

5762

U. S. COAST & GEODETIC SURVEY  
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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. K-2234

LOCALITY SARANA BAY  
Akun Strait to Yuleon Cove  
~~AKUTAN HARBOR, AKUTAN PASS &~~  
• Vicinity S.W. of Kootok Island  
~~SOUTHEAST SIDE AKUTAN ISLAND.~~

ALEUTIAN ISLANDS

1934

CHIEF OF PARTY

A. M. SOBIERALSKI, H. & G. E.

5762

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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MAY 7 1935  
REG. NO.  
Acc. No.

HYDROGRAPHIC TITLE SHEET

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

Field No. 2234

REGISTER NO. 5762

State ALASKA

General locality ALEUTIAN ISLANDS SARANA BAY

Locality Akun Strait to Vulkan Cove & Vicinity S.W. of Rootok Island  
~~AKUTAN HARBOR, AKUN PASS & SOUTHERN SIDE AKUTAN ID.~~

Scale 1/20,000 Date of survey July-August-Sept., 1934

Vessel U. S. C. & G. S. S. SURVEYOR & LAUNCH #3

Chief of Party A. M. SOBIERALSKI, H. & G. E.

Surveyed by A. M. SOBIERALSKI, V. M. GIBBENS

Protracted by V. M. GIBBENS

Soundings penciled by C. J. WAGNER

Soundings in fathoms feet

Plane of reference M L L W

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by L. B. BERES + L. E. BOYCE

Verified by L. B. BERES JUNE 4, 1935

Instructions dated APRIL 13, 1934

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET K-2234

Scale 1/20,000

AKUTAN HARBOR, AKUN PASS AND SOUTHEAST SIDE AKUTAN ID.

ALEUTIAN ISLANDS, ALASKA

U. S. C. & G. S. S. SURVEYOR -0- A. M. SOBIERALSKI, COMMANDING.

Date of Instructions: April 13, 1934. Project HT-176, 1934.

Survey Methods: Regular methods and visual fix control were used. The ship SURVEYOR took fathometer soundings. Launch #3 took handlead and wire soundings. Handlead soundings were taken up to the depth of 12 or 14 fathoms and wire soundings were taken from that depth out into the deeper water.

Discrepancies: No discrepancies noted.

Dangers: One important danger is a rock awash at one half tide, 250 meters  $17^{\circ}$  T from triangulation station Current. This rock can always be located by the swirl of water around it caused by the strong currents. ✓

A group of rocks which bare only at low water ✓ +  
lies 1130 meters,  $292^{\circ}$ T from triangulation station Arch.

Two rocks awash at high tide 230 meters south ✓  
from triangulation station Box should not be overlooked.  $54^{\circ}05'3''$ ;  $165^{\circ}41'5''$  ✓  
*reales 115 meters*

Vessels should keep clear of a reef extend- ✓ ✓  
ing out 600 meters east from topographic station "Sop". This reef is  
covered with heavy kelp.  $54^{\circ}07'3''$ ;  $165^{\circ}39'1''$

There are no other dangers which extend more ✓  
than 400 meters off shore.

Currents and Tide rips: See Coast Pilot notes submitted on January  
21, 1935.

Anchorage: See Coast Pilot Notes submitted on January  
21, 1935.

Akun Strait: In navigating this strait, vessels keep close to the heavy kelp which is plainly visible. Practically all the sounding was done at slack water, which lasts only a short time. As soon as the current picks up the launch could make no headway against it, except by skirting the kelp.

A 7 fathom sounding in approximate latitude 54-07 and longitude 165-38.5 was obtained on a line, <sup>(pos. 53m-34m)</sup> but never could be verified although numerous soundings were taken around it. However, two of the men in the party noted the ranges and when out fishing claim they dropped a fishing line on it and obtained about 7 fathoms, so that it is probably of very small extent. *The 7 fathom sounding retained*

Overlay: A small tracing accompanies the sheet showing additional soundings over the 7 fathom spot and in the narrowest part of Akun Strait which could not be shown legibly on the sheet.

*When possible soundings from tracing added to smooth sheet. Tracing filed with boat sheet*  
Comparison with previous surveys:

The soundings of the previous surveys are in good agreement with the soundings on this sheet, with the exception of a 15 fathom sounding (questioned) on sheet H-25416 latitude 54-07.9, longitude 165-48.2, which is between a 24 and a 25 fathom sounding on this sheet.

*The 15 fathom sounding considered erroneous, see par. 63(u) of this review*

Respectfully submitted,

*V. M. Gibbens*  
V. M. GIBBENS,  
Lieutenant (j.g.)

Forwarded, approved:

*A. M. Sobieralski*  
A. M. SOBIERALSKI,  
Chief of Party.

STATISTICS

SHEET K-2234

<u>Volume</u>	<u>Day</u>	<u>Date</u>	<u>Positions</u>	<u>Soundings</u>	<u>Statute Miles</u>
			<u>Launch #3</u>		
1	a	July 9	102	361	19.1
1	b	" 12	95	345	15.9
1	c	" 16	66	257	8.7
2	c	" 16	53	266	9.7
2	d	" 17	76	281	17.2
2	e	" 24	99	295	24.0
3	f	" 26	128	311	23.0
3	g	" 30	139	412	23.0
3	h	" 31	83	241	11.4
4	h	" 31	48	130	7.8
4	j	Aug 2	70	222	14.9
4	k	" 3	75	265	10.4
4	l	" 9	125	398	18.4
5	m	" 11	111	340	17.9
5	n	" 14	125	363	22.2
5	p	" 15	89	264	15.2
6	q	" 17	132	382	22.0
6	r	" 18	9	17	0.5
6	s	" 20	85	236	16.0
6	t	" 31	95	210	13.5
7	t	" 31	14	53	2.8
7	u	Sept 6	32	80	4.0
7	v	" 15	77	267	12.9
7	w	" 17	84	300	13.2
7	x	" 25	<u>27</u>	<u>62</u>	<u>4.6</u>
		Total Launch #3	2039	6358	348.3
			<u>SHIP "SURVEYOR"</u>		
8	A	Aug.13	77	418	39.0
8	B	" 27	<u>156</u>	<u>652</u>	<u>60.3</u>
		Total SURVEYOR	233	1070	99.3
		Total SURVEYOR & Launch #3	2272	7428	447.6

HYDROGRAPHIC SURVEY NO. H5762

Smooth Sheet 1

Boat Sheet 1 1 Overlay

Sounding Records 8 Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) See letter 324 (1935)

Statistics Yes

Approved by Chief of Party A. M. Sobieralski

Recoverable Station Cards (Form 524) \_\_\_\_\_

Special Chart for Lighthouse Service \_\_\_\_\_  
(Circular Nov. 30, 1933)

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5762

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	2272
Number of positions checked	338
Number of positions revised	3
Number of soundings recorded	7428
Number of soundings revised	8 + 146 fractions added on 10 fath soundings
Number of signals erroneously plotted or transferred	2

Date: JUNE 4, 1935

Verification by L. B. BERES

Time: 31 hrs

Review by G. Pisegari

Time: 25 "

VERIFIER'S REPORT H-5762

The records conform to the requirements of the General Instructions except in the cases noted under Remarks.

The one, two, three, and five fathom curves could not be completely drawn due to the nature of the shore. The ten and twenty fathom curves could be completely drawn.

The field plotting was complete as prescribed by the Hydrographic Manual.

The drafting was satisfactory except that the majority of the rock symbols had to be done over.

Junctions with adjacent sheets ~~was satisfactory~~. *were satisfactory, except #15728, which shows a gap at southwestern limit.*  
Remarks:

The following corrections were made on signals:

Signal Po - misspelled on smooth sheet and signal list. - *was spelled "Pol"*

Triangulation station Fal - corrected on smooth sheet - *was plotted as Top @*

Triangulation station Flat - corrected on smooth sheet. - " " " " " "

Signal Misty- shown as Water on T-6242 was changed to *"Misty"* ✓

Signal Con - corrected on T-6242. - *was spelled "Ton"* ✓

Signals Po, Dig, and Dol - corrected in signal list (Vol II) - *was Pol, Pig, Pol*

Positions 70 and 71A were replotted - had been plotted on wrong signal. ✓

Position 70W was replotted. ✓

Angles and ranges column W day- entries careless. *Names of have* Signals should ~~been~~ *where lacking, and where no numbers were used* entered at top of each page *and where signals on successive positions* ~~are the same use the letter S or Same to indicate the fact.~~ *should have been supplemented.*

Sunken rock - Volume I page 41 position 29-30b ? *Sunken rock plotted as recorded*

Respectfully submitted

*L. B. Beres.*  
L. B. Beres

*Note: - An overlay tracing accompanying the smooth sheet was compared and all the important soundings has been transferred to the smooth sheet. The tracing is filed as a back sheet.*



TIDE NOTE FOR HYDROGRAPHIC SHEET

May 23, 1935

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in  
8 volumes of sounding records for

HYDROGRAPHIC SHEET 5762

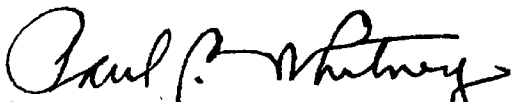
Locality ~~Akun Strait to Vulcan Cove~~ <sup>SARANA BAY</sup> and Vicinity, southwest of Rootok Island,  
Aleutian Islands, Alaska.

Chief of Party: A. M. Sobieralski in 1934  
Plane of reference is mean lower low water reading  
3.7 ft. on tide staff at Trident Bay  
5.9 ft. below B.M. 1

3.9 ft. on tide staff at Akutan Harbor  
13.4 ft. below B. M. 1

Height of mean higher high water above plane of reference is 4.3 feet at  
Trident Bay; and 3.9 feet at Akutan Harbor.

Condition of records satisfactory except as noted below:

  
Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5762 (1934) - FIELD NO. K-2234

Akun Strait to Vulcan Cove and Vicinity S. W. of Rootok Island,  
Aleutian Islands, Alaska

Surveyed in 1934

Instructions dated April 13, 1934 (SURVEYOR)

Hand Lead, Machine, and Fathometer  
Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - A. M. Sobieralski.

Surveyed by - A. M. S., V. M. Gibbens.

Protracted by - V. M. G.

Soundings penciled by - C. J. Wagner.

Verified and Inked by - L. B. Beres, L. E. Boyce.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. Triangulation stations "Fal" and "Flat" were plotted on the smooth sheet as topographic signals. They were corrected in the office.
- b. In volume number 1, b and c days, the bottom character "rky" was recorded in numerous cases as "Rk."

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The instructions for the project have been satisfactorily complied with, in general (see paragraph 9, this review).

3. Sounding Line Crossings.

No general system of cross lines were run but those that were, as well as the adjacent lines, show good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn, including portions of the 1, 2, 3, and 5 fathoms curves.

5. Junctions with Contemporary Surveys.

Junction with H-5744 (1934) on the east will be considered in the review of that sheet.

Junction with H-5763 (1934) on the southeast is satisfactory.

Junction with H-5728 (1934) on the south is satisfactory, except in the area between long.  $165^{\circ}47'$  and  $165^{\circ}52'$ , where there is a considerable gap in the work.

6. Comparison with Prior Surveys.

a. H-2541 (1901), H-2542 (1901).

These surveys are on a scale of 1:60,000 and cover the present survey with a few lines of widely spaced soundings around the eastern coast of Akutan Island between Akutan Harbor and Vulcan Cove, and in Akun and Avatanak Straits. In general, the agreement in depths is good.

The cluster of rocks charted in lat.  $54^{\circ}05.3'$ , long.  $165^{\circ}41.5'$ , from H-2541 (1901) but actually originating with T-2545 (1901), fall among soundings of the present survey. These are evidently a generalization of the group of definitely located rocks shown on the present survey which originate with T-4919 (1934). The present delineation should supersede that shown on the old surveys for charting. T.6242

All rocks on the old survey which fall within the inshore limits of the hydrography on the present survey will be disposed of in the reviews of T-4919 (1934) and T-6242 (1934).

b. H-2546 (1901).

This survey is on a scale of 1:20,000 and covers the Akutan Harbor area of the present survey with only a few soundings which are in general agreement.

- (1) Two uncharted bare rocks shown on H-2546 (1901) but originating with T-2545 (1901), scale 1:40,000, in lat.  $54^{\circ}08.65'$ , long.  $165^{\circ}43.9'$  are in slightly different positions from those shown on T-6242 (1934). They are evidently the same rocks shown on the present topographic and hydrographic surveys which adequately developed the area. The present delineation should be accepted for charting.

- (2) A rock awash (charted) in lat.  $54^{\circ}07.8'$ , long.  $165^{\circ}41.1'$  was found to be incorrectly plotted on H-2546 (1901). The rock was not plotted opposite the sounding to which the note in the record (pos. 39e, blue) referred. When correctly plotted the rock falls on the outermost end of a group of rocks shown on the present survey. This rock should be disregarded in future charting.
- (3) All rocks on the old survey which fall within the inshore limits of the hydrography on the present survey will be disposed of in the review of T-6242 (1934).
- (4) The 15 fathom sounding (uncharted) in Akutan Harbor (lat.  $54^{\circ}07.9'$ , long.  $165^{\circ}48.2'$ ) falls in depths of 24 fathoms in uniformly flat bottom on the present survey. This sounding was questioned in the old record (pos. 51F', red) with a note stating "water in tube" and it probably should have been rejected at the time. The 15 fathom sounding is believed to be erroneous and should be disregarded in future charting.

7. Comparison with Chart No. 8360.

Within the area of the present survey, the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

The protracting and plotting of soundings was satisfactory.

9. Additional Work Recommended.

In general this survey is complete and satisfactory, however the following additional work should be accomplished when work is resumed in this vicinity:

- a. The holiday in the vicinity of lat.  $54^{\circ}02'$ , from long.  $165^{\circ}47'$  to long.  $165^{\circ}52'$  should be covered when work is resumed in the area.
- b. The 19 fathom sounding in lat.  $54^{\circ}01.9'$ , long.  $165^{\circ}35.7'$  should be further developed.
- c. The 7 fathom sounding in Akun Strait (approx. lat.  $54^{\circ}07.0'$ , long.  $165^{\circ}38.5'$ ) was not verified after a rather intensive re-examination of the area. (See page 2, Descriptive Report). As the controlling depth in the passage is less than 7 fathoms, an investigation of this sounding is not immediately necessary. Should the area be investigated in the future, a short drag should be used.

10. Superseding Old Surveys.

Within the area covered, the present survey, with the indicated additions from previous surveys, supersedes the following surveys for charting purposes:

H-2541 (1901) in part.  
H-2542 (1901) " "  
H-2546 (1901) " "

11. Reviewed by - G. Risegari, July 23, 1935.

Inspected by - R. L. Johnston, August 2, 1935.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*R. O. Colburn*  
Chief, Division of Charts.

*J. S. Borden*  
Chief, Section of Field Work.

*G. H. Hude*  
Chief, Division of H. & T.

Applied to Charts 8860, 8802 + 9322 Oct 10 - 1935.

P.B. Oyster.

Applied to compilation 9005 March 1943 S.M.A.

" " " 8720 April 1943 G.H.S.

25 Jan 2, 1935  
E.H.S.