

6241

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 1137 H6241

State ~~ALEUTIAN ISLANDS~~
~~ALASKA~~

LOCALITY

~~ALEUTIAN ISLANDS~~

UNALASKA ISLAND

KULILIAK BAY

1937

CHIEF OF PARTY

A. M. Sobieralski

U. S. GOVERNMENT PRINTING OFFICE

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.2(a), EXECUTIVE ORDER 12356.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. 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. 1137

REGISTER NO. H 6241

State ~~Alaska~~ Aleutian Islands

General locality ~~Aleutian Islands~~ Unalaska Island

Locality ~~Unalaska Island~~ Kuliliak Bay

Scale 1:10,000 Date of survey July, Aug., Sept., 1937

Vessel U.S.C. & G.S.S. Surveyor

Chief of Party A. M. Sobieralski

Surveyed by J. C. Tison, Jr., W. F. Deane, J. Laskowski

Protracted by J. C. Tison, Jr.

Soundings penciled by J. C. Tison, Jr.

Soundings in fathoms feet

Plane of reference MLLW

Subdivision of wire dragged areas by -----

Inked by G. H. Everett

Verified by G. H. Everett

Instructions dated April 13, 1934

Remarks: -----

Descriptive Report

to accompany

Hydrographic Sheet No. 1137 *H-6241*

Kuliliak Bay - Inner Part

Season 1937

Instructions: The work was executed under The Director's Instructions dated April 13, 1934.

Limits: This sheet covers the inner part of Kuliliak Bay and the entrance to the inner Bay.

Survey Methods: All sounding lines were run by one of the Surveyor's launches, using the hand lead and wire for sounding and sextant fixes for control. Soundings inside the entrance to the inner Bay were all taken with the hand lead, and those in the entrance and just outside, where the water is deeper, with the wire. All soundings were corrected as prescribed in Special Publication # 143.

Signals for control of this hydrographic survey were located by topography on Sheet UA - 37, ^(T-6574) scale 1 : 10,000. No difficulty was experienced in obtaining strong sextant fixes for control of the sounding lines.

A combination of ranges and compass courses was used in maintaining direction of the sounding lines. Difficulty was experienced in selecting strong ranges for steering, and foggy weather also hindered in this respect. The sounding lines inside the Bay were run in very windy weather and as a result are quite crooked due to wind drift. Care was taken to change direction of the lines only when sextant fixes were obtained, so in spite of the crooked lines it is felt that each individual sounding is well located.

Discrepancies: No discrepancies were noted during the course of the work, either in depths, position of soundings, or location of signals.

Dangers: In latitude 53°-27.65 and Longitude 167°-02.26 a sunken rock with 2 ft. of water over it was found.

In Latitude 53°-28.04 and Longitude 167°-01.2 a rocky shoal with least depth of 3 5/6 fms. was found.

Sunken rocks shown in ink in the following localities were located by topography on Sheet UA - 37, ^(T-6574) and depths of water shown over them were obtained at the time of the topographic survey with an improvised sounding rod graduated in feet:

A single rock 42 meters southeast of triangulation station Kail 1935.
Four rocks outlining a group just offshore from topographic signal It.
55 meters southeast from topographic signal Ax. *Depths of water over*
85 meters WSW from topographic signal Do. *These sunken rocks were*
175 meters East from signal Yes. *shown in pencil on the smooth*
Two rocks just offshore from signal Not. *sheet by the Field Party. They*
The depths are reduced for tide. *were inked in the office.*

Channels: This survey shows the narrow entrance to the inner Bay to be free of dangers, with slightly deeper water to be found on its eastern side. The controlling depth for a mid-channel course through the entrance is $9\frac{1}{4}$ fathoms, and for a true north or south course passing 115 meters west of Dame Rock it is 10 fathoms. The entrance is best approached from the southeast, by giving Dame Rock a berth of at least 150 meters on its south side so as to stay well outside the 10 fathom curve.

Proceeding to sheltered anchorage inside the inner Bay, the controlling depth is $4\frac{5}{6}$ fathoms after passing the entrance. The channel with this depth lies close to the southeast shore of the Bay and just outside a heavy fringe of kelp along the northwest shore of Point Divide. On the north side of this channel the water shoals very gradually to the opposite side of the Bay. Northeast of Pampas Point the water deepens and the bottom is very flat, with $7\frac{1}{4}$ fathoms being the controlling depth for anchoring in the area east of Nesting Island and southeast of Sand Point. ✓

To proceed to anchorage in the above area from the outer part of Kuliliak Bay, approach the entrance to the inner Bay from the south-east or south-southeast giving Dame Rock a berth of at least 150 meters on its south side. Enter on a true north course passing 115 meters west of Dame Rock. When Bird Rock is on the port beam change course to $52\frac{1}{2}^{\circ}$ True and pass 105 meters off Pampas Point. When Nesting Island bears true north change course to $41\frac{1}{2}^{\circ}$ true and continue to anchorage with Nesting Island bearing 256° True.

Anchorage: Sheltered anchorage in all weather can be had in the area east of Nesting Island and south of Lat. $53^{\circ}-28.0$ with good holding ground. Violent willi-waws occur in the part of the Bay above Lat. $53^{\circ}-28.0$ in northerly and westerly weather. A heavy dory beached at Sand Point was rolled over and over by the wind, showing the force it attains.

Miscellaneous: Fog often drifts in, and in northerly and westerly weather winds always draw through the wide low valley extending westward to Kashega Bay from the vicinity of triangulation station Gab 1935. ✓

In heavy southerly weather, sharp, broken seas were noted in the entrance to the inner Bay. Swells enter the inner Bay and break along the northern and western shoreline from Entrance Rock around to Nesting Island. Small boat landings can be made in all but very extreme southerly weather in the shallow rocky bight located between signal Eve and triangulation station Gab 1935. ✓

The kelp indicated on the west side of the entrance, from signal Rap northward to signal Eve, is very thick, presenting a mat-like appearance in calm weather. It thins out as the shoreline is approached, and the area just outside the reef line is filled with numerous sunken rocks.

The kelp along the northwest shore of Point Divide is also very thick and grows solidly from the low water line to a distance off shore of from 45 to 65 meters. ✓

Miscellaneous (continued): From triangulation station Gab 1935 eastward to signal B&I a continuous band of kelp of varying widths parallels the northern shoreline. It is normally very thick and mat-like in appearance but after a period of heavy southerly weather is not so noticeable, it having been torn up in great quantities by breaking seas. Between this kelp and the low water line is a narrow strip of comparatively open but shoal water where numerous sunken rocks are visible and sparse kelp grows.

Junctions with other Surveys: This sheet joins Hydrographic Sheet No. 2537 on the south and east. A satisfactory junction was accomplished with no apparent discrepancies.

Comparison with previous Surveys: A comparison with Topographic Sheet UA - 37 ^(T-6594) shows no discrepancies in topographic detail except that the low water line on the north side of Sand Point is indicated to be slightly further offshore than is shown on the topographic sheet.

A comparison with Chart 9196 shows depths given on that chart to be deeper than those obtained on this sheet. The deeper soundings on Chart 9196 are probably due to lack of correct tidal information and to faulty location of individual soundings.

Geographic Names: All place names shown on this sheet are fully discussed in the Descriptive Report accompanying Topographic Sheet UA - 37. ^(T-6594) GHE

Statistics - Hydrographic Sheet Field No. 1137 *H-6241*

Launch No. 4.

<u>Date</u>	<u>Volume</u>	<u>Day</u>	<u>Statute Miles</u>	<u>Positions</u>	<u>Soundings</u>
7/19/37	1	a	10.6	109	520
7/21/37	1	b	13.7	119	520
7/27/37	1	c	10.2	106	448
7/28/37	1	d	7.2	67	293
7/28/37	2	d	6.4	83	295
7/30/37	2	e	11.0	34	150
7/31/37	2	f	9.3	82	280
8/22/37	2	g	3.3	46	101
9/1/37	2	h	7.0	120	338
Totals			78.7	766	2945

Area - - - - 2.2 sq. statute miles.

List of Signals Used for ControlHydrographic Sheet Field No. 1137 H-6241Triangulation Stations:

Kiluk 1935	Gab 1935	Kuli 1935
Kash 1935	Kail 1935	Split 1935
Entrance Rk. 1935	Divide 1935	Lili 1935

Topographic Stations: Topographic Sheet UA - 37

New	Way	Um
Old	Bak	Al
Pal	Ax	In
Rap	Hid	Me
Eve	Ned	Ti
Liza	Dom	Ab
Got	Do	Ex
Bil	An	It
Up	Kin	On
Crap	Law	Bo
Pa	Nil	Lit
No	Sic	Pin
Yes	Ton	Now
Lip	Not	

Respectfully submitted:

Approved & Forwarded:

A. M. Sobieralski
A. M. Sobieralski
Chief of Party.

James C. Tison, Jr.
James C. Tison, Jr.
Jr. H.&G.E.

APPROVAL SHEET

to accompany

Hydrographic Sheet Field No. 1137 *H-6241*

This sheet and the records have been examined and
are approved.

A. M. Sobieralski

A. M. Sobieralski
Commanding Officer
U.S.C.&G.S.S. Surveyor

220

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 5, 1938.

Division of Hydrography and Topography:

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

Plane of reference
~~Tide gauges are~~ approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 6241

Locality Kuliliak Bay, Unalaska Island, Aleutian Islands.

Chief of Party: A. M. Sobieralski in 1937
Plane of reference is mean lower low water reading
3.7 ft. on tide staff at Kuliliak Bay
6.4 ft. below B.M. 1

Height of mean high water above plane of reference is 5.0 feet.

Condition of records satisfactory except as noted below:

108
10
18

2
2
2

Chief, Division of Tides and Currents.

108
10
18

GEOGRAPHIC NAMES

Survey No. H-6241

Name on Survey	A.	B.	C.	D.	E.	F.	G.	H.	K.	
<u>Unalaska Island</u>	✓									1
<u>Kuliliak Bay</u>	✓				✓					2
<u>Perch</u>										3
<u>Bird Rock</u>										4
<u>Entrance Rock</u>										5
<u>Repetition Pt</u>										6
<u>Point Divide</u>										7
<u>Pampas Point</u> → <u>Trava Pt.</u> see topo sheet T-6594										8
<u>Rock</u>										9
<u>Nestling Island</u>										10
<u>Williwaw Point</u>										11
<u>Sand Point</u>										12
<u>Canyon Cove</u>										13
<u>Dome Rock</u>										14
										15
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										50

Names underlined in red approved

by ME on 4/14/38

M 234

Names underlined in red approved
by *JOE* on *4/14/38*

Remarks

Decisions

1	For Title only	USGB decision
2		see H-6160
3	(2 Bird Rocks S.E. Alaska - Baker)	Submitted to USGB
4	(1- Entrance RK. S.E. Alaska - Baker)	
5	(1- Divide Pt. Alaska Pen. - Baker)	Sub. to USGB
6	No duplications in Bakers	" "
7	No duplications in Bakers	" "
8	sand pt - S.E. Alaska - Baker a desc. term	" "
9	" " - Popof Is. - " a desc. term	" "
10	No duplications - Baker a desc. term.	" "
11		
12		
13		
14		
15		
16		
17		
18	Notes on locality	
19	Kuliliak - Aleut name meaning (sorrow, anguish) bay named by Sqrchef 1792	
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21		
22		
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26		
27		

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6241**

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

Number of positions on sheet ⁷⁶⁶
Number of positions checked ²⁹
Number of positions revised ⁵
Number of soundings recorded ²⁹⁴⁵
Number of soundings revised ⁶
Number of signals erroneously plotted or transferred

Date: *Aug. 12, 1938*

Verification by *G.H. Everett*

Time: *40 Hrs.*

Review by

[Signature]

Time: *10 1/2 hours.*

HYDROGRAPHIC SURVEY NO. H-6241

Smooth Sheet Yes

Boat Sheet Yes

Sounding Records 2 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals In D.R.

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service None
(Circular Nov. 30, 1933)

Remarks

Total Days 9

Last Date Sept. 1, 1937

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT

~~PHOTOSTAT OF~~

No. H-6241

~~NOT~~

received Feb. 23, 1938
registered Mar. 2, 1938
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
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83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓

REPORT ON VERIFICATION OF H-6241

The records conform to the requirements of the General Instructions and the field plotting was excellent.

The topography is from T-6594 (1937) plane table survey.

The joining sheet to south has not been registered to date.

Notes

Hydrographic Information on H-6241	Source			Remarks ✓
	Topo	Sdg. Vols.	B.S.	
Ledge or Reef along shore	Shown by dash line - See desc. in D.R.			Used Ledge symbol ✓
Foul Area along shore	Sunken rocks generally spotted	General Notes Begin & Ending of lines	Additional to that shown on Topo	Dashed line Used - Area from Topo & B.S. ✓
Kelp	Located	Gen. Notes		Transferred from Topo ✓
Sunken Rock, 53°-28.5' 167-00.65'		Vol. II (10-11e) Sdg. on rock 1/2 fm.		+ symbol used with note ✓
Channel 53-28.5 167-00.39		Vol. II (33-34e) Free from foul area, approx. 15 m. wide. See note Sdg. Vol.	✓	
Breakers 53-26.9 167-02.5		Vol. II (1, 6, 7 f)	✓	
Rock 53-27.1 Awash 167-02.55		Vol. II (16h) Awash at 4' tide		Bare 4' MLLW ✓
3 sunken rocks 53-27.58 167-02.85		Gen. note Vol. II (66h)	shown (spotted)	✓

Hydrographic Information	Source			Remarks
	Topo	Sdg. Vols.	B. S.	
The following list of sunken rocks are mentioned in D. R. H-6241 pg. 1.				
sunken Rk 53-27.75 167-01.95	Located No description		shown No description	1 $\frac{1}{2}$ fm at MLLW (by field)
4 Sunken Rks 53-27.64 167-01.3	Located No description		3 shown as + 1 (N.E. rock as X) No description	Descriptions by field
sunken Rk 53-28.6 167-00.7	Located. No description	Vol. II (7e) desc. as sunken rock (2 $\frac{1}{2}$ ' tide)	shown No description	$\frac{1}{2}$ fm. at MLLW (by field)
2 sunken Rk 53-28.45 167-00.6	Located No description		shown No description	$\frac{1}{2}$ fm at MLLW (by field)
sunken Rk 53-28.58 167-01	Located No description		shown No description	$\frac{1}{2}$ fm at MLLW (by field)
2 sunken Rks 53-28.4 167-00.55	Located No description		shown No description	Description (by field)
<p>The descriptive notes for the above 11 sunken rocks were not inked. Their descriptions are not noted in the records other ^{than} shown on H-6241.</p> <p>These rocks (sunken) have been inked on ^{with descriptive notes}</p> <p>The descriptive notes have been inked as indicated by the Field Party on the Hydrographic smooth sheet.</p> <p><i>Robert Brown</i></p> <p>Submitted Aug. 12, 1938</p> <p><i>Y. Everett</i></p>				

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6241 (1937) FIELD NO. 1137

Kuliliak Bay, Unalaska Island, Aleutian Islands
Surveyed in July - August - September 1937, Scale 1:10,000
Instructions dated April 13, 1934

Hand Lead and Machine Soundings.

3 Point fixes on shore signals.

Chief of Party - A. M. Sobieralski.
Surveyed by - J. C. Tison, Jr., and J. Laskowski.
Protracted by - J. C. Tison, Jr.
Soundings plotted by - J. C. Tison, Jr.
Verified and inked by - G. H. Everett.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

A dashed black line was used to indicate the limits of rocky reefs and ledges on the topographic survey T-6594 (1937). In the office this has been shown on the hydrographic smooth sheet with the standard ledge symbol.

The outer limits of numerous sunken rocks shown on the topographic survey have been delineated by a dashed black line with notes "foul area", on the hydrographic smooth sheet.

In charting features outside the high water line, the hydrographic sheet H-6241 should be used exclusively. (See Review, par. 1, of T-6594 (1937)).

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

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Shoreline and Signals.

The shorelines and signals originate with plane table survey T-6594 (1937).

4. Sounding Line Crossings.

No cross lines were run, but the depths on adjacent parallel lines are in good agreement.

5. Depth Curves.

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

6. Junctions with Contemporary Surveys.

The junction on the southeast with Field No. 2537 will be considered when that sheet is received from the field.

7. Comparison with Prior Surveys.

No prior surveys have been made by this Bureau in this area.

8. Comparison with Chart 9196 (New print dated February 3, 1938).

Within the area of the present survey the chart is based on Russian authority (see note on chart). The geographic position of this information is approximate; the shoreline details are sketchy and generalized, and the hydrography is generally deeper than the depths on the present work. It should be superseded by the present survey in future charting.

9. Field Plotting.

The field plotting was excellent.

10. Additional Field Work Recommended.

This survey is complete and no additional work is required. Mention is made, however, of the single 10-1/2 fathom sounding falling in depths of 13-1/2 fathoms in lat. 53° 26.6', long. 167° 02'.8 which was developed by split lines but not investigated by feeling over the sounding in question.

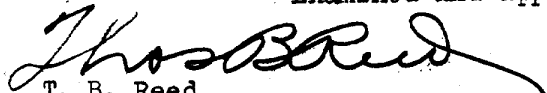
11. Superseded Prior Surveys.

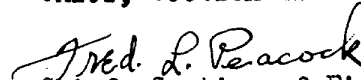
There are no prior surveys made by this Bureau within the area covered by the present survey.

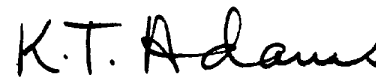
12. Reviewed by - Leo S. Straw, Aug. 18, 1937.


Inspected by - Harold W. Murray.

Examined and approved:


T. B. Reed,
Chief, Section of Field Records.


Fred L. Peacock
Chief, Section of Field Work.


K.T. Adams
Chief, Division of Charts.


J. H. de
Chief, Division of H. & T.

Applied to chart compilation # 9020. Aug Sept. 1939. L.Am.