

7713

Diag'd. on Diag. Ch. No. 8864-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX-1248 Office No. H-7713

LOCALITY

State Alaska - Aleutian Islands

General locality Kiska Island

Locality Gertrude Cove

194 8

CHIEF OF PARTY

F.B.T. Siema

LIBRARY & ARCHIVES

DATE March 8, 1949

8-1870-1 (1)

31248

MAR 8 1949

Form 537  
(Ed. Nov. 1941)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**HYDROGRAPHIC TITLE SHEET**

REG. NO. H-7713

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. H7713

Field No. EX-1248

State Alaska, Aleutian Islands

General locality Kiska Island, Aleutian Islands.

Locality Gertrude Cove

Scale 1:10,000 Date of survey 28 June to 23 July 1948

Instructions dated 3 February 1938; Supplemental Instructions dated 10 February 1948.

Vessel EXPLORER - Launch No. 2

Chief of party F.B.T. Siems

Surveyed by H. C. Applequist

Soundings taken by fathometer, graphic recorder, ~~hand lead, etc.~~

Protracted by H. D. Nygren

Soundings penciled by H. D. Nygren

Soundings in fathoms ~~feet~~ ~~at~~ ~~MLLW~~ MLLW

REMARKS:

Fathograms scaled by JHK

Fathograms Checked HCA PT

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY H' \_\_\_\_\_

Field No. EX-1248

Gertrude Cove, Kiska Island

1948

Scale 1:10,000

USC&GSS EXPLORER, F.B.T. Siems, Comdg.

Surveyed by: H. C. Applequist

A. PROJECT:

Instructions Project CS-218, dated 3 February 1938,  
Supplemental Instructions dated 10 February 1948.

B. SURVEY LIMITS AND DATES:

This survey covers Gertrude Cove, at the north end  
of Vega Bay, southeast side of Kiska Island.

The survey makes a junction on the southwest with  
Hydrographic Sheet ~~EX-2148~~<sup>EX-1248</sup>, all other junctions are with the land.

Hydrography was executed during the period 28 June to  
23 July 1948. Work was carried on in conjunction with other surveys  
in the area.

C. VESSEL AND EQUIPMENT:

All hydrography was accomplished with launch No. 2  
operating from a shore camp located in Gertrude Cove.

The sounding lines were run using a boat compass and  
ranges when available.

All soundings were taken with the 808 fathometer.

D. TIDE AND CURRENT STATIONS:

The reductions for tides were taken from tidal data  
obtained from the portable automatic tide gage operated in Gertrude  
Cove, Kiska Island. No time or height corrections were applied.

No current stations were occupied.

E. SMOOTH SHEET:

The smooth sheet was made by hand aboard the Ship EXPLORER. The topographic signals were traced off the topographic sheet on tracing paper and transferred to the smooth sheet. All signals and topographic details were verified.

F. CONTROL STATIONS:

Datum, North American 1927, local triangulation 1943, 1945 and 1947. Signal GERTY was located by the three point method.

Acc. No.  
S-2641

G. SHORELINE AND TOPOGRAPHY:

The shoreline has steep bluffs with the exception of the head of the bay which is sand beach. The shore line is steep between the high and lower water lines in most places, making it impossible to identify the low water line with soundings.

The topographic signals were located by a planetable survey. The shore line was not surveyed and will be taken from the aerial photographic survey. *T-7116b GC (1948)*  
*Shoreline compiled on T-8632 (1949) and applied to H-7713.*

H. SOUNDINGS:

All sounding was done by the echo method. Sounding lines were spaced in accordance with standard instructions. No unusual methods were used to obtain or correct the soundings.

I. CONTROL OF HYDROGRAPHY:

All hydrography was controlled by three point visual fixes, no adjustment was necessary.

J. ADEQUACY OF SURVEY:

The survey is complete, and is adequate to supersede prior surveys for charting. ✓

The junction with the adjoining sheet is satisfactory, depth curves can be adequately drawn. No holiday or excessive differences exist at the junction.

None regis-  
tered at this  
time. 7-18-49.  
TPU Review

K. CROSSLINES:

There are no cross lines, however the lines are closely spaced and the soundings are in close agreement.

TP 7c & 9b  
Review.

L. COMPARISON WITH PRIOR SURVEYS:

Comparison with hydrographic survey No. H-6901, scale *775, Review*  
1:60,000 made in 1935 by the U. S. Navy, shows no discrepancy.

M. COMPARISON WITH CHART:

The chart was made from the survey described in "I" above.

N. DANGERS AND SHOALS:

No new dangers or shoals were found. The survey shows the cove is clear of shoals and dangers.

O. COAST PILOT INFORMATION:

Refer to Coast Pilot Notes, Ship *EXPLORER*, 1948 season.

P. AIDS TO NAVIGATION:

None exist within the area.

Q. LANDMARKS FOR CHARTS:

None.

R. GEOGRAPHIC NAMES: *814*

No new geographic names are submitted. All geographic names used have previously been charted.

Respectfully submitted

*G. C. Mast*  
G. C. Mast  
Lt. Comdr., USC&GS

-----  
Approved and forwarded.

*H. Arnold Karo*  
H. Arnold Karo  
Commander, USC&GS  
Comdg. Ship *EXPLORER*

TIDAL NOTES

H-7713 Tide reducers for soundings on Hydrographic Sheet (Field No. EK-1248) were taken from data obtained from portable automatic tide gage operated in Gertrude Cove, Kiska Island. Lat.  $51^{\circ}56.2'N$  Long.  $177^{\circ}27.5'E$ .

The mean lower low water of the staff is 4.4 ft. No time or height corrections were applied.

Time meridian for operation of the gage was  $165^{\circ}W$  from 7 May to 7 July and  $180^{\circ}W$  from 7 July to 27 September.

STATISTICS FOR HYDROGRAPHIC SURVEY H-7713

Field No. EX-1248

USC&GSS EXPLORER, F.B.T. Siems, Comdg.

Survey Unit: Launch No. 2

VESSEL	Date 1948	Day Letter	Vol.	Stat. Mi.	Pos.	Sq.Stat. Mi.
Launch #2	6-28	a	1	1.3	7	
"	6-30	b	1	22.9	166	
"	7-1	c	1	5.8	53	
"	7-23	d	1	1.2	4	
				<hr/>		
				31.2	230	1.6

FINAL CORRECTIONS

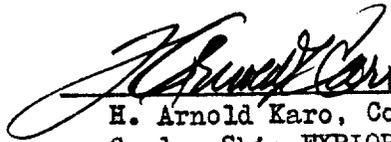
DRAFT & INITIAL

VESSEL	DATE	DAY LETTER	POSITION	808 #49 FMS.
Launch #2	6-28	a	All day	-0.2
"	6-30	b	1-74	0.0
			74-87	-0.2
			87-115	-0.4
			115-119	-0.2
			119-120	0.0
			120-154	-0.4
			154-157	-0.2
			157-166	0.0
"	7-1	c	1-18	-0.2
			18-53	0.0
"	7-23	d	All day	0.0

APPROVAL SHEET

The smooth sheet and records have been inspected and approved.

The field work was done under the supervision of Captain F.B.T.Siems.



H. Arnold Karo, Comdr., USC&GS  
Comdg. Ship EXPLORER

VELOCITY CORRECTIONS  
1948

808 Fath. Ship & Launches

NMC and NMC-2 Fathometers

Corr'n to 0.1 fms.

Corr'n to 0.1 fms.

Corr'n Fms.	Depth-Fms.	
0.0	0	to 3.4
-0.1	3.5	7.83
-0.2	8.4	12.4
-0.3	12.5	16.6
-0.4	16.7	20.9
-0.5	21.0	24.5
-0.6	24.6	29.0
-0.7	29.1	32.7

Corr'n Fms.	Depth-Fms.	
0.0	0	to 77.0

Corr'n to 0.2 fms.

Corr'n to 0.2 fms.

Corr'n Fms.	Depth-Fms.	
0.0	0	to 182.0
+0.2	182.1	220.0

Corr'n to 0.5 fms.

Corr'n Fms.	Depth-Fms.	
0.0	0	to 6.0
-0.2	6.1	14.9
-0.4	15.0	22.7
-0.6	22.8	31.0
-0.8	31.1	38.6
-1.0	38.7	46.3
-1.2	46.4	54.3
-1.4	54.4	61.8
-1.6	61.9	69.6
-1.8	69.7	77.0
-2.0	77.1	85.0
-2.2	85.1	93.1
-2.4	93.2	100.7
-2.6	100.8	109.0

Corr'n Fms.	Depth-Fms.	
0.0	0	to 210
+0.5	211	330
+1.0	331	410
+1.5	411	480
+2.0	481	540
+2.5	541	600
+3.0	601	650
+3.5	651	690
+4.0	691	730
+4.5	731	765
+5.0	766	797
+5.5	798	830

Corr'n to 0.5 fms.

Corr'n Fms.	Depth-Fms.	
0.0	0	to 12.3
-0.5	12.4	32.9
-1.0	33.0	52.0
-1.5	52.1	71.4
-2.0	71.5	91.3
-2.5	91.4	110.9
-3.0	111.0	132.0
-3.5	132.1	154.9
-4.0	155.0	179.2



VELOCITY CORRECTIONS  
1948

NMC and NMC-2 Fathometers (Continued)

Corr'n to 5.0 fms. (Con't'd)

Corr'n Fms.	Depth-Fms.	
+65	2453	2542
+70	2543	2632
+75	2633	2720
+80	2721	2803
+85	2804	2883
+90	2884	2964
+95	2965	3040
+100	3041	3112
+105	3113	3190
+110	3191	3260
+115	3261	3327
+120	3328	3396
+125	3397	3462
+130	3463	3525
+135	3526	3590
+140	3591	3655
+145	3656	3715
+150	3716	3775
+155	3776	3835
+160	3836	3895
+165	3896	3953
+170	3954	4012
+175	4013	4068
+180	4069	4122
+185	4123	4178
+190	4179	4232
+195	4233	4285
+200	4286	4336
+205	4337	4390
+210	4391	4440
+215	4441	4490
+220	4491	4543
+225	4544	4590
+230	4591	4638
+235	4639	4685
+240	4686	4730

Ex 1248

Kiska Island

Gertrude Cove

List of Geographic Names

Kiska Island

Gertrude Cove

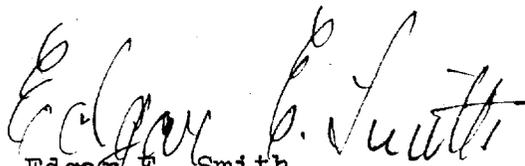
Ex 1248

Kiska Island

Gertrude Cove

Processing Office Notes

This sheet was prepared and plotted by the field party. Depth curves only were drawn by the processing office. ✓



Edgar E. Smith  
Cart. Engr.

## TIDE NOTE FOR HYDROGRAPHIC SHEET

16 March 1949

~~Division of Hydrography and Topography~~

Division of Charts: R. H. Carstens

Plane of reference approved in  
1 volumes of sounding records for

HYDROGRAPHIC SHEET 7713

Locality - Kiska Island, Aleutian Islands

Chief of Party: F.B.T. Siems in 1948  
Plane of reference is mean lower low water, reading  
4.4 ft. on tide staff at Gertrude Cove  
7.3 ft. below B. M. 2 (1947)

Height of mean high water above plane of reference is 3.2 feet.

Condition of records satisfactory except as noted below:

*E.C. McKay* Section of Tides  
Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES  
 Survey No. H-7713

Name on Survey										
	A	B	C	D	E	F	G	H	K	
<u>Alaska</u>			(for title)							1
<u>Aleutian Islands</u>			" "							2
<u>Kiska Island</u>									USGB	3
<u>Gertrude Cove</u>										4
										5
										6
										7
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										27

Names underlined in red are approved. 3/14/49 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7713  
 .....  
 .....

Records accompanying survey:

Boat sheets <sup>1</sup>...; sounding vols. <sup>1</sup>...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls ..... 1 envel.  
 special reports, etc. ....  
 .....

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

Number of positions on sheet		.230.
Number of positions checked		...25
Number of positions revised		...0.
Number of soundings revised (refers to depth only)		...5.
Number of soundings erroneously spaced		...6.
Number of signals erroneously plotted or transferred		...0.
Topographic details	Time	...2.
Junctions	Time	...0.
Verification of soundings from graphic record	Time	...38
Verification by <i>Aug Jeske</i> <i>Charles R. Wittmann</i>	Total time	5 40 hrs. Date <i>July 18, 1949</i> <i>April 22, 1949</i>
Reviewed by <i>Aug Jeske</i>	Time	11 Date <i>July 18, 1949</i>

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7713

FIELD NO. EX-1248

Alaska, Aleutian Islands, Kiska Island, Gertrude Cove  
Surveyed in June - July, 1948                      Scale 1:10,000  
Project No. CS-218

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - F. B. T. Siems  
Surveyed by - H. C. Applequist  
Protracted by - H. D. Nygren  
Soundings plotted by - H. D. Nygren  
Verified and inked by - C. R. Wittmann  
Reviewed by - I. M. Zeskind, July 14, 1949  
Inspected by - R. H. Carstens

1. Shereline and Control

The shoreline originates with air photographic survey T-8632 (1949) prior to review.

The source of the control is adequately described in the Descriptive Report.

2. Sounding Line Crossings

No crosslines were run on this survey, however, the sounding lines are closely spaced and soundings on adjacent lines appear to be in harmony.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except close inshore where the foul character of the bottom prevented development to the low-water line. In some places the low-water line was not delineated because of its proximity to the high-water line.

The bottom is generally smooth except for the foul areas found inshore.

4. Junctions with Contemporary Surveys

The junction with H-7707 (1948) on the southwest will be considered in the review of that survey.

5. Comparison with Prior Surveys

H-6901 (1935) 1:60,000

The meagre comparison afforded between the few soundings appearing on this small-scale Navy reconnaissance survey and the present survey indicates no appreciable change in the bottom.

The rock islets in lat.  $51^{\circ} 56.05'$ , long.  $177^{\circ} 26.05'$  (datum of chart 9180) fall in present depths of 3 to 5 fms. These rocks are apparently out of position and should be disregarded.

The present large-scale survey is adequately developed to reveal all hydrographic information necessary to supersede H-6901 within the common area.

6. Comparison with Chart 9180 (Latest print date 12/18/44)

A. Hydrography

The charted hydrography originates with the previously discussed hydrographic survey which needs no further consideration.

The present survey supersedes the charted hydrography.

B. Aids to Navigation

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

7. Condition of Survey

- a. The field records and Descriptive Report are complete and comprehensive.
- b. The protracting and plotting was carefully executed and is in compliance with the requirements of the Hydrographic Manual.
- c. No sounding crosslines were run (par. 2).
- d. No bottom characteristics were obtained.

8. Compliance with the Project Instructions

The survey adequately complies with the project instructions, except as noted in paragraph 7c and d.

9. Additional Field Work Recommended

This is a good basic survey, except as noted in paragraph 7c and d. For the reasons stated below, no additional work is recommended at this time.

a. Crosslines: Agreement in depth of adjacent lines of hydrography appears adequate.

b. Bottom Characteristics: A sufficient number of bottom characteristics for the small area covered by the present survey may be charted from Bp. 40455 (Japanese Military Chart 1960-16, published 13 March 1943).

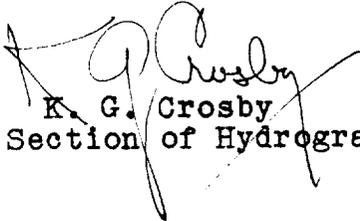
Examined and approved:



H. R. Edmonston  
Chief, Nautical Chart Branch



Casper M. Durgin  
Chief, Division of Charts



K. G. Crosby  
Chief, Section of Hydrography



W. M. Scaife  
Chief, Division of Coastal Surveys

