

7712 &

Additional work

Diag. Cht. No. 8864-2

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. EX-1148 Office No. H-7712 & Add'l
Wk. 1949

LOCALITY

State ALASKA

General locality ALEUTIAN ISLANDS

Locality KISKA HARBOR

194 8-'49

CHIEF OF PARTY

F.B.T.Siems & H.A.Karo

LIBRARY & ARCHIVES

DATE 8 MARCH 1949

8-1870-1 (11)

7712 &

Additional work

MAR 8 1949

Form 587
(Ed. Nov. 1941)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H-7712

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.

REGISTER No. H-7712

Field No. EX-1148

State Alaska

General locality ~~Kiska Island~~, Aleutian Islands

Locality Kiska Harbor, ~~Kiska Island~~

Scale 1:10,000 Date of survey 29 July to 28 September 1948

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

Vessel EXPLORER - Launch No. 2

Chief of party F.B.T. Siems

Surveyed by R. L. Pfau, H. C. Applegquist, E. W. Richards

Soundings taken by fathometer, graphic recorder, ~~hand lead, wire~~

Protracted by E. W. Richards

Soundings penciled by G. C. Mast and E. W. Richards

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

REMARKS:

Bathograms scanned by JNK EWR HDN GCM

" checked " EWR HCA JDH

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY H-7712

Field No. EX-1148

Kiska Harbor, Kiska Island, Alaska

1948

Scale 1:10,000

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

Surveyed by: R.L. Pfau, H.C. Applequist and E.W. Richards.

A. PROJECT:

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

B. SURVEY LIMITS AND DATES:

This survey covers Kiska Harbor and part of North Pass which is located in the central part of Kiska Islands east coast.

Hydrography of this survey was executed between the dates of 29 July and 28 September 1948.

The survey makes a junction with sheets ^{H-7708(1948)} EX-2248 and ^{H-7644(1948)} PI-2148 (field) on the eastern limits in North Pass and survey H-6933 of 194³ (1:10,000) on the southeast in South Pass. All other limits are with land.

In 1904 a contemporary survey of the same general area on a scale of 1:20,000 was made and registered as H-2700 and H-2701. More recently, in 194³, Kiska Harbor was wire-dragged and registered as survey H-6934 W.D. (Scale 1:10,000)

C. VESSEL AND EQUIPMENT:

All hydrography was accomplished with the Ship EXPLORER's launch No. 2, operating from a shore camp in Kiska Harbor. Soundings were obtained with an 808 Graphic recording fathometer No. 49. Soundings lines were controlled by running magnetic courses and ranges between sextant fixes.

D. TIDE AND CURRENT STATIONS:

The reductions for tide were taken from tidal data obtained from the Portable gage installed on the pier in Kiska Harbor and operating during the time of this survey. No time or height corrections were applied to any of the soundings.

No current stations were occupied.

E. SMOOTH SHEET:

The projection for the smooth sheet was made by hand aboard the Ship EXPLORER. Topographic signals and details were transferred from tracing paper. All signals and topographic details were verified.

F. CONTROL STATIONS:

Datum, North American 1927, local triangulation 1904, 1943 and 1945.

G. SHORELINE AND TOPOGRAPHY:

T-7118(1948) Topographic signals were located by planetable survey on sheet (EX-C-48). The detail of rocks in the vicinity of ROCK 1904 was obtained from red readings from that station. Shoreline details will be obtained from air photographs. In general, the shoreline has rocky bluffs except between signals "How" and "Rust", "Lot" and "Block", and in the general vicinity of "Hut". The shoreline in these locations is sandy except the latter which is gravel.

H. SOUNDINGS:

Soundings were taken by a recording fathometer and reduced in the usual manner.

I. CONTROL OF HYDROGRAPHY:

Horizontal control was obtained by three-point visual sextant fixes and no adjustment was made. The development of possible wrecks on "n" and "p" days was accomplished by running ranges between sextant fixes.

J. ADEQUACY OF SURVEY:

This survey, combined with those of 1904 and 1945, is considered adequate and no additional work is necessary.

*See par. J
of Review.*

The topography in the vicinity of TAR 1904 is not complete and it appears that chart 9124 is not complete and correct in this area. It is understood that photographs of this area were field inspected by the Ship SURVEYOR in 1945. Air photographs of this area aboard the EXPLORER in 1948 were not sufficiently clear for adequate field inspection. Any additional photographs obtained in 1948 should be consulted to clear up details in the area. It appears that the topography in this vicinity more or less conforms to the topographic survey of 1904, sheet T-2657.

*Shoreline
of present
survey not
compiled.
7-8-49.
IMZ*

K. CROSSINGS:

Line crossings are in agreement except on "a" day

which show soundings a few tenths of a fathom deeper than other days. It is thought that this is due to the heavy swell which was running into the harbor at that time.

Crossings
considered
adequate

L. COMPARISON WITH PREVIOUS SURVEYS:

There is adequate general agreement with the soundings taken in the survey of 1904 and the few soundings taken in 1945 (H-6934 W.D.)

M. COMPARISON WITH CHARTS:

The soundings of this survey are in general agreement with depths shown on chart No. 9124, dated May 1948, except as otherwise noted below.

Not marked "WK" on Ch. 9124
A minimum depth of 7.9 fathoms was obtained on the 6 3/4 fathom spot (marked "WK" at Lat. 51° - 58.53'N. Long. 177° - 33.8'E. with a possible indication that there might be a small hulk on the bottom at this spot. A minimum depth of 9.4 fathoms was obtained on the spot marked "8 WK" at Lat. 51° - 57.83'N Long. 177° - 33.8'E with slight indication of a small hulk on the bottom at this spot. No indications of wrecks located at Lat. 51° - 58.52'N, Long. 177° - 33.8'E and Lat. 51° - 58.2'N, Long. 177° - 33.2'E were found.

100 m. west of

6 3/4 fms. from
H-6934 W.D.

A minimum depth of 13.6 fathoms on some sort of hulk or wreckage, not shown on chart 9124, at Lat. 51° - 58.34'N, Long. 177° 33.85'E was found.

Plotted
13 fms. on
smooth sheet

N. DANGERS AND SHOALS:

There were no dangers or shoals found on this survey which are not indicated on chart 9124.

O. COAST PILOT INFORMATION:

All coast pilot information has previously been submitted in Coast Pilot Notes.

P. AIDS TO NAVIGATION:

There are no aids to navigation within the limits of this survey. The obstruction buoy off Trout Lagoon and the channel buoys which show on charts numbers 9124, 9155 and 9180 are now missing.

Q. LANDMARKS FOR CHARTS:

None submitted.

R. GEOGRAPHIC NAMES:

None submitted.

S. MOORING BUOYS:

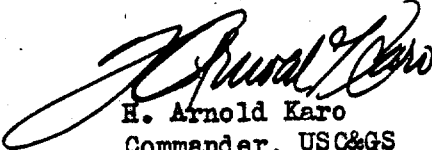
CL 789 (1948)

A special report, dated 21 September 1948, has been submitted giving the location of existing mooring buoys in Kiska Harbor. ✓

Respectfully submitted,


Paul Taylor
Lt. Comdr., USC&GS

Approved and forwarded.


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

TIDAL NOTES

Tide reducers for the soundings on Hydrographic Sheet H-7712 (Field No. EX-1148) are taken from data obtained from the portable automatic gage operated on the pier in Kiska Harbor; Lat. $51^{\circ}-59.0'N$, Long. $177^{\circ}-32.8'E$.

Mean Lower Low water is 4.3 feet on the staff. No additional time or height corrections were applied to the soundings.

The time meridian for the operation of the gage was 180th meridian time from the beginning of sounding to 10 September and from the 10th of September to 2 October the gage was operated on $165^{\circ}W$. meridian time.

STATISTICS FOR HYDROGRAPHIC SURVEY H 7712

Field No. EX-1148

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

VESSEL	DATE 1948	DAY LETTER	VOLUME	STAT.MI.	POSITIONS	AREA SQ. STA. MI.
Launch #2	8-5	a/	1	28.5	175	
"	8-6	b/	1	- -	6	
"	8-9	c/	1	15.5	96	
"	8-19	d/	1 & 2	30.8	194	
"	8-20	e/	2	18.0	131	
"	8-27	f/	2	8.6	83	
"	8-28	g/	2 & 3	14.4	89	
"	8-30	h/	3	22.8	146	
"	8-31	j/	3	5.0	36	
"	9-2	k/	3	5.6	41	
"	9-3	l/	3 & 4	49.6	253	
"	9-17	m/	4	15.2	130	
"	9-23	n/	4	13.3	106	
"	9-28	p/	5	3.7	41	
TOTAL				231.0	1527	14.9

FINAL CORRECTIONS

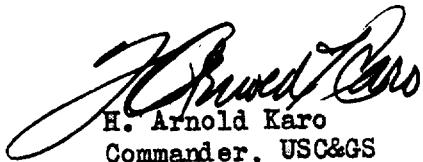
DRAFT & INITIAL

SHEET EX-1148

VESSEL	DATE	DAY LETTER	POSITION	808 #49 Fms. Corr.
Launch #2	8-5	a	1-99	0.0
			100-175	-0.2
"	8-6	b	All day	-0.2
"	8-9	c	1-25	0.0
			26-38	-0.2
			39-44	-0.4
			45-60	0.0
			61-96	-0.2
"	8-19	d	1-73	0.0
			74-76	-0.2
			77-86	-0.4
			87-194	-0.2
"	8-20	e	All day	0.0
"	8-27	f	1-13	0.0
			14-83	-0.3
"	8-28	g	All day	0.0
"	8-30	h	All day	0.0
"	8-31	j	All day	0.0
"	9-2	k	All day	0.0
"	9-3	l	1-133	0.0
			134-253	-0.2
"	9-17	m	All day	0.0
"	9-23	n	1-84	0.0
			85-106	-0.2
"	9-28	p	All day	0.0

APPROVAL SHEET

The records and smooth sheet have been inspected by me and approved. The field work was done under the supervision of Captain F.B.T. Siems.



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

GEOGRAPHIC POSITIONS
 NON-RECOVERABLE HYDROGRAPHIC SIGNALS
 Located by Theodolite Cuts
 HYDROGRAPHIC SHEET FIELD NO. EX-1148
 1948

*Computations
 filed with fatho-
 grams.*

*EGO (W.W.)	52	00	25.160	777.6	(1076.8)
	177	35	18.538	353.6	(790.9)
*ADI (W.W.)	51	57	20.980	648.4	(1206.0)
	177	34	11.049	211.0	(934.8)
*HEX (W.W.)	51	57	24.580	759.7	(1094.8)
	177	33	46.563	889.2	(256.6)
*FALL (Waterfall)					
	51	57	04.920	152.1	(1702.4)
	177	35	00.977	18.7	(1127.2)
*FAR (W.W.)	51	58	49.347	1525.3	(329.2)
	177	34	50.128	956.8	(188.4)
*NEAR (W.W.)	51	58	33.283	1028.8	(825.7)
	177	34	40.532	773.7	(371.6)
*CUT (Shed)	51	58	22.164	685.0	(1169.5)
	177	32	10.841	207.0	(938.4)
*WAT (Waterfall)	51	57	08.864	274.0	(1580.5)
	177	35	22.774	435.0	(711.0)
TIX (W.W.)	51	57	08.979	277.5	(1577.0)
	177	35	35.170	671.6	(474.3)
AXE (W.W.)	51	57	16.018	495.1	(1359.4)
	177	36	12.166	232.3	(913.5)
GAB (E.Gable Shed)	51	57	42.385	1310.0	(544.5)
	177	32	19.596	374.2	(771.5)
DEO (Radio Mast)	51	57	48.801	1508.3	(346.2)
	177	32	15.092	288.2	(857.4)
YAK (W.W.)	51	57	14.992	463.4	(1391.1)
	177	34	39.928	762.5	(383.3)
COR (High corner Barge)	51	58	06.917	213.0	(1641.5)
	177	32	10.789	205.9	(939.6)
FORE (Foremst wreck)	51	58	58.926	1821.3	(33.2)
	177	33	29.949	571.6	(573.5)

*No Check Positions

VELOCITY CORRECTIONS
1948

808 Fath. Ship & Launches

Corr'n to 0.1 fms.

Corr'n Fms.	Depth-Fms.	
0.0	0	to 3.4
-0.1	3.5	8.3
-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 to 0.2 fms.

Corr'n Fms.	Depth-Fms.	
3.0	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 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

NMC and NMC-2 Fathometers

Corr'n to 0.1 fms.

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

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 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

VELOCITY CORRECTIONS
1948

NMC and NMC-2 Fathometers (Continued)

Corr'n to 1.0 fms.		Corr'n Fms.	Depth-Fms.
Corr'n Fms.	Depth-Fms.		
0	to 270	+41	2001 to 2020
+1	271 440	+42	2021 2040
+2	441 565	+43	2041 2063
+3	566 665	+44	2064 2090
+4	666 745	+45	2091 2110
+5	746 814	+46	2111 2130
+6	815 872	+47	2131 2152
+7	873 933	+48	2153 2172
+8	934 984	+49	2173 2198
+9	985 1039	+50	2199 2218
+10	1031 1078	+51	2219 2237
+11	1079 1122	+52	2238 2257
+12	1123 1168	+53	2258 2278
+13	1169 1207	+54	2279 2300
+14	1208 1248	+55	2301 2320
+15	1249 1285	+56	2321 2340
+16	1286 1322	+57	2341 2360
+17	1323 1356	+58	2361 2378
+18	1357 1388	+59	2379 2400
+19	1389 1421	+60	2401 2415
+20	1422 1454	+61	2416 2433
+21	1455 1484	+62	2434 2452
+22	1485 1513	+63	2453 2470
+23	1519 1549	+64	2471 2486
+24	1550 1577	+65	2487 2505
+25	1578 1609		
+26	1610 1640		
+27	1641 1666		
+28	1667 1696		
+29	1697 1724		
+30	1725 1752		
+31	1753 1777		
+32	1778 1805		
+33	1806 1828		
+34	1829 1854		
+35	1855 1880		
+36	1881 1906		
+37	1907 1930		
+38	1931 1953		
+39	1954 1977		
+40	1978 2000		

Corr'n to 5.0 fms.		Corr'n Fms.	Depth-Fms.
		+5	560 to 930
		+10	931 1165
		+15	1166 1355
		+20	1356 1517
		+25	1518 1665
		+30	1666 1805
		+35	1806 1928
		+40	1929 2040
		+45	2041 2152
		+50	2153 2260
		+55	2261 2360
		+60	2361 2452

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

ADJUSTMENT OF HYDROGRAPHIC SIGNALS
Scaled From
HYDROGRAPHIC SURVEY NO. 6934

Station	Scaled Lat. & Long.			Correction	N.A. 1927 Lat. & Long.		
NORTH HEAD 1904	51	58	+ 618.4	+ 476.5	51	58	+1094.9 ✓
	177	34	+ 470.4	+ 220.6	177	34	+ 691.0 ✓
LEDGE 1904	51	57	+ 321.5	+ 474.2	51	57	+ 795.7 ✓
	177	33	+1050.7	+ 219.8	177	34	+ 24.6 ✓
Mean of above				+ 475.4 + 220.2			
REX (w.w.)	51	56	+1710.0	+ 475.4	51	57	+ 330.9 ✓
	177	34	+1007.2	+ 220.2	177	35	+ 81.5 ✓
BOW (Bow of wreck)	51	56	+1761.0	+ 475.4	51	57	+ 390.9 ✓
	177	34	+ 109.5	+ 220.2	177	34	+ 329.7 ✓
VIM (w.w.)	51	57	+ 90.0	+ 475.4	51	57	+ 565.4 ✓
	177	36	+ 263.0	+ 220.2	177	36	+ 483.2 ✓
WAC (w.w.)	51	56	+1816.0	+ 475.4	51	57	+ 436.9 ✓
	177	35	+ 783.5	+ 220.2	177	35	+1005.7 ✓
BAR (w.w.)	51	57	+ 239.0	+ 475.4	51	57	+ 714.4 ✓
	177	32	+ 810.0	+ 220.2	177	32 32	+1030.2 ✓
ABE (w.w.)	51	58	+ 475.1	+ 475.4	51	58	+ 950.5 ✓
	177	34	+ 365.5	+ 220.2	177	34	+ 585.7 ✓

The above 1943 stations were recovered and used. They were not relocated. The photostat of Hydrographic Survey No. 6934 did not include the projection data nor the Latitude or Longitude of any triangulation station. Stations NORTH HEAD 1904 and LEDGE 1904 were scaled and the mean correction necessary to change to the N.A. 1927 Datum was thereby determined. The hydrographic stations were then scaled and the above correction applied. The scaling was done independently by two officers and the mean values used. The backward and forward distances were both scaled and adjusted due to the distortion of the sheet.

Kiska Harbor

Processing Office Notes

This sheet was prepared and plotted by the field party. The only work done by the processing office was to add depth curves and names, transfer the inked topography, and make a few notes. The two paragraphs following were written by Captain Siems.

General statement.

"The hydrographic survey of Kiska Harbor was made to supersede in general the 1904 survey (H-2700 & H 2701) accomplished by hand lead and wire soundings. The 1904 soundings in rocky areas and close inshore, and in areas not covered by the recent survey, should be retained. Soundings on wreckage and indications of wreckage determined from 1943 to 1945 should be retained. So far as known no wreckage has been removed.

See Par. 96
and 6A, 2
of this Review.

Rocks east side of South Pass.

Rk Not shown at all on H-6933 (1943)

Referring to second paragraph under J-Adequacy of Survey (this report) and first paragraph on page 2 of Topographic Descriptive Report for sheet (Ex-C-48,) the rock shown as a high water rock on T 2657, in Lat. 51 57.73 N Long 177 36.64 E, is indicated as a rock awash on H 6933; Chart 9124 based on Navy air photo compilation shows a fairly large islet in or near this position. I am reasonably certain that this area has been seen covered at high water during the 1948 season. It is believed that the rock shown on T 2657 in Lat. 51 57.70 Long 177 36.78 is also submerged at high water. The party was instructed to make a topographic survey of the group of rocks, but was prevented from doing so by unfavorable weather."

T-7118 (1948)
These rocks not shown on present Hydro. Survey, Shore-line & off-shore detail not yet compiled. Differences in rock detail to be adjusted when topo of area is compiled.
10.2. 7-8-49

Summary

Except for the two areas shown on the overlay no attempt was made to relocate wrecks which were found in recent years. There has been no wreck clearance in Kiska Harbor and those wrecks already located should be retained on the chart. The Explorer anchored over an uncharted wreck at Lat. 51 58.35 Long. 177 33.85 and spent two hours breaking out the anchor. The chief purpose of the survey was to verify and supplement with modern methods the hand lead and wire survey of 1904.

See P 6A, 2
of this
Review.

Edgar E. Smith
Cart. Engr.

2 March 1949

Ex 1148

Kiska Harbor

List of Geographic Names

Kiska Island

Kiska Harbor

North Pass

South Pass

North Head

South Head

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

16 March 1949

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 7712

Locality - Kiska Island, Aleutian Islands

Chief of Party: F.B.T. Siems in 1948
Plane of reference is mean lower low water, reading
4.3 ft. on tide staff at Kiska Harbor
22.4 ft. below B. M. 10(1948)

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

Condition of records satisfactory except as noted below:

E. C. McKay Section of Tides
Chief, ~~Section of Tides~~ Tides and Currents.

GEOGRAPHIC NAMES
 Survey No. H-7712

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>Kiska Island</u>								USGB		3
<u>Kiska Harbor</u>								"		4
<u>South Head</u>								"		5
<u>South Pass</u>								"		6
<u>North Head</u>								"		7
<u>North Pass</u>										8
<u>Little Kiska Island</u>								USGB		9
										10
										11
										12
										13
										14
										15
										16
										17
										18
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										26
										27

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

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7712.....

Records accompanying survey:

Boat sheets 1.....; sounding vols. 5.....; wire drag vols.;
 bomb vols.; graphic recorder rolls 1 envel.
 special reports, etc. 1 overlay tracing.....

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

Number of positions on sheet	.....	1527	.....
Number of positions checked	.....	191	.....
Number of positions revised	.....	13	.....
Number of soundings revised (refers to depth only)	.....	7	.....
Number of soundings erroneously spaced	.....	1	.....
Number of signals erroneously plotted or transferred	.....		.....
Topographic details	Time	2	.....
Junctions	Time	6	.....
Verification of soundings from graphic record	Time	16	.....
Verification by <i>Lu Jeskeund</i> G. HILLIARD.....	Total time	21.4 hrs	Date <i>July 8, 49</i> MAY 17, '49
Reviewed by <i>Lu Jeskeund</i>	Time	62.5	Date <i>July 8, 1949</i>

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7712

FIELD NO. EX-1148

Alaska, Aleutian Islands, Kiska Harbor
Surveyed in July - Sept., 1948 Scale 1:10,000
Project No. CS-218

Soundings:

808 Fathometer

Control:

Sextant fixes on shore signals

Chief of Party - F. B. T. Siems
Surveyed by - R. L. Pfau, H. C. Applequist, E. W. Richards
Protracted by - E. W. Richards
Soundings plotted by - G. C. Mast, E. W. Richards
Verified and inked by - G. S. Hilliard
Reviewed by - I. M. Zeskind, June 8, 1949
Inspected by - R. H. Carstens

1. Shoreline and Control

The portion of shoreline and rock detail shown on the present survey originates with graphic control survey T-7118a & b (1948). Completion of the inshore rock detail is deferred pending receipt of additional inshore hydrography. *(Two piers, shoreline and railways added from unregistered graphic control survey, Report attached, not retained) 6/2-13/51*

There are no contemporary topographic surveys of this area. However, air photographic surveys from which the shoreline can be obtained are to be accomplished as soon as conditions permit.

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

2. Sounding Line Crossings

The depths at crossings are in adequate agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated except close inshore where the foul character of the bottom frequently prevented development to the low-water line.

The bottom outside the 5-fm. curve is generally smooth, except for the foul area which extends about one mile off-shore northeastward from North Head. The bottom in Kiska Bay is foul with numerous sunken wrecks.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-6933 (1943) at the north end of South Pass. The small area in Kiska Harbor covered on H-6933 in the vicinity of lat. 51° 58.8', long. 177° 33.0', has been adequately surveyed on the present survey. Except for one sounding, hydrography from H-6933 in this area is superseded by the present survey and has not been carried forward.

*Junction
is not
adequate
in
coverage.*

Junctions with surveys H-7708 (1948) and H-7644 (1948) at the eastern limits of North Pass will be discussed in the reviews of those surveys.

5. Comparison with Prior Surveys

- A. H-2700 (1904) 1:10,000
H-2701 (1904) 1:20,000

A comparison between the prior and present surveys reveals no important differences in bottom configuration. Depths on these surveys differ from present depths by 1-2 fms. One rock awash, three soundings and a number of bottom characteristics are carried forward to the present survey. With these additions, the present survey is adequate to supersede the prior surveys within the common area. However, disposition of inshore rock detail charted from these prior surveys is deferred until the shoreline is applied to the present survey.

- B. H-6900 (1935) 1:30,000

This U. S. Navy reconnaissance survey overlaps the northeast portion of the present survey north of North Head. A comparison reveals erratic differences of 3 to 6 fms. between prior and present depths in areas of relatively smooth bottom. Soundings listed below show comparative depths between the prior and present surveys. The prior soundings (charted) are considered erroneous and should be disregarded:

<u>Comparative Sdgs (fms.)</u>		<u>Datum of Chart 9124</u>	
<u>H-6900</u>	<u>H-7712</u>	<u>Lat.</u>	<u>Long.</u>
19	21-23	51° 58.97'	177° 36.02' ✓
23	27	51° 59.14'	177° 36.72' ✓
29	25-26	51° 59.02'	177° 36.67' ✓
27	21	51° 58.81'	177° 36.46' ✓
19	22-23	51° 58.78'	177° 36.75' ✓
17	20	51° 58.78'	177° 36.25'

The rock awash charted in lat. 51° 58.82', long. 177° 35.26', originating with H-6900, falls in present depths of 12 fms. This rock awash is considered to be out of position and should actually fall about 100 meters northward where a rock awash appears on the present survey.

The present survey is adequate to supersede the prior survey within the common area.

C. H-6934 W.D. (1943) 1:10,000

This wire-drag survey covers much of Kiska Harbor west of North Head. The coverage extends inshore approximately to the 5-fm. curve. No conflicts exist between the effective drag depths and depths on the present survey. Three soundings have been carried forward to the present survey.

The 6-3/4-fm. depth charted in lat. 51° 58.47', long. 177° 34.42', falls in present depths of 10 fms. This depth apparently originates with a 41 ft. clearance depth on H-6934 and was charted in error as a sounding. The 6-3/4 should, therefore, be disregarded.

6. Comparison with Chart 9124 (Latest print date 10/28/44)

A. Hydrography

The charted hydrography originates principally with the previously discussed surveys and with information shown on Bps. 37692 (1943) and 38783 (1944), Chart Letters 691 (1943), 211 (1944) and 661 (1944) and Restricted N. to M. 21 (1943).

1. The 2-1/2-fms sounding in lat. 51° 58.30', long. 177° 32.65', is charted in error. This sounding originates with H-6934 W.D. (1943) on which it is shown as 2-3/4 fms.

Attention is directed to the Hydrographer's statement par. 1, p. 2, that charted detail near Δ Tax is not correct or complete. R.H.C. 11/15/51

2. The following charted least depths on wrecks, originating with Bp. 38783 (1944) and Chart Letter 661 (1944) are 1-4 fms. shoaler than the present depths. These charted depths are not considered disproved by the present survey and should, therefore, be retained on the chart.

<u>Depths in fms.</u>		<u>Charted</u>	
<u>Charted</u>	<u>Present Survey</u>	<u>Lat.</u>	<u>Long.</u>
		<i>OLD DATUM - NOT MAINT</i>	
11 ✓	13	51° 58.72'	177° 33.33' ✓
9 ✓	13	51° 58.67'	177° 33.47' ✓
12 ✓	13-15	51° 58.58'	177° 33.36' ✓
15 ✓	16	51° 58.34'	177° 33.32' ✓
10 ✓	12-15	51° 58.33'	177° 33.02' ✓
13 ✓	14-15	51° 58.06'	177° 33.01' ✓
8 ✓	94 *	51° 57.97'	177° 33.07' ✓
12 ✓	14-15	51° 58.48'	177° 32.97' ✓

The present survey supersedes the charted hydrography within the common area, except for the depths listed above.

* *86 on Add wk 1949
replaces 8 fms.*

B. Aids to Navigation

The obstruction buoy charted in lat. 51° 58.32', long. 177° 32.68', is not shown on the present survey. This buoy is reported in Chart Letter 89 (1949) to be one not maintained by the Coast Guard. The Coast Guard has recommended to the U. S. Navy that this buoy be discontinued.

7. Condition of Survey

- The field records and Descriptive Report are complete and comprehensive.
- The protracting and plotting was carefully executed and is in compliance with the requirements of the Hydrographic Manual.
- No bottom characteristics were obtained within the area of the present survey.
- Inshore development to the low-water line was not accomplished in several areas in the northern, eastern and southern portions of the survey. The Chief of Party has recommended (paragraph 2 of the Processing Office notes) the retention of prior soundings in these areas. These soundings have not been retained on the present survey inasmuch as supplemental instructions have been issued for the survey of these areas.

Inshore areas developed on Add wk 1949

8. Compliance with the Project Instructions

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

9. Additional Field Work Recommended

The following additional work should be accomplished:

- a.* The running of split lines in the areas listed below:

<u>Latitude</u>	<u>Longitude</u>
52° 57.55'	177° 35.50'
52° 57.65'	177° 35.50'
52° 57.88'	177° 35.00'
52° 57.90'	177° 37.20'

* Add. WK.
accomplished
in 1949

- b.* Hydrography in the unsurveyed inshore areas mentioned in paragraphs 7d and 8 above.

Instructions for the additional work recommended in a and b have been issued to the field parties.

Although the charted least depths over the wrecks referred to in paragraph 6A-2 were not disproved, further development of these wrecks is not recommended. The depth of water over these wrecks is considered adequate for navigational purposes.

Examined and approved:

H. R. Edmonston
H. R. Edmonston

Chief, Nautical Chart Branch

Gasper M. Durgin
Gasper M. Durgin

Chief, Division of Charts

K. G. Crosby
K. G. Crosby

Chief, Section of Hydrography

W. M. Scaife
W. M. Scaife

Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7712 ⁽¹⁹⁴⁸⁻⁴⁹⁾ ~~7712~~

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11/7/50	9155	<i>S.H. McGinnis</i>	Before <u>After</u> Verification and Review <i>Critical soundings only (Partially applied)</i> Before <u>After</u> Verification and Review
11/7/50	9180	<i>L.A.M.</i>	Before <u>After</u> Verification and Review <i>Partially applied. Added 2 sdgs.</i>
8/7/51	9124	<i>Picigari</i>	Before <u>After</u> Verification and Review <i>Part applied.</i>
3/3/52	8864	<i>Jan</i>	Before <u>After</u> Verification and Review <i>Examined only.</i>
11/16/54	^{Recom.} 9124	<i>O.R. Wittman</i>	Before <u>After</u> Verification and Review <i>(fully)</i>
7-18-55	^{Recom.} 9180	<i>O.R. Wittman</i>	Before <u>After</u> Verification and Review <i>applies thru 9124</i>
11/16/61	8864	<i>ME</i>	Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
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			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review
			Before <u>After</u> Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H-7712 Ad. Wk.

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.

Additional work

REGISTER No. H-7712 Ad. Wk.

Field No. CS-218

State ALASKA

General locality KISKA ISLAND

Locality KISKA HARBOR

Scale 1:10,000 Date of survey AUGUST 4, 1949

Instructions dated 8 July 1949 NO. 222/MEK S-1-EX

Vessel EXPLORER

Chief of party H. A. KARO

Surveyed by J. S. Morton, F. A. Riddell

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

Protracted by J. H. Eaton

Soundings penciled by J. H. Eaton

Soundings in fathoms ~~XXXXXXXXXX~~ MLLW

REMARKS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
USC&GSS EXPLORER

POST-OFFICE ADDRESS:

705 Federal Office Building
Seattle 4, Washington

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

20 January 1950

To: The Director,
U.S. Coast & Geodetic Survey,
Washington 25, D.C.

Subject: Additional work accomplished on hydrographic sheet
H-7712, Kiska Harbor, Project CS-218.

Reference: Your letter of 8 July 1949. No 222/MEK S-1-EX.

In compliance with the letter of reference additional hydrography was accomplished on hydrographic sheet H-7712, 4 August 1949. The records, consisting of the original Boat Sheet, a temporary Boat Sheet prepared this season, 2 fathograms and two volumes Sounding Record, are being forwarded under separate cover.

The statistics for this additional work are as follows:

Date	Boat	Letter day	Positions	Sta.Mi. Sdg.Line
8-4-49	Launch #1	a(blue)	68	6.1
8-4-49	Launch #2	aa(red)	<u>129</u>	<u>19.7</u>
		TOTAL	197	25.8

During the time of this work a tide gauge was maintained at Constantine Harbor, Amchitka Island, Alaska. The hourly heights of tide for the correction of soundings on this survey were furnished by the Washington Office.

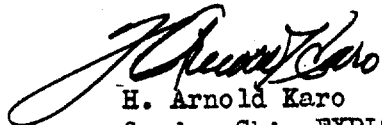
The splits called for in the letter of reference were all run. In the area south of $51^{\circ}57.4'$ sounding lines were run as close to the beach as it was safe to go. This is a very foul area as indicated on the Boat Sheet. Many of the rocks and reefs in this area were sketched in by the hydrographer but their exact location should be obtained from the aerial photographs. The same is true of the other areas in which inshore development was required. It is obvious that the development of the low-water line is impracticable.

Further investigation was made of the ⁹⁴20 fm. shoal at Lat. $51^{\circ}57.84'$, Long. $177^{\circ}33.2'$ by drifting and circling over the area for half an hour. It is a very small shoal (probably a wreck) and the least depth found was 8.6 fms. High winds made an investigation with a lead line impracticable.

L Replaces previous sdg. of 10 fms.

The previous season's signals were recovered and used to control the survey. One additional hydrographic signal (Nan, Lat. 51°58.0', Long. 177°38.2') was located and used.

808 fathometers were used for sounding by both launches, and all corrections are entered in the sounding records, and the soundings have been reduced and checked.



H. Arnold Karo
Comdg. Ship EXPLORER

cc: Seattle Processing Office

VELOCITY CORRECTIONS

1949

808 Fath. Ship & Launches

<u>Corr'n. fms.</u>	<u>Depth fms.</u>
0.0	0.0 to 4.0
-0.1	4.1 to 8.3
-0.2	8.4 to 12.4
-0.3	12.5 to 17.0
-0.4	17.1 to 20.9
-0.5	21.0 to 24.9
-0.6	25.0 to 28.3
-0.7	28.4 to 32.0
-0.8	32.1 to 35.6
-1.0	35.7 to 43.2
-1.2	43.3 to 51.0
-1.4	51.1 to 59.2
-1.6	59.3 to 67.4
-1.8	67.5 to 75.0
-2.0	75.1 to 83.0
-2.2	83.1 to 90.9
-2.4	91.0 to 98.1
-2.6	98.2 to 105.8
-3.0	105.9 to 124.7
-3.5	124.8 to 146.7
-4.0	146.8 to 170.0
-4.5	170.1 to 196.0

~~T-6987~~

The shoreline was applied to Graphic Control Sheet T-6987 from one Navy five-lens photograph (1934) which was the only one available. Scale of the photograph was approximately 1:25,000.

Triangulation stations Kiska N. Base 2, 1945; Kiska S. Base 2, 1945; Ledge, 1904; South Head, 1943; Ridge, 1943; and Chute, 1904, were held to in the vertical projector when the shoreline was transferred to the Graphic Control Sheet. In addition, topographic stations Big Dog and Lot, recovered in the field, were held. Topographic station Pin, recovered in the field, could not be held probably due to an error in field picking as the image on the photograph is very poor.

All detail added from the five-lens photograph to the Graphic Control Sheet is shown in pencil.

The shoreline is subject to correction after field verification or from more recent photographs; also, no stereoscopic examination was possible because only one photograph was available.

Submitted by:

K. N. Maki

K. N. Maki

Aug. 23, 1946

Approved:

L. C. Lande
L. C. Lande

*This shoreline was transferred in pencil to H-7712, as
the unregistered graphic control sheet is not being retained*

G.F.D.
1/31/51

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. T-5987

TOPOGRAPHIC TITLE SHEET

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

Field No. ~~SU-C-1945~~

REGISTER NO. ~~T-6987~~

State Alaska, Aleutian Islands

General locality Kiska Island

Locality Kiska Harbor

Scale 1:10000 Date of survey May 31, 1945

Vessel SURVEYOR

Chief of party C.D. Meaney

Surveyed by K.B. Jeffers

Inked by K.B. Jeffers

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated _____, 19____

Remarks: Revision survey for chart correction

Descriptive Report to Accompany
Topographic Sheet ^(Not retained) (SU-C-1945), Kiska Harbor

Date of Survey: The topography was done on May 31, 1945

Scale: The topography was done on an aluminum mounted sheet at a scale of 1:10000.

Purpose: The survey was made to provide correction data for charts No. 9124 and 9155. The barge dock and remains of a marine railway in the southwest corner of Kiska Harbor were located.

Methods: Standard methods for topographic surveys were used. The high water line was plotted for a short distance to the north and south of the dock and marine railway to assist in fitting the new survey to previous work.

Signals indicated by red circles were located by theodolite cuts which were plotted on the sheet using a steel protractor.

The docks in the northwest corner, and all buoys, rafts and barges were located by sextant fixes which were plotted on the topographic sheet. All such information is shown with blue ink.

A tracing of this sheet was forwarded at an earlier date giving advance information for chart correction. L. 461 (1945)

The sounding volume containing the record of sextant angles for locating of docks and buoys has been forwarded with the topographic sheet.

Respectfully submitted,

Karl B. Jeffers

KARL B. JEFFERS
Lt. Comdr., C. & G. Survey

Approved:

C.D. Meaney

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

Topographic information was transferred to H-7712
as graphic control sheet is not being retained.

G.F.J.
1/31/51

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

3 February 1950

Division of Charts: R. H. Carstens

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 7712 (Add. Work)

Locality Kiska Harbor, Kiska Island

Chief of Party: H. A. Karo in 1949
Plane of reference is mean lower low water, reading
3.0 ft. on tide staff at Sweeper Cove
7.0 ft. below B. M. 1 (1943)

Height of mean high water above plane of reference is 3.7 feet.

Condition of records satisfactory except as noted below:

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

GEOGRAPHIC NAMES

Survey No. H-7712 Ad. Wk.

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
<p><i>No additional names 2-3-50 L. Heck</i></p>									1
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Hydrographic Surveys (Chart Division)

H-7712 Ad. Wk.
 HYDROGRAPHIC SURVEY NO.

Records accompanying survey:

Boat sheets ².....; sounding vols. ².....; 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	.....	187
Number of positions checked	.....	107
Number of positions revised	.....	4
Number of soundings revised (refers to depth only)	.....	9
Number of soundings erroneously spaced	.....	2
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....

Plotted by J. H. Eaton

Verification by *O. Svendsen* Total time *38 hrs.* Date *7-28-50*
118 hrs. Date *8-25-50*

Reviewed by *Qu Zestkin* Time *10* Date *8/29/50*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7712 Add. Wk.

FIELD NO. EX-1148

Alaska, Aleutian Islands, Kiska Harbor
Surveyed in August, 1949 Scale 1:10,000
Project No. CS-218

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - H. A. Kero
Surveyed by - J. S. Morton and F. A. Riddell
Protracted by - J. H. Eaton
Soundings plotted by - J. H. Eaton
Verified and inked by - O. Svendsen
Reviewed by - I. M. Zeskind, 29 August 1950
Inspected by - R. H. Carstens

1. Instructions

The additional work was recommended in paragraphs 9a and b of the review of H-7712 (1948) and was accomplished in accordance with the Director's letter dated July 8, 1949.

2. Scope and Results

The additional work consists in the running of split lines in several inadequately developed areas and the further development of inshore areas to the low-water line where practicable. With the addition of supplemental soundings from H-2700 (1904) and H-6933 (1943) in depths less than 10 fms., these areas are now considered to be adequately developed.

After further development on the present survey the 9.4-fm. sounding previously shown in lat. $51^{\circ} 57.84'$, long. $177^{\circ} 33.23'$, is superseded by an 8.6-fm. sounding which was obtained by fathometer. High winds prevented a handlead investigation of this shoal.

The disposition of inshore rocks charted from H-2700 will be considered when the shoreline for the present survey is available.

3. Additional Work Recommended

Except for the addition of inshore detail when topographic surveys are available, the present survey is considered basic and no additional work is recommended.