May, June, July.....1931

Vessel... U.S.C.&G.S.S. SURVEYOR

Chief of Party... F.R.T. Sims, H.& G.E.

Surveyed by... George W. Lovvace, Jr., H.& G.E.

Inked by........ " " " " "

Heights in feet above... high water ground 65.50 approx.

Constancy approx. 100 feet

Form line interval... 100 feet

Instructions dated... April 17, 1931

Remarks:......

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S.F.O