

7039

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Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. 2344 Office No. H-7039

LOCALITY

State ALASKA

General locality DELAROF ISLANDS

Locality KAVALGA - OGLIUGA - SKAGUL - UGIDAK

1944-45

CHIEF OF PARTY

C.D. MEANEY, Commanding Ship SURVEYOR

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

7039

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

H7039

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

REGISTER No. H-7039

Field No. DE 2344

State Alaska - Aleutian Islands

General locality Delarof Islands

Locality Kavalga, Ogluga, Skagul, and Ugidak Is.

Scale 1:20,000 Date of survey July 1944 ~~June~~ to October, 1945

Instructions dated 3 February 1938

Vessel Ship SURVEYOR and Ship DERICKSON, Launches No. 1 & 2

Chief of party C. D. Meaney and I. C. Wilder

Surveyed by C. D. Meaney, L.C. Wilder, (1944)
R.C. Rowse, W.R. Porter and K.B. Jeffers

Soundings taken by Dorsey III, NMC 2808 fathometer, graphic recorder, ~~and lead wire~~

Protracted by Christine N. Hillman

Soundings penciled by Christine N. Hillman

Soundings in fathoms ~~feet~~ and tenths at ~~MLLW~~ MLLW

REMARKS: Plotted by the Seattle Processing Office

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7039 (SU-2344)

KAVALGA, OGLIUGA, SKAGUL AND UGIDAK OF THE DELAROF ISLANDS

ALEUTIAN ISLANDS

1945 C.S. 218

Scale: 1/20000

Chief of Party: C.D. Meaney Commanding Ship SURVEYOR, 1945

Field work by: C.D. Meaney, L.C. Wilder, R.C. Rowse,
W.R. Porter and K.B. Jeffers.

A. PROJECT:

This hydrographic survey was executed under instructions for project CS 218 dated 3 February 1938; Supplemental instructions dated 16 April 1943 and 1 February 1944; Instructions issued by Captain F.B.T. Siems dated 5 May and 28 May 1945.

B. SURVEY LIMITS AND DATES:

This survey covers all waters, with the exception of Skagul Pass, adjacent to the Islands of Kavalga east of longitude $178^{\circ} 48' W$, Ogliuga Skagul and Ugidak to longitude $178^{\circ} 28' W$. The work extends north to latitude $51^{\circ} 39'$ and south to latitude $51^{\circ} 31.5'$. A junction was made with the hydrographic survey ^{H-7033 (1944)} previously executed in Skagul Pass. H-7039 joins sheets Nos. H-7038, H-7051, H-7052 and also the hydrography ⁽¹⁹⁴⁵⁾ north of Kavalga executed by the Ship PATTON. ⁽¹⁹⁴³⁾ During 1945 most of the hydrography was accomplished between June 5 and October 9 from the SURVEYOR and her launches. ^{H-70380 (1945)}

C. VESSELS AND EQUIPMENT:

Three days of hydrography was executed from the Ship DERICKSON during the season of 1944 northeast, east and southeast of Skagul. The work accomplished during the season of 1945 was done from the Ship SURVEYOR and the SURVEYORS launches Nos. 2 and 4. The launches operated from the ship. The ship operated the Horsey III fathometer with recorder verification by a type 808 recorder or the RCA type NMC fathometer for all depths of one hundred fathoms or less. For depths over one hundred fathoms the RCA type NMC fathometer was used. The launches used type 808 recorders Nos. 52, 59 and 46.

D. TIDE AND CURRENT STATIONS:

All tidal data was obtained from the portable automatic tide gage maintained in Skagul Pass near Ogliuga Island. No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet will be constructed and plotted by the Seattle Processing Office.

F. CONTROL STATIONS:

Triangulation established by L.O. Wilder during 1944 and topographic stations from sheet T-6976, and the topographic sheet of Kavalga Island accomplished by the Ship PATTON during 1945 furnish the control for this survey. All topographic stations were located by planetable.

Also T-6980 (1944)

1945 graphic control destroyed 2/1/51 - All information on hydro or air photo sheets - Report attached to A-7052 - G.F.J.

G. SHORELINE AND TOPOGRAPHY:

T-8005 (1934-45)

To be taken from existing air photographs. Heavy kelp in the shoaler waters close to the islands and constant swell breaking on the offlying rocks and reefs and on the rocky shores endangered launches and personnel and prevented the delineating of the low water line. Kelp was so dense this season that it was impossible to go through it with launches.

H. SOUNDINGS:

Standard methods were used to obtain all depths. Handlead soundings were obtained for verification of the fathogram in kelp areas and on shoals. It was found very difficult to obtain the least depth by handlead on small shoals due to strong currents and uneven bottom.

I. CONTROL OF HYDROGRAPHY:

All sounding lines were controlled by sextant fixes at proper intervals.

j. ADEQUACY OF SURVEY:

This survey is considered complete and adequate for charting purposes. Depth curves can be readily drawn throughout the survey and at the junctions with other sheets.

K. CROSSLINES:

About ten percent of crosslines were run. Crossings are satisfactory.

L & M. COMPARISON:

Comparison with prior surveys and chart. There are no prior surveys or charts of this area.

N. DANGERS AND SHOALS:

There are no dangers or important shoals to endanger surface navigation outside the ten fathom curve. Attention is called to numerous rocks, reefs, and kelp lying off these islands within the ten fathom curve. The waters close to the islands are foul. (See Coast Pilot information for further notes.)

O. COAST PILOT INFORMATION:

The following is an excerpt from the season's coast pilot report.

Ugidak Island, the easternmost island is small rocky, prominent and about 65 feet high. It borders Tanaga Pass and lies $2\frac{1}{2}$ miles east of Skagul Island. The waters around this island are deep and have been surveyed. There is a deep channel between Ugidak and Skagul Islands. Currents are very strong in the vicinity of this island and tide rips dangerous to small boats may be encountered in the vicinity of Ugidak Island.

Skagul and Ogliuga lie $2\frac{1}{2}$ to 7 miles west of Ugidak Island. The highest point of these island is about 90 feet. The waters in the vicinity of these islands have been surveyed. There is an emergency landing field and buildings on Ogliuga Island. The most prominent object on Ogliuga Island is a tower near the north shore.

There is a good anchorage in 20 fathoms, sand and gravel bottom, for northerly winds, one and one quarter miles south of the pass separating Skagul and Ogliuga Islands, and one and one quarter miles west of Tag Island.

The pass separating Skagul and Ogliuga Islands is useful only for small launches. Currents in the pass are very strong and when sea and current are opposed tide rips develop in the pass. There are heavy kelp beds close to the shores of the islands. Kelp grows throughout the pass. This kelp in the channel is towed under when the current is running.

There are numerous rocks and kelp beds close to the shores of Skagul and Ogliuga Islands and offlying inlets east and southeast of Skagul Island.

P. AIDS TO NAVIGATION:

There are no aids to navigation within this area.

Q. LANDMARKS FOR CHARTS:

Tower, 1944, Ogliuga; Latitude $51^{\circ} 36'$ 1415 meters; Longitude $178^{\circ} 39'$ 192 meters; Unalaska datum.

S. SILTED AREAS:

None.

T. BY PRODUCT INFORMATION:

The heavy kelp areas to the west and southwest of Ugliuga Island and to the eastward of Kalvaga Island serve as feeding grounds for large numbers of sea otter. Tag and Ugidak Islands are both sea lion breeding grounds.

Z. TABULATION OF APPLICABLE DATA:

Topographic surveys T-6976 ⁽¹⁹⁴⁵⁾ forwarded to Seattle Processing Office.

Velocity corrections forwarded to Seattle Processing Office.

Coast Pilot Report forwarded to Washington Office.

Respectfully submitted,



WILBUR R. PORTER
Lt. Comdr., C. & G. Survey

Approved:



C.D. MEANEY
Lt. Comdr., C. & G. Survey
Comdg. Ship SURVEYOR

VELOCITY CORRECTIONS

Corrections to and including 20 fathoms for all launch work were compiled from bar checks and for greater depths from Temperature, Salinity and Pressure Curves, as well as all corrections for ship work. Copies of velocity corrections applied are attached to this report.

A frequency meter is attached to the R.C.A. Model NMC fathometer. A reading of 60.0 indicates that the speed of the driving arm is correct. A higher reading indicates that the speed is too great and a negative correction should be applied to each sounding. Frequency meter readings between 59.7 and 60.3 indicate an error of no more than $\frac{1}{2}$ of 1% and no corrections have been made when the frequency meter read within that range.

Signals-H- 7039

Name	Origin	Name	Origin
Abe ✓	T-6980	Jib ✓	T-Patton
Ack ✓	T-6976	Jig ✓	T-6976
Add ✓	T-6976	Joe ✓	T-6976
Ale ✓	T-6980	Kavalga ✓	Triangulation
Amp ✓ NP	T-6976	Ked ✓ NP	T-6976
Any ✓ NP	T-6980	Ken ✓	T-Patton
Arch ✓	T-6976	King ✓ NP	T-6980
Bac ✓	Triangulation	Lag ✓	Triangulation
Bar	Sextant Vol.1	Lap ✓	T-6976
Beehive ✓	T-Patton	Lar ✓	T-Patton
Beg ✓	T-6976	Leg ✓	T-Patton
Bet ✓	T-6976	Leo ✓	T-6976
Bump ✓	T-Patton	Love ✓	T-6980
Cab ✓	T-6976 Δ	Mag ✓ NP	T-6976
Cam ✓ NP	T-6976	Mal ✓	T-6976 5997a
Cove ✓	T-Patton	Mar ✓	T-6976
Cook ✓	T-Patton	Mop	Sextant
Cop ✓	T-6976	Nan ✓	T-6980
Cud ✓	T-6980	Ned (2) ✓	T-6976 (T-Patton)
Def ✓	T-6976	Nig ✓	T-6976 6997a
Daw ✓	T-6976	Nor ✓	T-6976
Der ✓	T-6976	Not ✓	T-6980
Don ✓ NP	T-6976	Oak ✓	T-6976
Ebb ✓ NP	T-6980	Obo ✓	T-6980
Eel ✓ NP	T-6976	Old ✓	T-Patton
Egg ✓	T-6980	Ole ✓	T-6976
Era ✓ NP		Omi ✓	T-6980
Fad ✓	Triangulation	One ✓	T-6980
Fed ✓	T-6976	Out ✓	T-6976 (T-Patton)
Fred ✓ NP	T-6980	Pal ✓	T-6976
Gal (Tap) ✓	T-6976	Peg ✓	T-6976
Gas ✓ NP	T-6976	Pep ✓	T-Patton
Gul ✓	Triangulation	Pete ✓ NP	T-6980
Had ✓	"	Pin ✓	T-6976
Hem ✓	T-6976	Pid ✓	T-6980
Hop ✓ NP	T-Patton	Pole ✓	T-6976
Itan ✓	Triangulation	Punt ✓	T-Patton
Jar ✓	T-Patton	Ram ✓	T-6976
Jean ✓	T-6980	Radar ✓	Triangulation
		Red ✓ NP	T-6976
		Out	T-6976

*Destroyed 4/15/41
Temp. No.*

Statistics for Hydrographic Survey No.
 Field No. 1544
 Ship DERICKSON

Field No. 1544

Day	Vol.	Date	No. of H.L. Soundings	Positions	Statute Miles
a	1	Aug. 8	1	45	7.1
b	1	Aug. 9	2	153	27.8
c	1	Aug. 12	13	89	13.1
Total			16	287	48.0

(Area 1.0 square statute miles)

Statistics for Hydrographic Survey No.
 Field No. 2344
 Ship DERICKSON

Day	Vol.	Date	Field No. 2344 No. of H.L. Soundings	Positions	Statute Miles
a	13	7/25/44	2	69	18.3
A	21	7/28/44	6	175	89.0
B	21	7/29/44	2	86	48.0
C	^{1 2} 2 & 3	7/30/44	1	246	125.5
Totals			11	576	280.8

(Area 33 square statute miles)

Statistics for hydrographic survey H- 7039 1945

Date	Vol.	Day	No. Pos.	Stat. Miles Sdgs.
SHIP				
6-5-45	4	A	215	81.8
6-6-45	4&5	B	161	60.6
7-11-45	5	C	78	29.8
9-5-45	5	D	130	47.3
Launch No. 2				
6-6-45	1	a	93	24.1
6-7-45	1	b	160	51.8
6-8-45	1&2	c	171	54.7
7-7-45	2	d	131	40.4
7-8-45	7	e	184	47.3
7-9-45	7&8	f	174	47.4
7-10-45	8	g	12	5.7
7-11-45	8	h	235	56.0
9-5-45	12	j	52	11.2
9-29-45	12	k	35	3.7
Launch no.4				
6-5-45	3	a	141	39.0
7-7-45	3&6	b	170	30.4
7-8-45	6	c	161	35.2
7-9-45	6	d	182	36.6
7-10-45	9	e	116	25.0
7-11-45	9	f	121	34.0
7-12-45	9	g	72	13.7
7-13-45	10	h	111	33.7
7-19-45	10	j	13.2	32.3
7-20-45	10	k	164	39.8
7-21-45	11	l	43	10.2
9-5-45	11	m	99	23.5
			3315	915.2

Area 75 square miles

June to October 1945

Temperature & Salinity Corrections

RCA - Model NMC

Dersey and 808

Depth		Correction	Depth		Correction
0	to 47.5 fms.	+ 0.0 fms.	14.0	to 23.5 fms.	- 0.4 fms.
4	to 105	+ 0.2	24.0	to 32.5	- 0.6
105	to 112	+ 0.4	33.0	to 42.0	- 0.8
113	to 238	+ 0.5	42.5	to 51.5	- 1.0
239	to 337	+ 1.0	52.0	to 61.0	- 1.2
338	to 416	+ 1.5	61.5	to 70.5	- 1.4
417	to 485	+ 2.0	71.0	to 80.0	- 1.6
486	to 545	+ 2.5	80.5	to 89.5	- 1.8
546	to 602	+ 3.0	90.0	to 102.0	- 2.0
603	to 650	+ 3.5	103	to 126	- 2.5
651	to 700	+ 4.0	127	to 150	- 3.0
701	to 741	+ 4.5	151	to 174	- 3.5
742	to 781	+ 5.0	175	to 198	- 4.0
782	to 816	+ 5.5	199	to 220	- 4.5
817	to 855	+ 6.0	221	to 244	- 5.0
856	to 888	+ 6.5	245	to 272	- 5.5
889	to 919	+ 7.0	273	to 299	- 6.0
920	to 948	+ 7.5	300	to 325	- 6.5
949	to 975	+ 8.0	326	to 350	- 7.0
976	to 1002	+ 8.5	351	to 379	- 7.5
1003	to 1029	+ 9.0	380	to 405	- 8.0
1030	to 1056	+ 9.5	405	to 436	- 8.5
1057	to 1081	+ 10.0	436	to 462	- 9.0
1082	to 1106	+ 10.5	463	to 493	- 9.5
1107	to 1130	+ 11.0	494	to 521	- 10.0
1131	to 1154	+ 11.5	522	to 557	- 10.5
1155	to 1178	+ 12.0	558	to 588	- 11.0
1179	to 1200	+ 12.5	589	to 620	- 11.5
			621	to 657	- 12.0
			658	to 695	- 12.5
			696	to 730	- 13.0
			731	to 771	- 13.5
			772	to 810	- 14.0
			811	to 862	- 14.5
			863	to 915	- 15.0
			916	to 990	- 15.5
			991	to 1075	- 16.0
			1076	to 1200	- 16.5

Corrections for 808 fathometers used for launch hydrography have been determined by bar checks to a depth of 20 fms.

TEMPERATURE AND SALINITY CORRECTIONS

808 FATHOMETER

808 Fathometer No. 48

Depth	Correction
to 7.5 fms.	0.0 fms.
7.6 fms. to 19.0 fms.	-0.2 fms.
19.1 " to 23.5 "	-0.4 "
23.6 " to 32.5 "	-0.6 "

Use T. & S. Curves in depths greater than 23.5 fms.

808 Fathometer No. 52

Depth	Correction
to 12.0 fms.	0.0 fms.
12.1 to 22.0 "	-0.2 fms.
22.1 to 31.4 "	-0.4 "
31.5 to 40.8 "	-0.6 "
40.9 to 50.2 "	-0.8 "
50.3 to 60.0 "	-1.0 "
60.1 to 69.3 "	-1.2 "
69.4 to 78.4 "	-1.4 "
78.5 to 87.6 "	-1.6 "

808 Fathometer No. 58

Depth	Correction
2.0 to 20.0 fms.	+0.2 fms.
20.1 to 29.5 "	0.0 "
29.6 to 39.4 "	-0.2 "
39.5 to 48.4 "	-0.4 "
48.5 to 57.7 "	-0.6 "
57.8 to 67.5 "	-0.8 "
67.6 to 76.9 "	-1.0 "
77.0 to 86.3 "	-1.2 "

808 Fathometer No. 59

Depth	Correction
2.0 to 22.0 fms.	-0.0 fms.
22.1 to 31.4 "	-0.2 "
31.5 to 40.6 "	-0.4 "
40.7 to 49.9 "	-0.6 "
50.0 to 59.5 "	-0.8 "
59.6 to 69.1 "	-1.0 "
69.2 to 78.2 "	-1.2 "
78.3 to 87.3 "	-1.4 "

Comp. KBJ
Checked WRP

Tide Note

The Ogliuga gage was used for all reducers. -

Latitude 51-36.2 North -

Longitude 178-37.0 West -

The zero of the tide staff is 3.8 feet below M.L.L.W. Hourly heights were obtained and checked from the marigrams by the personnel of the Ship Surveyor. All tide reducers have been entered and checked. ~~A copy of reducers entered accompanies this report.~~

Signals-H-7039

Name	Origin
Rid ✓	T-Patton
Ron ✓	T-6976
Rush ✓	T-Patton
Sac ✓	T-Patton
Sal ✓	T-6976
Set ✓	T-Patton
Ski ✓	T-6976
Sky ✓	T-Patton
Shag ✓	T-Patton
Sin ✓	T-6980
Sow ✓	T-6980
Tag ✓	Triangulation
Tap (Gal) ✓	T-6976 - see GAL
Ted ✓	T-6976
Tom ✓	T-Patton
Top ✓	T-6976
Tower ✓	Triangulation
Try ✓	T-6976
Tub ✓	T-Patton
Twin ✓	T-6980
Two ✓ NP	T-6980
Ugida ✓	Triangulation
Ulm ✓	T-6980
Una ✓	T-6976
Use ✓	T-Patton
Vag (Flag) ✓	T-6976
Van ✓	T-6976
Vex ✓ NP	T-Patton
Vic ✓	T-6976
Wee ✓	T-6976
Wes ✓	T-6980 T-6976
Will ✓	T-6980
Win ✓	T-Patton
Win ✓	T-Patton
Yam ✓	T-Patton
Yoke ✓	Triangulation
Zed ✓	Triangulation
Zig ✓	T-Patton
Zip ✓ NP	T-6980

Descriptive NOTES to Accompany Hydrographic Sheets
No. 1544 and No. 2344 (Field Numbers -)
Scales 1:10000 and 1:20000

Vicinity of Skagul and Ogliuga Ids., Delarof Ids.
Aleutian Islands

USC&GSS DERICKSON

Season of 1944

PROJECT

CS 218 Instructions dated 16 April 1943.

SURVEY LIMITS AND DATES

Sheet ~~1544~~^{7-7033 (1944)} - This 1:10000 sheet covers the pass (Skagul Pass) between Skagul and Ogliuga Ids. between Latitudes 51-35 and 51-37. Work started on August 8 and ended on August 12, 1944.

Sheet ~~2344~~⁷⁻⁷⁰³³ - This sheet covers the general area about Skagul and Ogliuga Ids., Scale 1:20000, except the pass between these islands which was accomplished on Sheet 1544. It borders no other surveyed areas except to the south, Sheet ~~4444~~⁷⁻⁷⁰⁵¹. *(T-7051) Adjoining areas surveyed in 1945 on present survey*

Work was started on July 25 and ended on July 30 and work was done only when it was impossible to accomplish triangulation.

VESSEL AND EQUIPMENT

The work on Sheet 1544 was done in the DERICKSON'S 24' launch with 808A Fathometer - traneivers installed in the bilges. Part of one days work on Sheet 2344 was also done with this launch. The turning radius of this launch is 10 to 15 feet.

The work on Sheet 2344 was done with the MV DERICKSON except part of a days launch work. Both an 808A and an NMC Fathometer were used. The turning radius of the MV DERICKSON is not known. L. C. Wilder was in charge.

TIDE AND CURRENT STATIONS

Portable automatic gages were in operation in Skagul Pass and Tanaga Bay. Reducers for this area were furnished by the Washington Office.

A current station which was not entirely satisfactory was occupied at the north entrance to Skagul Pass.

CONTROL STATIONS

Control was from triangulation and a graphic control sheet of Skagul and Ogliuga Ids., Season of 1944, L. C. Wilder, Chief of Party. *T-6980 (1944)*

SHORELINE AND TOPOGRAPHY

Only a very small amount of shoreline was run in on the above mentioned graphic control sheet. Photographs (Navy 1934) have been inspected for this area and forwarded to the Washington Office.

The topographic stations on Sheet 1544 were expanded from the above mentioned graphic control sheet (~~T-6976~~) from scale 1:20000 to 1:10000.

The number T-6980 later assigned to this sheet.

SOUNDINGS

For launch work two to three bar checks were obtained each day, the index correction being set to give a correct sounding with the bar at 2 fms. Revolutions were counted.

With the ship both the 808A and the NMC were used. Bar checks were obtained but there were few of them. Leadline soundings were also used (where obtained in Tanaga Bay, sand bottom) to determine the index correction on the NMC as there is no index adjustment.

Soundings could not be run into the low water line with the launch in the pass between the islands because of the very thick kelp. Heavy kelp also exists in the summer months about Ogliuga and Skagul Ids.

CONTROL OF HYDROGRAPHY

Usual three point fixes.

ADEQUACY OF SURVEY

Sheet 1544 - Survey considered adequate except that it was impossible to get into the kelp areas to obtain soundings. It might be possible to cover this area in the spring of the year before the kelp is grown, Sheet 2344 can be carried into a junction with Sheet 1544 to the north and south. Sheet 2344 - This survey was only started.

CROSS LINES

No cross lines were run.

Comparison with Chart or older surveys cannot be made.

DANGERS AND SHOALS

- Sheet 1544
1. A $1 \frac{2}{6}$ fm. spot in heavy kelp Lat. 51-36.89 Long. 178-36.43 position 47c.
 2. A 5 foot spot in heavy kelp Lat. 51-36.70, Long. 178-36.46 position 6a.
 3. A 3 foot spot in light kelp Lat. 51-36.30, Long. 178-36.42 position 83e.
 4. A $2 \frac{2}{76}$ fm. spot Lat. 51-35.60, Long. 178-36.57 position 151b.
 5. A rock awash at high tide near center of Pass in Lat. 51-35.66 Long. 178-36.75.
- Sheet 2344 - Not sufficient work to define dangers.

*pertains to
H-7033(1944)*

There are no aids to navigation and no landmarks.

GEOGRAPHIC NAMES

There is no source in the Aleutians for obtaining and checking names. The names of the islands are the only known names on these sheets.

COAST PILOT INFORMATION

Should be written after survey is complete. See Coast Pilot Notes, Season of 1944, L. C. Wilder.

W. F. Malbate
W. F. Malbate for Sheet 1544

L. C. Wilder
L. C. Wilder for Sheet 2344

Respectfully submitted
L. C. Wilder, Chief of Party

L. C. Wilder

SUMMARY OF BAR CHECKS

808 FATHOMETER NO. 59

DELAWARE ISLANDS JUNE TO OCT. 1945

DATE 1945	2 FMS.	5 FMS.	10 FMS.	15 FMS.	20 FMS.
7-11	+0.2	+0.2	+0.1	0.0	-0.2
7-12	+0.2	+0.1	+0.1	0.0	
7-13	+0.1	+0.1	+0.1	0.0	0.0
7-13	0.1	0.1	0.1	0.0	
7-19	0.2	0.1	0.1		
7-19	-0.2	0.2	0.1	0.0	0.0
7-19	0.2	0.2	0.1	0.1	
7-20	0.1	0.1	0.1		
7-21	0.2	0.2	0.2	0.1	0.0
7-21		0.2	0.2	0.1	
7-24	0.2	0.1	0.1	0.0	
7-24	0.2	0.1	0.1		
7-27	0.2	0.1	0.1	0.0	
8-4	0.1	0.1	0.1	0.0	
8-4		0.1	0.1	0.0	
8-4	0.1	0.1	0.1	0.1	
8-10		0.1	0.2	0.1	0.0
8-10	0.0	0.1	0.1	0.1	
8-11	0.1	0.1	0.0	0.1	0.1
8-18	0.1	0.1	0.0	0.0	-0.2
8-29	0.1	0.0	0.1	0.0	
8-29		0.1	0.0		
8-30	0.1	0.1	0.1	0.1	0.0
8-30	0.2	0.1	0.1	0.1	
8-30	0.2	0.0	0.0	0.0	-0.1
8-30	0.2	0.0	0.0	0.0	
9-5	0.0	0.0	0.0		
9-10	0.0	0.0	0.0		
9-10	0.0	0.0			
9-10	0.1	0.1	0.1	0.0	0.0
9-11	0.0	0.0	0.0	0.0	-0.1
9-11		0.0	0.0		
9-12	0.0	0.0	0.0	0.0	0.0
9-14	-0.1	0.0	0.0		
9-29	0.2	0.1	0.0	0.0	-0.1
TOTALS	3.5	3.0	2.5	0.9	0.6
MEANS	0.12	0.09	0.07	0.04	-0.05

SUMMARY OF BAR CHECKS

808 FATHOMETER NO. 52

DELAROF ISLANDS JUNE TO OCT. 1945

DATE	2 FMS.	5 FMS.	7 FMS.	10 FMS.	15 FMS.	20 FMS.	25 FMS.
6-5	0.0	0.0	0.0	-0.2	0.0		
6-5	-0.1	-0.1		-0.1			
7-7	-0.2	-0.1	0.0	-0.1			
7-7	-0.1	0.0	0.0	0.0	-0.2		
7-8	-0.1	-0.1	-0.2				
7-8	-0.2	-0.1	-0.1	0.0	0.0		
7-9	-0.1	-0.1	0.0	0.0	0.0		
7-9	-0.1	0.0	0.0	0.0	0.0	-0.3	-0.3
7-10	-0.1	0.0	-0.2	-0.3	-0.5	-0.6	
7-11	-0.1	0.0	0.0	-0.1	-0.3	-0.4	
7-11	-0.1	0.0	-0.1	-0.2	-0.4	-0.6	
7-12	-0.1	0.0	0.0	0.0	-0.1	-0.3	
7-13	0.0	0.0	0.0	0.0	0.0	-0.1	
7-19	-0.1	0.0	0.0	0.0	-0.2	-0.2	
7-19	-0.1	-0.1	0.0	0.0	-0.1	-0.1	
7-20	-0.1	0.0	0.0	-0.1	-0.2	-0.2	
7-20	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.4
8-29	-0.1	0.0	0.0	0.0	0.0	0.0	
8-30	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
8-30	-0.1	-0.1	0.0	0.0	0.0	-0.3	-0.2
9-5	-0.1	0.0	0.0	-0.1	-0.2	-0.2	-0.2
9-8	0.0	-0.1	-0.1	0.0	0.0	-0.2	0.0
9-8	-0.1	0.0	0.0	0.0	-0.1	-0.2	0.0
9-10	-0.1	0.0	0.0	0.0	-0.2		
9-10	-0.1	0.0	0.0	-0.1	-0.1		
9-11	-0.1	-0.1	0.0	-0.1	-0.2	-0.3	
9-11	-0.1	-0.1	-0.1	0.0	0.0	-0.2	
9-12	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.3
9-12	-0.1	-0.1	0.0	0.0	-0.2	-0.3	0.0
9-13	-0.1	0.0	-0.1	-0.2	-0.3	-0.2	-0.1
9-13	-0.2	-0.1	0.0	0.0	-0.1	-0.2	-0.1
9-14	-0.1	0.0	-0.1	0.0	0.0	-0.1	0.0
TOTALS	-3.1	-1.0	-0.3	-0.6	-3.2	-4.9	-0.3
MEANS	-0.10	-0.03	-0.01	-0.02	-0.11	-0.21	-0.03R

SUMMARY OF BAR CHECKS

808 FATHOMETER NO. 46

DEKAROF ISLANDS JUNE TO OCT. 1945

DATE	2 FMS.	5 FMS.	7 FMS.	10 FMS.	15 FMS.	20 FMS.
1945						
6-6	+0.1	0.0	+0.1	+0.1	-0.2	-0.3
6-7	0.0	0.0		0.0	-0.1	
6-7	-0.1	-0.1		-0.2	-0.2	
6-8	+0.1	0.0		-0.1	-0.1	-0.2
6-8	0.0	-0.1		-0.1		
TOTALS	+0.1	-0.2	+0.1	-0.3	-0.6	-0.5
MEANS	+0.02	-0.04	+0.1 R	-0.06	-0.15	-0.25

808 FATHOMETER NO. 58 S						
DATE	2 FAM.	5 FMS.	7 FMS.	10 FMS.	15 FMS.	20 FMS.
1945						
7-8	+0.2	+0.4		+0.2	+0.3	+0.3
7-8	+0.2	+0.2		+0.2		
7-9	+0.3	+0.3		+0.2	+0.1	
7-9	-0.1	-0.1		0.0	0.0	0.0
7-10	+0.1	0.0				
TOTALS	+0.9	+0.1		+0.6	+0.4	+0.3
MEANS	+0.18	+0.20		+0.15	+0.13	+0.15

H-7039

(DE 2344)

Delarof Islands - Ugidak to Kavalga

Sounding on this sheet was started by the party of the DERICKSON in 1944, soundings recorded in volumes 1, 2, and 3. The rest of the work using twelve additional volumes is by the SURVEYOR's party in 1945.

Smooth Sheet-

The smooth sheet is hand made on Whatman paper. Topographic details are from T-6976, T-6980, ~~T-6999~~ and T-8005. Rocks, etc., added from the hydrographic survey are in pencil and are in each case indicated by notations and arrows running to them. Those rocks in pencil without such notations are from the photo-topo sheet T-8005.

Control:

Topographic signals are from T-6976 (1945), T-6980 (1944) and ~~T-6999a~~ (1945).

Triangulation stations are all from the 1944 scheme.

The angles to locate hydro signal BAR are on page 2 of Vol. 6.

The islet at Lat. $51^{\circ} 35.7$ Long. $178^{\circ} 41.8$ is from photo-topo T-6980. Lt. Comdr. Fortin, who passed close by several times and remembers it well, estimates that it is between 6 and 10 feet above MHW.

The islet containing signal BAR, Lat. $51-35$ Long. $178-42.6$, is a sand bar 10 to 12 feet high surrounded by and possibly over-laying reefs and ledges. (Per Lt. Comdr. Fortin)

Breaker- On T-6980 at Lat. $51-35$ Long. $178-37.4$, breakers are indicated. This was not mentioned in the hydrographic records. *Maybe in the vicinity - shown on present survey by breakers*

Kelp Beds- Several dense kelp beds were not examined because the kelp was too heavy to work a launch through. Lt. Comdr. Fortin does not recall seeing breakers or rocks in the large kelp bed centered on Lat. $51-35.5$ Long. $178-42.5$.

Currents- There are numerous notes of strong currents in the sounding records, but usually without estimate of strength or direction. In the channel between Kavalga and Ogliuga there are strong currents and tide rips. There is kelp across the shoal part of this channel, but it is usually fowed under by the current. The current information which could be plotted has been put on a linen overlay which accompanies the smooth sheet.

Note the following soundings:

Latitude	Longitude	Position	Depth	Remarks
51° 34.8	178° 29.3	70-71D	18.5 ^{Fms.}	16.5 on H-7051 (1944-45) Shoal indication not developed. ✓
51 36	178 33.2	27-28d	5.2 ✓	Offlying shoal E. of Skagul. ✓
51 36.8 ⁷	178 41.3 ⁸	124-125j	6.7 ✓	Outlying shoal to NW of Ogliuga. ✓
51 33.5 ⁺⁷	178 38.7 ²	25-26f ✓	5.7 ✓ 5.4 ✓	— <i>sdg rejected - kelp trace</i>
51 34.9	178 33.28	15-16c 25-26e	5 ✓	— <i>sdg rejected - kelp trace</i> Outlying shoal to SE of Skagul. ✓
51 33.5 ⁺⁸	178 38.25	54-55A ✓	8.6 ✓	
51 36.1	178 43.6 ⁵⁵	11-12a	4.8 ✓	NW limit of extensive shoal area. ✓
51 34.2 ⁶	178 39.14	178-179e	3.6 ✓	S. end of shoal extending a mile offshore. ✓
51 33.9 ²	178 42.2 ⁷	142-143c	3.6 ✓	South end of extensive foul area. ✓
51 34.0 ²	178 42.2 ⁸	"	2.6 ✓	" " " " " " ✓
51 34.3 ²	178 43.5	89-90k	4.6 ✓	Shoalest depths in channel ✓
51 34.3 ²⁸	178 43.9 ⁵	3-4k	4.6 ✓	" " " " " " ✓
51 34.1 ⁰⁴	178 43.9	153-154d	3 ✓	S. edge of channel 1/2 mile offshore.

Discrepancies at Crossings-

Lat. and Long.	Pos. #	Ship	Depth - Fms.
51° 38.0 178 28.45	34-35D 158-159B	SURVEYOR "	95-94 90
51 31.85 178 35.1	160-161A 12-13B	DERICKSON "	45-47 48
51 37.0 178 28.4	155-159B 40-43C	SURVEYOR DERICKSON	These two ship lines practically parallel to each other plot a difference of 2 to 3 fathoms.
51 37.0 178 28.55	152-154B 63-65C	SURVEYOR DERICKSON	
51 35 178 30.2	A depth of 19.5 fms. falls close to 16.5 on H-7051. Developed closer on that sheet. This 19.5 is 1100 m. from the 16.5 on H-7051		

Sigs Pos 150-159 Bday June 6 rejected because of differences at crossings amounting to 7 fms. Jump noted on tgm.

Unimportant

These two ship lines practically parallel to each other plot a difference of 2 to 3 fathoms.

These two lines also plot a marked difference of 2 to 3 fms. SURVEYOR's lines are shoaler.

DRAFT & INSTRUMENTAL CORRECTIONS SHIP SURVEYOR

Season - 1945

Dorsey III

808

N.M.C.
Red Light

N.M.C.
Recorder

Delarof Islands

In fathoms

Initial 2.2

Initial 2.0

Initial 2.2

Initial 0.0

Inst. error
0.1

Inst. error
0.0

Inst. error
0.1

Inst. error
0.1

Date	Ships Draft				
6-5	1.9	-0.2	-0.1	-0.2	+2.0
6	1.9	-0.2	-0.1	-0.2	+2.0
6-7	1.9	-0.2	-0.1	-0.2	+2.0
6-8	1.8	-0.3	-0.2	-0.3	+1.9
6-13	2.2	+0.1	+0.2	+0.1	+2.3
7-7	2.1	0.0	+0.1	0.0	+2.2
7-8	2.0	-0.1	0.0	-0.1	+2.1
7-9	2.0	-0.1	0.0	-0.1	+2.1
7-10	2.0	-0.1	0.0	-0.1	+2.1
7-11	2.0	-0.1	0.0	-0.1	+2.1
7-12	1.9	-0.2	-0.1	-0.2	+2.0
7-13	2.1	0.0	+0.1	0.0	+2.2
7-14	2.0	-0.1	0.0	-0.1	+2.1
7-19	1.9	-0.2	-0.1	-0.2	+2.0
7-20	2.0	-0.1	0.0	-0.1	+2.1
7-24	1.85	-0.3	-0.2	-0.3	+1.9
7-27	1.8	-0.3	-0.2	-0.3	+1.9
8-3	2.1	0.0	+0.1	0.0	+2.2
8-8	2.1	0.0	+0.1	0.0	+2.2
8-10	2.1	0.0	+0.1	0.0	+2.2
8-11	2.0	-0.1	0.0	-0.1	+2.1
8-13	2.0	-0.1	0.0	-0.1	+2.1
8-18	2.0	-0.1	0.0	-0.1	+2.1
8-24	2.0	-0.1	0.0	-0.1	+2.1
8-25	1.9	-0.2	-0.1	-0.2	+2.0
8-28	1.9	-0.2	-0.1	-0.2	+2.0
8-29	1.9	-0.2	-0.1	-0.2	+2.0
8-31	1.9	-0.2	-0.1	-0.2	+2.0
9-5	1.9	-0.2	-0.1	-0.2	+2.0
9-6	2.1	0.0	+0.1	0.0	+2.2
9-7	2.1	0.0	+0.1	0.0	+2.2
9-8	2.0	-0.1	0.0	-0.1	+2.1
9-10	2.0	-0.1	0.0	-0.1	+2.1
9-11	2.0	-0.1	0.0	-0.1	+2.1
9-12	2.0	-0.1	0.0	-0.1	+2.1
9-13	2.0	-0.1	0.0	-0.1	+2.1
9-14	2.0	-0.1	0.0	-0.1	+2.1
9-14	2.0	-0.1	0.0	-0.1	+2.1
9-14	2.0	-0.1	0.0	-0.1	+2.1
9-28	2.1	0.0	+0.1	0.0	+2.2
9-29	2.0	-0.1	0.0	-0.1	+2.1
9-29	2.0	-0.1	0.0	-0.1	+2.1
10-2	1.9	-0.2	-0.1	-0.2	+2.0
10-3	1.9	-0.2	-0.1	-0.2	+2.0
10-4	1.9	-0.2	-0.1	-0.2	+2.0
10-5	1.9	-0.2	-0.1	-0.2	+2.0
10-5	1.9	-0.2	-0.1	-0.2	+2.0
10-8	1.9	-0.2	-0.1	-0.2	+2.0
10-9	1.8	-0.3	-0.2	-0.3	+1.9

H-7039
(DE 2344)

Delarof Islands

Geographic Names Penciled on the Smooth Sheet

Kavalga Island

Ogliuga Island

Skagul Island

Ugidak Island

Skagul Pass

H-7039

(DE-2344)

Delaware Is. - Ugidak to Kavalga

LIST OF SIGNALS

<u>Name</u>	<u>Origin</u>	<u>Name</u>	<u>Origin</u>
ABE	T-6980	OAK	T-6980
ACK	T-6980	OBO	T-6999a
ADD	T-6980	OLD	T-6999a
ALB	T-6980	OLM	T-6999a
ARCH	T-6980	OMI	T-6980
BAG	BAG 1944	ONE	T-6980
BAR	Sext. Vol. 6	OTT	T-6980
BEG	T-6980	OUT	T-6999a
BUMP	T-6999a	PAL	T-6980
CAB	CAB 1944	PEQ	T-6980
COOK	T-6999a	PEP	T-6999a
GOP	T-6980	PIN	T-6980
GOR	T-6980	POD	T-6980
COVE	T-6999a	PUNT	T-6999a
GUD	T-6980	RAD	RADAR 1944
DAF	T-6980	RAM	T-6980
DAK	UGIDAK 1944	RID	T-6999a
DER	T-6980	RON	T-6980
EGG	T-6980	RUSH	T-6999a
FAD	FAD 1944	SAC	T-6999a
FAD	T-6999a	SAL	T-6980
FED	T-6980	SMT	T-6999a
FLAG	T-6980	SHAG	T-6999a
FOX	T-6980	SHE	T-6980
GAL	T-6980	SIN	T-6980
GUL	GUL 1944	SKI	T-6980
HAD	HAD 1944	SKY	T-6999a
ITEM	ITEM 1944	SOW	T-6980
ITEM	T-6999a	TAG	TAG 1944
JAR	T-6999a	TAP	T-6980
JOAN	T-6980	TED	T-6980
JIB	T-6999a	TOM	T-6999a
JIG	T-6980	TOP	T-6980
KEN	T-6999a	TOV	TOWER 1944
LAG	LAG 1944	TRY	T-6980
LAP	T-6980	TUB	T-6999a
LAX	T-6999a	TWIN	T-6980
LBO	T-6980	ULM	T-6980
LOUE	T-6980	UNA	T-6980
MAL	T-6980	USE	T-6999a
MAR	T-6980	VAL	KAVALGA 1944
MYO	T-6980	VIC	T-6980
MOP	T-6999a	WHS	T-6980
NAC	Pinnacle T-6999a	WIN	T-6999a
NAH	T-6980	YAK	T-6999a
NED	T-6999a	YOKR	YOKR (USED) 1944
NIG	T-6999a	ZED	ZED (USED) 1944
NOR	T-6980	ZIG	T-6999a
NOT	T-6980		

* ~~Sheet~~ Sheet Destroyed 2/1/51
 Report attached to H-7052 6 FD

Respectfully submitted,

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

747m

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~

13 January 1947

Division of Charts: H. W. MURRAY

Plane of reference approved in
15 volumes of sounding records for

HYDROGRAPHIC SHEET 7039

Locality - Delarof Islands, Aleutian Islands, Alaska

Chief of Party: L. C. Wilder in 1944 and C. D. Meaney in 1945.

Plane of reference is mean lower low water, reading

3.8 ft. on tide staff at Ogliuga Island

4.7 ft. below B. M. 1

5.0 ft. on tide staff at Constantine Harbor

9.9 ft. below B. M. 1

Height of mean high water above plane of reference is 3.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay

Section

Chief, ~~Division~~ of Tides and Currents.

GEOGRAPHIC NAMES

Survey No.

H-7039

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>Alaska</u>			(for title)							1
<u>Aleutian Islands</u>		"	"							2
<u>Delarof Islands</u>		"	"							3
										4
<u>Ugidak Island</u>										5
<u>Skagul Island</u>										6
<u>Skagul Pass</u>										7
<u>Tag Island</u>										8
<u>Ogliuga Island</u>			(location of one tide staff)					USGB		9
<u>Kavalga Island</u>										10
										11
										12
										13
										14
<u>Constantine Harbor</u>			(location of one tide staff)							15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red are approved.
1/16/48 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7039²³¹⁴

Records accompanying survey:

Boat sheets 3.....; sounding vols. 15.....; wire drag vols.;
 bomb vols.; graphic recorder rolls 4 ~~envel.~~
 special reports, etc., *overlay tracing*.....

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

Number of positions on sheet	.....	3315 -
Number of positions checked	.....	220 -
Number of positions revised	.....	7
Number of soundings revised (refers to depth only)	.....	132
Number of soundings erroneously spaced	.....	45
Number of signals erroneously plotted or transferred	.....	-
Topographic details	Time	16 hrs
Junctions	Time	30 "
Verification of soundings from graphic record	Time	24 "
<i>F.H. Bell</i> -		239
Verification by <i>A.R. STIRNI</i>	Total time	279 hrs 518
	Date	12/5/47
Reviewed by <i>R.H. Carstens</i>	Time	50 hr
	Date	Jan 9, 1948

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7039

FIELD NO. 2344

Alaska-Aleutian Ids., Delarof Ids., Skagul I. to Kavalga I.
Surveyed in July 1944 - October 1945 Scale 1:20,000
Project No. CS-218

Soundings:

Control:

808 Fathometer
NMC "
Dorsey III "

Sextant fixes on shore signals

Chief of Party - C. D. Meaney and L. C. Wilder
Surveyed by - C. D. Meaney, L. C. Wilder, R. C. Rowse,
W. R. Porter, H. J. Healey, K. B. Jeffers,
F. Natella, R. H. Brown and R. Mansfield
Protracted by - C. N. Hillman
Verified and inked by - F. H. Bell and A. R. Stirni
Reviewed by - R. H. Carstens, January 9, 1948
Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline originates with air photographic survey T-8005 (1934-45). No shoreline is presently available for Ugidak Island (charted).

The signals are from planetable surveys T-6976 (1945), T-6980 (1944) and ~~T-6999a (1945)~~. *Destroyed 2/1/51 E.F.L.*

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

Curves in depths of 10 fathoms and deeper were adequately delineated. The survey of large areas adjacent to the shore and of several detached areas in depths less than 10 fathoms was prevented by dangerous rocks and dense growth of kelp.

In depths less than 20 fathoms the bottom is very irregular. Numerous reefs and pinnacles rise sharply from the surrounding area. Inshore the bottom is characterized by extensive foul areas covered by dense kelp.

In deeper, offshore areas the bottom is fairly smooth.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7050 (1945) and H-7052 (1945) on the southwest; H-7038 (1945) on the west and north; and H-7051 (1944-45) on the east and south.

5. Comparison with Prior Surveys

There are no prior surveys of the area by this Bureau.

6. Comparison with Chart 8863 (Latest print date 10/5/46)

A. Hydrography

The charted hydrography originates principally with Bp. 40162 (1945) showing advance information from the present survey. The present survey supersedes this blueprint.

The 5 fms. charted in lat. $51^{\circ} 33.4'$, long. $178^{\circ} 38.5'$ (chart datum) is a hand correction originating with the present survey before verification and review. The sounding is considered to be a kelp reading on a shoal which is actually 310 meters to the northwest of the charted position. The 5 fms. should be superseded by the present smooth sheet depth of 9.6 fms. which is shown nearby.

B. Aids to Navigation

There are no aids to navigation charted within the limits of the present survey.

7. Condition of Survey

The plotting was carefully executed.

The sounding records and Descriptive Report are complete and comprehensive.

The hydrography was executed in accordance with the Hydrographic Manual.

8. Compliance with the Project Instructions

The present survey adequately complies with the Project Instructions except as noted in the following paragraph 9.


9. Additional Field Work Recommended

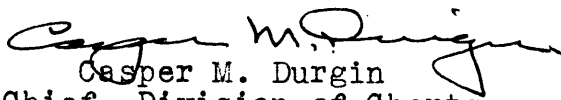
This is an adequate basic survey in the area covered and no additional work is recommended at the present time.


Large foul areas covered by a dense growth of kelp were impassable by small boats at the time the survey was in progress. Should increased navigation in these waters warrant the survey of these areas, such additional work may be possible in the spring of the year when the kelp is less dense.

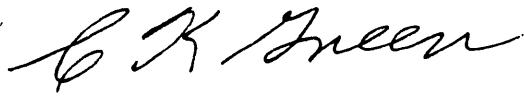
Additional development should also be accomplished on the 7-fm. shoal in lat. $51^{\circ} 31.97'$, long. $178^{\circ} 45.23'$.

Examined and approved:


I. E. Rittenburg
Chief, Nautical Chart Branch


Casper M. Durgin
Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


C. K. Green
Chief, Division of Coastal Surveys

