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

State: ALASKA

DESCRIPTIVE REPORT
Topographic Sheet No. FIELD "A":
Hydrographic 4694

LOCALITY
SOUTHWEST ALASKA
Sitkalidak Narrows and
McDonald Lagoon
Southeast Coast of Kodiak Island

1932

CHIEF OF PARTY
F.B.T. SIEMS, H.G.E.
INSTRUCTIONS:

DIRECTOR'S instructions dated April 22, 1932.

LIMITS:

This sheet covers Sitkalidak Narrows from a junction with Sheet "D", 1931 in the vicinity of Old Harbor to a junction with Sheet T-4397 in the vicinity of Sheep Island. The other section of this sheet covers McDonald Lagoon from a junction with Sheet T 4397 on the north to a junction with sheet T 4662 on the south.

DESCRIPTION:

The resurvey of the Narrows was made to give a survey of this important section on a large scale, 1:10,000 being used. A discrepancy at the head of McDonald Lagoon found in 1931 work and the necessity of supplementing the hydrography in this area made a resurvey of the section necessary.

Sitkalidak Narrows affords the western entrance to Sitkalidak Straits and is a narrow channel of about three hundred and fifty meters width with low rolling tundra on either side. The western entrance of the Narrows is marked by the Kadiak Fisheries Trap and by Old Harbor Light. The only hidden danger noted in this season's work is a reef near the eastern shore due east of Old Harbor Dock, which bares 4 feet at M.L.L.W. The Coast Pilot has a note that there are several broken piles in the shoal bay northeast of the village. These piles were not seen during the work in this area, inquiry at Old Harbor was made but no definite information as to their existence could be obtained. The people in the village recall that there used to be some old stubs showing in the vicinity between the present trap and the river, these being about three hundred yards offshore. The shore between Old Harbor Light and the two 5 foot boulders on the beach is suitable for beaching boats in emergency. The eastern entrance is restricted by a sand spit off the end of Sheep Island in the direction of Sheep Island Light and by a reef making out from the shore northwest of this Light. Anchorage is found in the bay south of Sheep Island, dangers being two piling south of the light which are covered at extreme tides. Sheet T 4397 shows three piling in this section, after careful examination it is thought that these piling have been removed and replaced by the two now shown. Sheep Island is a low grass covered island, highest point 45 feet.

McDonald Lagoon is the first bay on Sitkalidak Island west of Table Island and is marked by an abrupt rocky bluff to the east of the entrance. The lagoon is narrow and about three and one half miles long, with grass covered slopes rising to sixteen hundred feet more or less on each side. The entrance is restricted by low sand spits. A house and outbuildings belonging to the McCord Cattle Company are located on the east shore inside the entrance, there are also two other shacks on the eastern shore toward the end of the lagoon. Anchorage is found just inside the entrance.
in the bight to the westward, the upper end of the lagoon is shoal. From the
head of the lagoon to the outside coast is a distance of only 110 meters.
The bar at the entrance breaks in northeasterly weather.

Control for these areas was furnished by 3rd order triangulation.

SURVEY METHODS:

In the Sitkalidak Narrows the triangulation stations were occupied
and signals were cut in from these. By using this method such control
was afforded as to cut the traversing to a minimum. The junctions with
the 1931 work were made at Point and in the vicinity of Old Harbor. At
Point a good junction was made although on the Old Harbor side it was
necessary to over run the 1931 work about a quarter of a mile to establish
a satisfactory junction. It is recommended that the 1932 shoreline be
accepted in this section as being better controlled and on a larger scale.
A satisfactory junction with the 1928 work was made on both shores in the
vicinity of Sheep Island. The shoreline of Sheep Island is subject to
change, it being recommended that the 1932 work be accepted in this par-
ticular. Due to the low country surrounding the Narrows the form lines
were put in on a 50 foot interval to better define the appearance of the
locality.

In McDonald Lagoon as in the Narrows signals were cut in from
the triangulation stations. As noted in the letter of Recommendations
Concerning Field Work, Kodiak Island; Commanding Officer, SURVEYOR,
dated 2/3/32; the head of the Lagoon was found in error. Satisfactory
junctions were made with the 1928 work in the vicinity of Monk 1931 and
in the bight between the entrance and Cod 1931. The form lines were
revised entirely. Junction was also made with the work of 1931 on the
outside coast of Sitkalidak Island.

<table>
<thead>
<tr>
<th>STATISTICS</th>
<th>SHEET &quot;A&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore line (Sitkalidak Narrows)</td>
<td>9.0 statute miles</td>
</tr>
<tr>
<td>Area &quot;</td>
<td>5.5 square statute miles</td>
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<tr>
<td>Elevations &quot;</td>
<td>27</td>
</tr>
<tr>
<td>Magnetic Declinations &quot;</td>
<td>1</td>
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<tr>
<td>Shore line (McDonald Lagoon)</td>
<td>14.5 statute miles</td>
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<tr>
<td>Area &quot;</td>
<td>8.0 square statute miles</td>
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<tr>
<td>Elevations &quot;</td>
<td>31</td>
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<tr>
<td>Magnetic Declinations &quot;</td>
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<tr>
<td><strong>TOTALS</strong></td>
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<tr>
<td>Shore line</td>
<td>23.5 statute miles</td>
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<tr>
<td>Area</td>
<td>13.5 square statute miles</td>
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<tr>
<td>Elevations</td>
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<tr>
<td>Magnetic Declinations</td>
<td>2</td>
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</table>

LIST OF NAMES

Well established local names:

Sitkalidak Narrows
Sheep Island
McDonald Lagoon
### Plane Table Positions

<table>
<thead>
<tr>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-11</td>
<td>1555</td>
<td>153-18</td>
<td>365</td>
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<td>--</td>
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<tr>
<td>57-13</td>
<td>66</td>
<td>153-15</td>
<td>672</td>
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<tr>
<td>57-12</td>
<td>1347</td>
<td>153-15</td>
<td>137</td>
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<tr>
<td>57-12</td>
<td>867</td>
<td>153-15</td>
<td>465</td>
<td>--</td>
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</tr>
<tr>
<td>57-12</td>
<td>871</td>
<td>153-15</td>
<td>364</td>
<td>--</td>
<td>Top</td>
</tr>
</tbody>
</table>

### McDonald Lagoon

<table>
<thead>
<tr>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-09</td>
<td>1172</td>
<td>153-03</td>
<td>576</td>
<td>--</td>
<td>--</td>
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<tr>
<td>57-07</td>
<td>976</td>
<td>153-05</td>
<td>589</td>
<td>--</td>
<td>--</td>
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<tr>
<td>57-06</td>
<td>1634</td>
<td>153-05</td>
<td>409</td>
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<tr>
<td>57-08</td>
<td>1419</td>
<td>153-05</td>
<td>524</td>
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<td>Hi Pt.</td>
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<td>1347</td>
<td>153-04</td>
<td>133</td>
<td>--</td>
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<td>57-10</td>
<td>903</td>
<td>153-04</td>
<td>600</td>
<td>10'</td>
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</tbody>
</table>

Respectfully submitted,

Max G. Ricketts, Jr., H.&G.E.

Approved and Forwarded:

F.B.T. SIEMS, H.&G.E.
Chief of Party, C.&G.S.
The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front gable of shack on 67-11 1555</td>
<td>153-16</td>
<td>375 Valdez Topo:</td>
<td>8502, 8574</td>
</tr>
<tr>
<td>Kadiak Fisheries Old</td>
<td></td>
<td>(o FIT)</td>
<td></td>
</tr>
<tr>
<td>Harbor Trep.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Small unlighted beacon on 57-12 1365</td>
<td>153-15</td>
<td>137 Valdez Topo:</td>
<td>8502, 8574</td>
</tr>
<tr>
<td>sand spit, west end of Sheep Id. Beacon</td>
<td></td>
<td>(o LIT)</td>
<td></td>
</tr>
<tr>
<td>permanent as is being undermined.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern of two pilings in 57-12 871</td>
<td>153-15</td>
<td>364 Valdez Topo:</td>
<td>8502, 8574</td>
</tr>
<tr>
<td>bright south of Sheep Id.</td>
<td></td>
<td>(o DOL)</td>
<td></td>
</tr>
<tr>
<td>covered at extreme tide.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NOTE:* Chart 8574 is based on Port Hobron datum and is related to Valdez datum as follows:

- Subtract 286 meters from latitude D.M. meters (Valdez datum) to transform to Port Hobron datum.
- Subtract 181 meters from longitude D.P. meters (Valdez datum) to transform to Port Hobron datum.

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it: for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
REVIEW OF TOPOGRAPHIC SHEET No. 4694
Title (Par. 55) Sitkalidak Narrows and McDonald Inlet, Kodiak, Alaska
Chief of Party T. B. J. Sieu Surveyed by M. S. Richarte Inked by M. B. R.
Ship Surveyor Instructions dated Apr. 21, 1932 Surveyed in May-June 1932

1. The survey and preparation for it conform to the requirements of the Topographic Manual (Pars. 7, 8, 9, 13, 16). √

2. The character and scope of the survey satisfy the specific instructions. √

3. The control and closures of traverses were adequate. (Par. 12, 29.) √

4. The amount of vertical control that the Manual specifies for "contours-formlines" was accomplished. (Par. 18, 19, 20, 21, 22, 23.) Junction with T-4387 and T-4642 has been made in the office (shown by broken line) and T-4655 has been corrected as approved by the Chief Field Party and the Chief of Field Records. √

5. The delineation of "contours-formlines" is satisfactory. (Par. 49, 50.) √

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 23.) √

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 18a, 43, 44.) √

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) √

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) √

10. The span, draw and clearance of bridges are shown. (Par. 16c.) √

11. Locations and elevations of summits are given. (Par. 19, 51.) √
12. The tree line was shown on mountains. (Par. 16g.)

13. The descriptive report covers all details listed in the Manual, insofar as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of plan-table stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPAs, 68.) They are listed in the Descriptive Report.

16. A list of landmarks for charts was furnished on Form 567: (Par. 16d, e, 60.)

17. The magnetic meridian was shown and declinations were checked. (Par. 17, 52.)

18. The geographic datum of the sheet is Valdez and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate for shoreline. (Par. 34c, d, e, 68.)

20. Geographic names are shown on the sheet and are covered by the descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the Descriptive Report after review by

Reviewed in office by P.J. Christianeau, May 5, 1933

Examined and approved

K.T. Adams
Chief, Section of Field Records

F.B. Borden
Chief, Section of Field Work

Chief Charts

Chief, Section of Field Work
Chief, Division of Hydrography and Topography

Chief, Division of Charts

(Note: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual.)
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 Letter "A"  

REGISTER NO. 4694  

State: ALASKA  

Kodiak and Sitkalidak Is.  

Locality: SITKALIDAK NARROWS AND MCDONALD LAGOON  

1:10,000  

Scale: 1:20,000  

Date of survey: MAY & JUNE, 1932  

Vessel: U.S.C.S. SURVEYOR  

Chief of Party: E.B.T. SIEMS  

Surveyed by: MAX G. RICKETTS  

Inked by: MAX G. RICKETTS  

Heights in feet above M.H.W. to ground: 50  

Contour: Approximate contour  

Form line interval: 100 feet  

Instructions dated: APRIL 22, 1932  


1931 triangulation stations in McDonald Lagoon recovered and used without additional triangulation.