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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

State: ALASKA

DESCRIPTIVE REPORT

Topographic ~~Hydrographic~~ Sheet No. D 4655

LOCALITY

~~SITKALIDAK STRAITS~~

KODIAK ISLAND, S.W. ALASKA

Puffin I., to Old Hbr., and Vicinity

1931

CHIEF OF PARTY

F.B.T. SIEMS, H.& G. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET

NO. "D"
SCALE 1:20,000

Kodiak Island, Alaska
Sitkalidak Straits

Surveyed May June and July, 1931 4655

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

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GENERAL DESCRIPTION OF LOCALITY: (see also Coast Pilot Notes 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 ¼ 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

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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 Straits 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.

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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 Barling Bay.

The entrance to Three Saints Bay is marked by a small island about $\frac{1}{2}$ mile off the north point. This island is about 90 feet in elevation. "John I."

CHARACTER OF CONTROL USED:

Sixty-five triangulation-stations were used. Stations POOR, HILL, MIN, 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 Port Hobron Datum, determined in 1928. Transformation between Port 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) ←

To convert to Valdez Datum:
Move φ S. 286.1 M.
λ E. 173.8 M.
JWM

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 Barling Bay. When the junction with the 1928 survey was made at Old Harbor, the dock and shore-line ~~was~~ were 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 gable 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) approved Ok to use
SITKALIDAK LAGOON - one mile south of Newman Bay (local name) Ok to use
ROLLING BAY - one mile south of Sitkalidak Lagoon - (local name) Ok to use
*JOHN ISLAND - (recommended) outer entrance Island, Three Saints Bay Carded
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. Carded

Also Smug. Cove (Coast Chart. - U.S.C.&G.S.)

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 W. 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.

GWL/HH

PLANE TABLE POSITIONS

OBJECT	LAT ° '	D M meters	LONG ° '	DP meters	Ht. feet	REMARKS
KEEL	57 06	(1100) 756	153 27	(831) 179		large flat rock
CLOD	57 06	(455) 1401	153 26	(266) 744		pinnacle rock
INTO	57 07	(1406) 450	153 25	(283) 727		pinnacle rock
ANT	57 03	(876) 980	153 23	(20) 991		centre of three pinnacle rocks
GAGE	57 02	(1074) 782	153 19	(224) 787		large flat rock
RAW	57 01	(516) 1340	153 19	(505) 505		outer point of cliff
EAR	56 59	(171) 1685	153 20	(767) 244		pinnacle rock

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4655

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 ~~Sitkalidak Straits~~ 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.B.T. Siems, H.& G.E.

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

Inked by " " " " "

Heights in feet above high water o ground ~~[illegible]~~ Form line interval 100 feet

Instructions dated April 17, 1931

Remarks:

GPO