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

**R.S. Patton**<br>Director

**U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES**

**MAN.** 28 1931

<table>
<thead>
<tr>
<th>State: Alaska</th>
<th>Acc. No.</th>
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</table>

### DESCRIPTIVE REPORT

**Topographic**<br>**Hydrographic**<br>Sheet No. "H" 4583

### LOCALITY
- South of Kodiak Island
- North Coast of Sitkinak Island

### 1930

### CHIEF OF PARTY
- F. H. HARDY
GENERAL DESCRIPTION.

Sitkinak Island is divided by a lagoon having narrow entrances on the north and south coasts of the island. Hills separated by low valleys extend eastward and terminate in bold headlands on the east end of the island. Two parallel ridges extend in a southwesterly direction across the island from Flat Point and Valley Point. The principal ridge rises to a dome shaped mountain in about the middle of the western part. The west ridge rises steeply from the shore and has numerous shale slides and rock outcrops. A sand and gravel beach extends from the western limit of the sheet to the north entrance of the lagoon. From there eastward the beach is strewn with boulders and a heavy shingle. A reef extends northeastward from the east end: there are two pairs of bare rocks on the reef, the outer ones one mile from shore. At low water reef's bare out to the inner pair and northeastward about 200 meters from the outer pair.

There are no inhabitants on the island except occasionally a few fishermen in the summer and trappers in winter. Fresh water can be obtained from numerous creeks on the island.

FALSE HEAD is the lower and northerly promontory on the headlands at the east end of the island. From the eastward the headlands show as dark bluffs. From the west end of Sitkinak Strait, False Head shows as a shoulder on the east end of the island.

FLAT POINT is the most northerly point on the island. It extends out a quarter of a mile from the first rise and is a low gravel point. Successive gravel ridges on the point indicate that it is being gradually built up. The beach is steep to off the point.

VALLEY POINT lies off the northern end of the ridge that runs along the west coast of the island. It is a low gravel and sand point. A reef extends northward from the point 300 meters.
SITKINAK LAGOON divides the island in two parts. Near the north coast the lagoon is broad and shallow and is largely bare at low tide. The tide ebbs and floods through both entrances. There is a narrow channel having a depth of 6 feet through the north entrance and anchorage for small craft can be found in the area indicated on the sheet. There is a 3-4 knot current running in the channel where anchorage is possible. The channel shoals rapidly beyond this point and passage through out the lagoon can only be made with a pulling boat. The bottom in the lagoon is of a fine loose sand that is continually shifting.

CONTROL

The triangulation stations, Valley Point, Tween, Flat Point, Ruff, Beach, Slue, Wis, Camp, Wry, False Head, Sn, Out, Osk, Equinox, Pyramid, Nut, Nox, Abe, Fair, Tip and Dome were used as control for this survey.

TRAVERSES

A traverse was run from Flat Point to Valley Point and checked within the allowable error.

A traverse was run from Flat Point East around False Head to Osk. At the time the only control available was triangulation stations Camp and False Head. The traverse did not close as the old location of the stations was in error. Additional triangulation was completed and the traverse was rerun and checked within the allowable error. The end of this traverse was checked by triangulation at station Osk.

A traverse was run from Valley Point to Paw. The location of Paw was checked by sextant cuts from the Tender Helianthus.

AUXILIARY SURVEYING METHODS

In Sitkinak Lagoon the area next to the outside coast and the vicinity of the entrance and channel were located by planetable. In the shoaler portions of the lagoon the high and low water lines were located by sextant fixes that were plotted on the topo sheet. The shoreline of the
lagoon near the East end of the Island except the north shore was also located by sextant fixes.

The reefs and outlying rocks near station In were located by sextant fixes taken from the rocks by using a pulling boat. The reefs along the north coast were located by planetable and supplemented by data obtained from the hydrographic party. The limits of the kelp bed off signal StO was located by the hydrographic party. The limits of the kelp bed off signal Pod was located by sextant cuts taken from a pulling boat. The rocks along the West coast South west from Valley Point were located by sextant cuts from the launch Helianthus and plotted on the topo sheet several cuts to the more important of these had been obtained by plane table.

FORM LINES

Cuts were taken from the plane table where possible to obtain elevations. Off shore observations were taken from the Tender Helianthus and the form lines sketched. A hypsograph was used to compute the elevations, allowance being made for H. I. and distance from the shore line.

NEW NAMES

VALLEY POINT so named by both the parties of 1906 and 1930. A valley makes inshore from the point.

FLAT POINT Named by the parties of 1906 and 1930, self explanatory.

SITKINAK LAGOON Referred to as such by the party of 1930.

FUSE HEAD Named by the parties of 1906 and 1930. So named because it is a ledge and the higher beadalnd lies to the southward.
**PLANE TABLE POSITIONS**

<table>
<thead>
<tr>
<th>Object and Descript.</th>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top—(Sharp peak on north end of ridge)</td>
<td>56-34</td>
<td>1370</td>
<td>154-08</td>
<td>30</td>
<td>1181</td>
</tr>
<tr>
<td>Rock (West Coast)</td>
<td>56-35</td>
<td>1806</td>
<td>154-17</td>
<td>657</td>
<td></td>
</tr>
</tbody>
</table>

*(Insert is continuation of topography on West end of Island)*

Respectfully Submitted,

[Signature]

A.C. THORSON, JR. H&G.

Approved & Forwarded:

[Signature]

F. H. HARDY,
H&G. Engr.
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. "H"

REGISTER NO. 4583

State. St. H. Alaska

General locality. Kodiak Island

Locality. Sitkinak Island

Scale 1:20,000 Date of survey June-July, 1930

Vessel. Str. SURVEYOR

Chief of Party F. H. HARDY

Surveyed by A. C. T. & C. M. M.

Inked by A. C. T.

Heights in feet above MLLW to ground to tops of trees

Contour. Approximate contour. Form line interval 100 feet

Instructions dated April 1, 1930

Remarks: 

SP 0