5964

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. 2335 H5964

LOCALITY

UNALASKA I. ISLAND
~~SOUTHWESTERN ALASKA, ALEUTIAN~~
CAPE STARICHKOF TO ~~KOKAUSKIN~~ CAPE
~~ISLANDS, N. W. COAST UNALASKA~~
PT. KADIN.
~~ISLAND~~.

19 35

CHIEF OF PARTY

H. B. Campbell

U. S. GOVERNMENT PRINTING OFFICE: 1930

5964

Form 537
Ed. Sept., 1929

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. 2335

REGISTER NO. 5964

State ALASKA

General locality ~~SOUTHWEST ALEUTIAN ISLANDS~~ Unalaska Island

Locality ~~N. W. COAST UNALASKA ISLAND~~ Cape Starichkof to ~~Cape~~ Makushin Cape PT. KADIN.

Scale 1 : 20 000 Date of survey August, September, 19 35

Vessel Discoverer

Chief of Party H. B. Campbell

Surveyed by H. A. Karo, M. V. Westdahl. H. O. Fortin, Port Motorsailor, I. R. Rubottom, Stbd. Motorsailor.

Protracted by H. H. Konichek

Soundings penciled by D. H. Konichek

Soundings in fathoms ~~feet~~

Plane of reference Mean lower low water.

Subdivision of wire dragged areas by none

Inked by C. R Bush, Jr.

Verified by C. R. B, Jr.

Instructions dated April 13, 19 34

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1929

DESCRIPTIVE REPORT

TO ACCOMPANY

Hydrographic sheet No. 2335

Project 177, Ship Discoverer, 1935

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1. The work was accomplished under the Director's instructions dated April 13, 1934.

2. The off-shore work was done by the Westdahl, and consists of both fathometer and machine soundings. Fathometer soundings were confined to depths between thirty and one hundred and forty fathoms as explained in the 1935 report,"Reduction of Fathometer Soundings",made by the Westdahl. The failure to reach bottom on several of the off-shore soundings was due to the lack of wire, and was unavoidable under the circumstances. All junctions between work done by the various units appear to be entirely satisfactory, as does the junction with sheet No. 2235 of Makushin Bay.

(H-5979(1935)

3. A forty fathom fathometer depth was obtained at Lat. 53° 54'.55 Long. 167° 08'.55, and is the only indication of so shoal a spot in this vicinity. There is no apparent reason for discrediting this information, because a comparison between the fathometer and the vertical machine sounding almost immediately afterward gave a characteristic result. Vertical casts were taken later in an attempt to either verify or disprove this sounding, but weather conditions prevented ~~xxxx~~ maneuvering the vessel into the exact spot desired.

See Rev., par. 9a

4. It is recommended that additional work be done in the vicinity of Lat. 53° 44'.6 ~~55 44'.70~~ Long. 167° 04'.30. A least depth of sixteen fathoms was obtained by taking mumerous vertical casts, but it is felt that a further investigation might result in still shoaler soundings. Lying almost directly in the center of the approach to Makushin Bay, as it does, this area is very imp-

See Rev., par. 10d

ortant, and all possibilities of the existance of depths dangerous to navigation should be exhaustively studied.

5. A twelve fathom sounding at Lat. 53° 55.15 Long. 167° 06.80 along with other shoal depths inshore should also be further investigated. When the inshore work adjoining on the north is done, a greater overlap at the junction of the sheets than usual will probably furnish the required imformation. See Rev., par. 12

6. No discrepancies or adjustments were noticed or made in this work.

7. Attention is called to the four and one half fathom depth at Lat. 53° 50.20 Long. 167° 09.95 along with the note on the smooth sheet. This spot is too close to shore to constitute a real danger to navigation in good weather, but might become a hazard to ships attempting to make a landfall at, "Nigger Head", in bad weather. Note obliterated in office. Probably read "Unable to get least depth" See Rev., par. 9c. 10 Not Appld 5/7/36 Lat. 53°50.5, long. 167°09.3

8. The rock covered 1½ feet at M.L.L.W. at Lat. 53° 47.40 Long. 167° 05.70 is a danger to small craft following the coast close inshore, but is located where few boats would ordinarily go. shown as awash extreme low tides

9. The rock at Lat. 53° 42.25 Long. 167° 03.40 covered 1 foot at M.L.L.W. is far enough from shore to constitute a danger for all craft. The surrounding characteristics give the impression to the mariner that the area is not foul, and boats heading close around the point might run aground. shown as awash extreme low tides

10. Volcano Bay was used as an anchorage many times throughout the season by both the Discoverer and the Westdahl. Good shelter may be had from the north and east, but the place is open to winds from other directions. In several instances the Westdahl obtained a fair amount of shelter from southerly seas by anchoring in about six fathoms in the bight at the south end of the bay, but, generally speaking, the anchorage is not to be recommended except in an emergency or in good weather. The bottom is hard sand for the most part, and is not particularly good holding ground.

11. There are no previous surveys of the area available on a scale large enough to enable any comprehensive comparisons to be made between the accumulation of old information from various sources and the new work. Discussed in detail in Rev. par. 7.

12. Information on geographic names will be found in the topographers reports on the topographic sheets "A" (T-6423) and "J" (T-6431) season 1935, Ship Discoverer.

STATISTICS FOR SHEET NO. 2335

			SOUNDINGS			STATUTE MI.					
DATE	DAY	VOL	WIRE	H.L.	FATH	POS	WIRE	H.L.	FATH	TOTAL	BOAT
8/17	A	1	5		236	66	.2		18.1	18.3	Westdahl
8/20	B	1	6		304	87	.5		23.0	23.5	Westdahl
8/21	C	1	6		208	60	.4		15.4	15.8	Westdahl
8/27	D	1	8		158	52	.6		10.5	11.1	Westdahl
8/28	E	2	159		218	227	16.1		17.7	33.8	Westdahl
8/29	F	2	137		368	252	15.4		31.3	46.7	Westdahl
8/30	G	3	81		619	254	6.7		37.3	44.0	Westdahl
9/ 10	H	3	5		314	92	.2		24.0	24.2	Westdahl
9/11	J	3	67		255	135	11.5		18.4	29.9	Westdahl
9/12	K	3	25		197	81	1.4		17.5	18.9	Westdahl
9/13	L	3	124		71	148	26.0		6.4	32.4	Westdahl
9/14	M	4	88			88	9.5			9.5	Westdahl
9/16	N	4	62			62	3.5			3.5	Westdahl
9/19	P	4	36		66	54	3.0		5.7	8.7	Westdahl
8/15	a	5	74	349		96	4.3	11.8		16.1	Port M.S.
8/16	b	5	273	76		110	13.9	2.6		16.5	Port M.S.
8/17	c	5	253			129	17.5			17.5	Port M.S.
8/14	a	6	103	727		157	6.4	19.5		25.9	Stbd M.S.
8/15	b	6	61	254		90	2.8	6.6		9.4	Stbd M.S.
8/16	c	7	103	121		139	3.8	13.2		17.0	Stbd M.S.
8/17	d	7	125	209		102	10.0	6.8		16.8	Stbd M.S.
9/7	e	7	167	55		105	12.9	1.5		14.4	Stbd M.S.
10/2	f	8	289	60		176	24.8	3.1		27.9	Stbd M.S.
TOTALS			2257	1951	3008	2762	191.4	65.1	225.3		

Approved and forwarded,

H B Campbell

Chief of Party, Com'd'g.
Ship DISCOVERER

Respectfully submitted,

D. H. Konichek

D. H. Konichek, Aid
U.S.C. & G.Survey

Form 567

DIVISION OF CHARTS, FILE NO. _____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Seattle, Washington

Feb. 27, 1936

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

H. B. Campbell

H. B. Campbell, Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude		Longitude		Datum		
	° '	D. M. meters	° '	D. P. Meters			
Geological formation, Prominent, rounded, grass covered peninsula at Cape Kovrizhka, 231 feet high, locally known as "NIGGER HEAD". (Not Appd 5/7/36 233' on T-6431(1935))	53 50	670.6	167 09	472.6	Dutch Harbor	Triang. △ Kor(1935)	No's. 8802, 8860, 9302
Geological formation. Grass covered rock 104 feet high, most seaward of series extending from Makushin Point.	53 45	315.1	167 02	325.6	Do.	Do.. △ Rock No. 1(1935)	Do.

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.

GOVERNMENT PRINTING OFFICE

TIDAL DATA

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To accompany hydrographic sheet # 2335

Portable automatic gauge located in Skan Bay at Lat. 53°36′35″.6 Long. 167°02′44″.0. All the soundings on this sheet are reduced on the basis of imformation received from this gauge. The plane of reference (M. L. L. W.) is at 6.7 feet on the staff at this gauge.

The highest tide observed at this gauge gave a reading of 11.2 feet on the staff. The lowest tide observed showed 5.2 feet on the staff.

M.H.K.

List of signals on hydrographic sheet No. 2335 Con't.

Hydrographic name.	Location.
Jar	Topo. signal, sheet J 1935
Iv	
Hog	
Gal	
Fat	
Epo	
Cus	Cus, 1935
Elk	Topo. signal, sheet J 1935
Did	
Cog	
Box	
Apo	
Sharp	Sharp, 1935
Zeb	Topo. signal, sheet J 1935
Wet	
Van	
Ten	
Mak	Mak, 1935
Sky	Topo. signal, sheet A 1935
Six	
Rat	
Pig	
Nix	
Map	
Lax	
Makushin	Makushin, 1934
Kip	Topo. signal, sheet A 1935
Jab	
Is	
Of	
Ike	
Hex	
Jem	
Rab	
Isle	Isle, 1934
Rock #1	Rock #1, 1935
Fib	Topo. signal, sheet A 1935
Eat	
Dog	
Cat	
Bim	
Ado	
Star	Star, 1935
Rich	Rich, 1935

List of signals on hydrographic sheet No. 2335

Hydrographic name.	Location.
Fin	Topo. signal, sheet J 1935
Dog	
Cub	
Bel	
Any	
Bull	
Tac	
Act	
Bum	
Cab	
Day	
End	
Fig	
Gob	
Her	
It	
Jay	
Kiss	
Lot	
May	
Bank	
Yaw	
Was	
Vic	
Top	
So	
Shin	Shin, 1935
Dud	Topo. signal, sheet J 1935
Red	
Pin	
Not	
Gas	
Fly	
Elf	
Dil	
Art	
Bed	
Ker	Ker, 1935
Can	Topo. signal, sheet J 1935
Bis	
And	
Zev	
Yet	
Cano	Cano, 1935
Wa	Topo. signal, sheet J 1935
Up	
Ton	
Say	
Riz	Riz, 1935
Pip	Topo. signal, sheet J 1935
Ope	
Mat	
Leg	
Kid	

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

April 9, 1936.

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 5964

Locality **Cape Starichkof to ~~Makushin Cape~~ PT. KADIN, Aleutian Islands.**

Chief of Party: **H. B. Campbell in 1935**
Plane of reference is **mean lower low water reading**
6.7 ft. on tide staff at **Skan Bay**
10.5 ft. below B.M. 1

Height of mean high water above plane of reference is 3.6 feet.

Condition of records satisfactory except as noted below:

Paul A. Whitney
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

GEOGRAPHIC NAMES

Survey No. H5964

Name on Survey	On Chart No. 8802 A	On previous survey No. None B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	Coast Pilot U.S. Light List H	Geog. Dict. of Alaska Baker K	
Pt. Kadin Makushin Cape ✓ 7-29-38 L.H.	✓							✓	✓	1
Glacier Bay										2
Nigger Head								on Unmak Island		3
Cape Kovrizhka ✓	✓						✓	✓	✓	4
Volcano Bay ✓	✓						✓	✓	✓	5
Makushin Pt. ✓	✓									6
Cape Starichkof	✓						✓		✓	7
Unalaska Island	✓						✓	✓	✓	8
										9
										10
										11
										12
										13
Names underlined in red approved by [illegible] on Apr. 3'36										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

H5964

	Remarks	Decisions
1	U.S.G.B. decision	DGN
2	await arrival of Topo sheets "A" & "J" (1935) Discoverer	
3		
4		
5		
6		DGN
7		
8		DGN
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M 234

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5964

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

Number of positions on sheet	2762.
Number of positions checked	35.
Number of positions revised	2.
Number of soundings recorded	7216.
Number of soundings revised	147
Number of signals erroneously plotted or transferred	—

Date: April 30, 1936

Verification & Inking by Chas R Bush Jr. Time: 7 days, 6 hrs

Review by Harold W. Murray Time: 1 ", 3 "

HYDROGRAPHIC SURVEY NO. 5964

Smooth Sheet 1

Boat Sheet 1

Sounding Records 8 Vols.

Descriptive Report yes

Title Sheet yes

List of Signals yes

Landmarks for Charts (Form 567) yes

Statistics yes

Approved by Chief of Party ~~yes~~ No

Recoverable Station Cards (Form 524) No

Special Chart for Lighthouse Service (Circular Nov. 30, 1933) No

Remarks

705

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTATIC COPY~~

No. H 5964
~~New Jersey~~

received
registered
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	JCR		Last # page 1 — DR.
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	

G. K. Green April 1, '36

April 30, 1936.

Verifiers Report on H-5964.

The records conform to the General Instructions except as noted in the Review. xxxm.

The usual depth curves could be completely drawn.

The field plotting was complet e except that certain positions fell off the North side of the sheet and were not plotted. These were:

[redacted]
58b to 61b (green) } To be plotted on adjacent sheet when received in office xxxm.
70b to 72b (green) }
46c to 50c (green)

The kelp inshore was evidently inked prior to plotting the positions and pencilling the soundings. This required a great deal of work on the verifiers' part to take out this kelp where it fell over soundings in order to ink the m. The protracting was very good but there were numerous errors in pencilling the sound ings. Noted in Rev.

There were no junctions made with adjacent sheets. H-5979 on the East has not been verified and there are no other contemporary sheets adjacent at present.

The sunken rock at Lat. 53-50.9, Long. 167-09.9 on T-6431 was changed to a rock awash on this hydrographic sheet.

The rock awash at Lat. 53-5[illegible].1, Long. 167-0[illegible].5 shows "bares 3ft. at MLLW"on the topo sheet but is only bare 2ft. at MLLW shown on this sheet.

The rock awash at Lat. 53-49.9, Long. 167-09.6 shows bare 2ft. at MLLW on the topo and is only bare 1ft. at MLLW as shown on this sheet.

The rock at Lat. 53-49.7, Long. 167-07.8 is shown as a sunken rock on the topo sheet and should be shown as a rock awash as shown on this sheet.

Topos changed to agree. xxxm.

The 40 fathom spot at Lat. 53-54.5, Long. 167-08.6 looks erroneous. The positions on either side of this sounding (62j and 63j) were checked and the fathometer is apparently working good as shown by a comparison taken soon after this 40 fathom sounding. Discussed in D.R. (page 1, par. 3)

A careful comparison was mad e with T-6423 and T-6431 covering this area.

The 16 fathom spot at Lat. 53-44.65, Long. 167-04.25 was apparently the shoalest water found in this area.

The work is considered accurate and sufficient. See Rev., par 9. xxxm.

Chas. R. Bush Jr.

The topographic signals were visually checked by CRBJr.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5964 (1935) FIELD NO. 2335

Cape Starichkof to Matushin Cape, Unalaska Island, Alaska
Surveyed in 1935
Instructions dated April 13, 1934 (DISCOVERER)

Hand Lead, Fathometer and Machine Soundings. 3 Point fixes on Shore Signals.

Chief of Party - H. B. Campbell.
Surveyed by - H. A. Karo, M. V. WESTDAHL, H. O. Fortin, and I. R. Rubottom.
Protracted by - D. H. Konichek.
Soundings penciled by - D. H. Konichek.
Verified and inked by - C. R. Bush, Jr.

1. Condition of Records.

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

a. The kelp symbol which was inked on the smooth sheet by the field party was shown directly over the soundings, thereby obliterating them and necessitating corrections in the office.

b. Evidence that the plotting of the topographic signals had been checked was lacking, since the initials of the checker were omitted. The checking was accomplished in the office.

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance except that the customary paragraph describing the control used was not entered.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project, except that several areas should have been further developed. (See par. 10).

3. Shoreline and Signals.

The shoreline and signals are from plane table surveys: T-6423 (1935), and T-6431 (1935). (Continued on page 3).

4. Sounding Line Crossings.

Such cross lines as were run or result from the work are satisfactory.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the 10, 5, 3, 2 and 1 fathom curves.

6. Junctions with Contemporary Surveys.

a. The junction on the east with H-5979 (1935) will be considered in the review of that survey.

b. No other surveys join the present survey on the north, west and south at the present time.

7. Comparison with Prior Surveys.

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

8. Comparison with Chart 8802 (New Print dated Jan. 25, 1935).

The source of the charted hydrography and topography could not be ascertained but it was charted on the 1st edition of Chart 8800 (1893), which chart was superseded by the present chart in 1909. The charted information differs considerably in geographic position with that on the present survey, being approximately 5 minutes eastward in longitude and 1 minute southward in latitude. Allowing for this difference, the charted 62 (latitude 53°44', longitude 167°10' on chart) is in excellent agreement with the present survey. The charted 47 agrees remarkably with the shoal shown on the present survey with a least depth of 49 fathoms, (latitude 53°51.6', longitude 167°11.6'), but in view of the uncertain source of the 47, the 49 on the present survey is preferable for charting purposes. The charted 22 (latitude 53°53.2', longitude 167°13.4') which falls in depths of 300 to 370 fathoms on the present survey is evidently inaccurate in depth and position and should be disregarded in future charting. Within the area covered, the present survey should completely supersede the charted information for future charting purposes.

9. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual, except that a number of soundings were incorrectly penciled as to depth. These were corrected in the office.

10. Additional Field Work Recommended.
For Future Consideration.

This survey in general is complete and no additional field work is required at this time. However, when work is continued in this

locality, further development of the following items, most of which are discussed in the Descriptive Report, is desirable:

a. The several 11 and 12 fathom soundings in the vicinity of latitude 53°55.0', longitude 167°06.7'. (See Descriptive Report, par. 5).

b. The 40 fathom sounding in latitude 53°54.6', longitude 167°08.6'. (See Descriptive Report, par. 3).

c. The 16 fathom sounding in latitude 53°44.6', longitude 167° 04.3'. (See Descriptive Report, par. 4). In view of the extensive development already made with the sounding machine, the possibility of dragging this area should be considered.

11. Superseding Previous Surveys.

There were no prior surveys made by this Bureau in the area covered by the present survey.

12. Reviewed by - Harold W. Murray, May 6, 1936.

Inspected by - R. J. Christman, May 22, 1936.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

G Rude
Chief, Division of H. & T.

Paragraph 3 (Continued).

At the time T-6431 (1935) was surveyed no triangulation was available north of "Kor - 1935" in lat. 53 - 50.4, long. 167 - 09.4. A 6 mile traverse run from "Kor - 1935" to the limits of the survey was found to be 40 meters in error when tied in with the 1936 triangulation. The error was adjusted on T-6431 (1935) by correcting the projection. A similar correction was added in color to the projection of the present survey in the area north of "Kor-1935" and roughly between the high water line and the 20-fathom curve. No correction was added outside these limits because of the deeper water and the relative uncertainty of the correction.

April 25, 1938. J.A.McCormick.

Applied to drawing of Chart No. 8802 — S. B. Maizs June 1937

Applied to Comp. 9028 October 6, 1938 — H. E. MacEwen

Applied to Chart 9023 Nov 8, 1938 — Chas R Bush Jr