6867

Diag'd. on Diag. Ch. No. 9198

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX-2445 Office No. 6867

LOCALITY

State Alaska — Aleutian Is.

General locality Attu Island (~~north coast~~)

Locality ~~Between~~ Austin Cove to Steller Cove ~~& Holtz Bay~~

194 5

CHIEF OF PARTY

Roland D. Horne

LIBRARY & ARCHIVES

DATE APR 18 1946

B-1870-1 (1)

6867

Form 537
(Ed. Nov. 1941)

REG. NO. H6867

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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-6867

Field No. EX 2445

State Alaska - Aleutian Is.

General locality Attu Island ~~(North Coast)~~

Locality Austin Cove to ~~Between~~ Steller Cove ~~and Holts Bay~~

Scale 1:20,000 Date of survey 27-28 July 1945

Instructions dated Supplemental, 24 May 1945, Liaison Officer, Project #30

Vessel USC&GSS EXPLORER

Chief of party Roland D. Horne

Surveyed by E.C. Baum; W. Weidlich

Soundings taken by fathometer, graphic recorder, ~~xxxxxxxxxxxxxxx~~

Protracted by R. H. Woodcock

Soundings penciled by R. H. Woodcock

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

REMARKS: Project CS-218 - Field work was discontinued on this survey (projects #29 and #30) in accordance with Liaison Officer's Supplemental Instructions dated 22 August 1945, ref. ND17/H1 (Gen), FETS/hs, series 01846 (excerpts of Director's Orders and Instructions of 29 January 1945).

The 150° W. Meridian time was used for operation of tide gage, reduction of soundings, execution of hydrography.

Smooth Sheet and Plotting by the Seattle Processing Office.

U. S. GOVERNMENT PRINTING OFFICE 428975

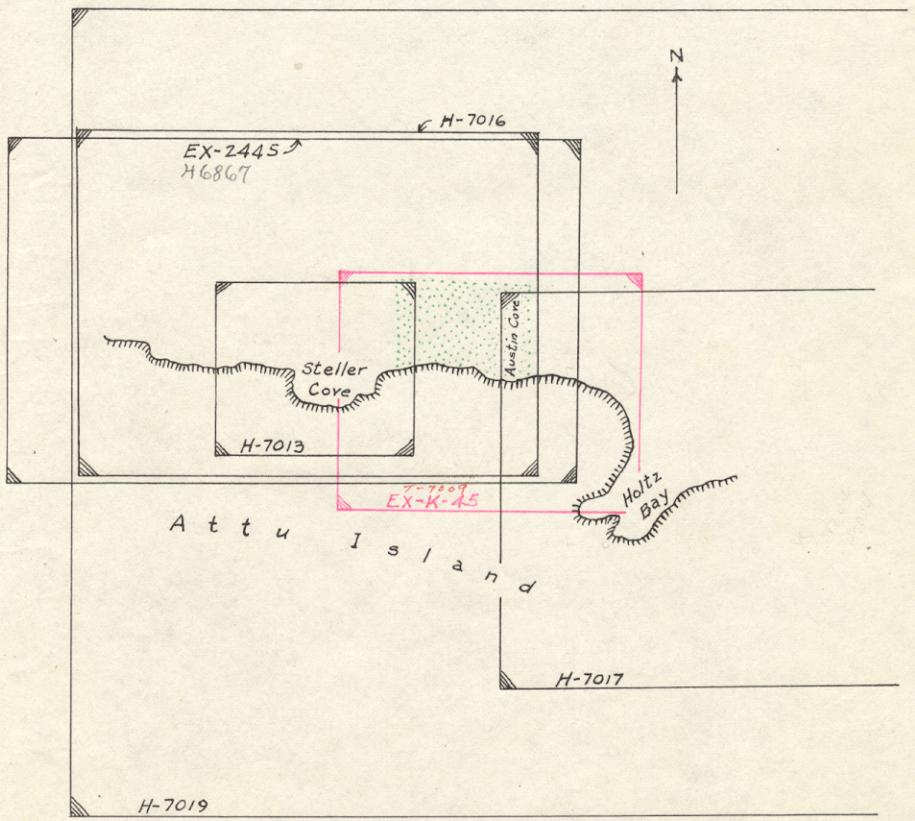
INDEX SHEET

to

Accompany Hydrographic Sheet

Field Number EX-2445

6867



green dotted area indicates surveyed limits.
black solid lines indicate hydrographic sheets.
red solid lines indicate topographic sheets.

DESCRIPTIVE REPORT

TO

ACCOMPANY HYDROGRAPHIC SURVEY H- 6867
(Field No. EX-2445)

BETWEEN HOLTZ BAY AND STELLER COVE

ATTU ISLAND, ALASKA

1945

SCALE 1:20,000 USC&GSS EXPLORER

ROLAND D. HORNE, COMMANDING

SURVEYED BY: E. C. BAUM - W. WEIDLICH

- o -

A. PROJECT:

CS-218; Supplemental Instructions dated 24 May 1945, project #30, Liaison Officer, Adak, Alaska.

B. SURVEY LIMITS AND DATES:

The survey is located on the north shore of Attu Island, Alaska contiguous to the coastline between Steller Cove and Holtz Bay and delimited: by a north-south line, lying at the eastern entrance to Steller Cove, extending offshore for 2⅛ miles distant; thence easterly for 3 3/4 miles; thence south for 3 miles to the coastline, forming the eastern entrance of Austin Cove. See index-limit sheet attached.

Hydrography was executed during the period 27-28 July 1945.

Junctures with contemporary surveys: to the eastward with H-7017, (1948)-45) scale 1:20,000; to the northward with H-7019, (1944-45) scale 1:40,000; to the westward with H-7013, (1944) scale 1:10,000 (south) and H-7016, (1944)

scale 1:20,000 (north). See index-limit sheet attached for junctures with and scales of contemporary surveys.

C. VESSEL AND EQUIPMENT:

The USC&GSS EXPLORER with hydrographic launch No. 1, operating from the vessel, executed the hydrography. The launch operated offshoreward to a juncture with the ship survey at approximately the 30 fathom depth curve defined by an east-west line 1 mile offshore, normal to the coastline.

The turning radius of EXPLORER is 275 and 360 meters to port and starboard respectively. The vessel's sounding speed varies between 10 knots on inshore lines to 12½ knots on offshore lines. No appreciable variation in turning radius was observed within the limits of speeds utilized.

The vessel and launch used 808 fathometers, graphic recorder types, No's. 60 and 50 respectively, for all depths on the fathom scale.

D. TIDE STATION:

Reduction of tides was based on Steller Cove, portable tide gage, during period of survey.

E. SMOOTH SHEETS:

Function of Processing Office.

F. CONTROL STATIONS:

Datum, USN GANNET 1934. Local triangulation, Roland D. Horne 1944. Local topography, traverse method, field sheet No. EX-K-1945. T-7009

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topographic details pertaining to the area (to be? EES) of this survey are combined from data from topographic (traverse method) sheet, Field No. EX-K-1945 T-7009 and air-photographs flown by US Navy, Attu, Alaska during 1944 and 1945. HWL on T-6973 (1944)

Shore line not on boat sheet nor topo plate. Photos not available to processing office No shore line on smooth sheet. EES. Shoreline added in Washington office

Where the low-water line is not defined by soundings, due to the irregular, rocky ledge-formations, it was delineated by air-photographic inspection. The inspection with regard to offlying rocks, elevations above their respective planes of reference were made by the air-photographic field party.

The delineated shoreline contiguous to this survey was not available during period of survey.

H. SOUNDINGS:

All depths were graphically recorded, on the fathom scale, using the 808 fathometers.

See Hydrographic Report, Field No. EX-2245 H-6866 paragraph "H. Sounding," regarding spot development.

I. CONTROL OF HYDROGRAPHY:

Standard sextant-fix practices for position determination were executed in accordance with "Special Publication No. 143 Rev. 1942."

J. ADEQUACY OF SURVEY:

This survey is complete, requires no additional work and is adequate to supersede prior surveys for charting.

Boat sheet junctures with contemporary surveys are in close agreement, however the smooth sheet examination, when accomplished,

will govern.

Depth curves can be adequately drawn on the boat sheet at the junctions.

K. CROSSLINES:

Adequate crosslines were run indicating close agreement.

L. COMPARISON WITH CHART:

No previous survey existed.

M. DANGERS AND SHOALS:

Cognizance should be taken of:

Type	Depth fms	Latitude	Longitude	Pos. No. Vol.	Remarks
Shoal	1 6	53°00'.17 N	173°00'.07 E	165 b, 3	Small Craft
~~Rock~~ Islet	~~0~~	53°00'.12 .07 N	173°00'.28 E	65 b, 2	Awash MHW
Islet	-	53°00'.08 N	173°03'.45 E	--	Topo Signal Let.
Islet	-	53°00'.04 N	173°02'.4 E	--	Topo Signal Ice.

83

~~1.8~~ 1.5 52° 59.67 173 04'.76 ~~205~~

Shoal Rock awash MHW See T7009 EES.

Respectfully submitted,

Edwin C Baum

E. C. Baum,
Lt. Comdr., C&GS.

W. Weidlich

W. Weidlich,
Mate, C&GS.

Approved and forwarded:

Roland D. Horne

Roland D. Horne,
Comdr., C&GS

STATISTICS FOR HYDROGRAPHIC SURVEY H- 6867

FIELD NO. EX-2445

Survey Unit	Vol.	Day Letter	Date 1945	Number Positions	No. Sta. Miles Sdg. Lines	Area Sq. Sta. Miles
EXPLORER	1	A	July 27	151	64.2	
"	1	B	July 28	62	24.2	
Total For EXPLORER				217	88.4	8.5
Launch #1	2	a	July 27	224	50.5	
"	2&3	b	July 28	180	28.8	
Total For Launch #1				404	79.3	4.9
Grand Total				621	167.7	13.4

TIDE NOTE

Reduction of soundings for Hydrographic Sheet No. H- 6867 (Field No. EX-2445) is based on tide data from portable automatic tide gage #187 established in 1945 on the west shore of Steller Cove, Attu Island, Alaska. Latitude 52°59'.6 N, longitude 172°54'.6 E. The hourly heights for reduction of records were scaled from the marigrams. The plane of reference of MLLW is 3.9 feet on tide staff as derived from Tide Division letter dated 19 June 1945, ref. m l h with respect to re-establishment and leveling during 1945 field season.

All times, for the operation of tide gage, execution of hydrography and reduction of records were based on the 150° W. Meridian time.

12 July 1945

WHO

800 fms.			820 fms/sec. fms.
12.0	to	17.8	-0.2
17.9	"	28.0	-0.3
28.1	"	28.2	-0.4
28.3	"	32.8	-0.5
32.9	"	37.5	-0.6
37.6	"	46.5	-0.8
46.6	"	55.5	-1.0
55.6	"	61.8	-1.2
61.9	"	70.3	-1.4
70.4	"	78.4	-1.6
78.5	"	84.5	-1.8
84.6	"	94.5	-2.0
94.8	"	102.2	-2.2
102.5	"	117	-2.5
118	"	136	-3.0
137	"	156	-3.5
157	"	176	-4.0
176	"	190	-4.5

TAUTOGUS

800 fms.			820 fms/sec. fms.
0.0	to	2.5	0.0
2.6	"	10.0	-0.1
10.1	"	16.2	-0.2
16.3	"	21.5	-0.3
21.6	"	26.5	-0.4
26.6	"	31.5	-0.5
31.6	"	36.2	-0.6
36.3	"	44.2	-0.8
44.3	"	52.2	-1.0
52.3	"	60.4	-1.2
60.5	"	68.5	-1.4
68.6	"	76.5	-1.6
76.6	"	84.5	-1.8
84.6	"	92.2	-2.0
92.3	"	100.5	-2.2

NMC fms.			800 fms/sec. fms.
0	to	13	0.0
13.2	"	100	+0.2
101	"	200	0.0

For greater depths see corrections of 17 June 1945.

EX-2445

6867

17 JUN 1945

Fms.			800 fms/sec. Fms.
00	to	200	0.0
201	to	275	+0.5
276	to	350	+1.0
351	to	430	+1.5
431	to	486	+2.0
487	to	555	+2.5
556	to	600	+3.0
601	to	645	+3.5
646	to	690	+4.0
691	to	735	+4.5
736	to	770	+5.0
771	to	805	+5.5
806	to	842	+6.0
843	to	878	+6.5
879	to	905	+7.0
906	to	945	+7.5
946	to	972	+8.0
973	to	1000	+8.5
1001	to	1025	+9.0
1026	to	1050	+9.5
1051	to	1080	+10.0
1081	to	1110	+10.5
1111	to	1134	+11.0
1135	to	1160	+11.5
1161	to	1184	+12.0
1185	to	1208	+12.5
1209	to	1228	+13.0
1229	to	1250	+13.5
1251	to	1273	+14.0
1274	to	1295	+14.5
1296	to	1314	+15.0
1315	to	1337	+15.5
1338	to	1355	+16.0
1356	to	1378	+16.5
1379	to	1398	+17.0
1399	to	1417	+17.5
1418	to	1436	+18.0
1437	to	1456	+18.5

Fms.			800 fms/sec. Fms.
1457	to	1475	+19.0
1476	to	1493	+19.5
1494	to	1511	+20.0
1512	to	1530	+20.5
1531	to	1549	+21.0
1549	to	1564	+21.5
1565	to	1581	+22.0
1582	to	1598	+22.5
1599	to	1613	+23.0
1614	to	1630	+23.5
1631	to	1647	+24.0
1648	to	1665	+24.5
1666	to	1682	+25.0
1683	to	1699	+25.5
1700	to	1712	+26.0
1713	to	1728	+26.5
1729	to	1743	+27.0
1744	to	1759	+27.5
1760	to	1774	+28.0
1775	to	1788	+28.5
1789	to	1803	+29.0
1804	to	1817	+29.5
1818	to	1830	+30.0
1831	to	1844	+30.5
1845	to	1856	+31.0
1857	to	1869	+31.5
1870	to	1882	+32.0
1883	to	1895	+32.5
1896	to	1905	+33.0
1906	to	1916	+33.5
1917	to	1928	+34.0
1929	to	1939	+34.5
1940	to	1950	+35.0
1951	to	1959	+35.5
1960	to	1970	+36.0
1971	to	1980	+36.5
1981	to	1989	+37.0
1990	to	2000	+37.5

EX-2445

H-6867

Seattle Processing Office Notes

This is an unfinished field survey. It is intended to extend the soundings westward during 1946 to a junction with H-6864 (EX 2345) near Kresta Point. As the greater part of the work is yet to be done, the Processing Office will request the return of the smooth sheet for further plotting when the need arises.

Smooth Sheet-

Datum: USN GANNET 1934. The sheet extends westward to Kresta Point to provide for additional work. All topo signals are from T-7009 (EX-K-45). Certain rocks were transferred from T-6973 (Ex-H-44). Shoreline from T-6973a

Crossings-

Latitude	Longitude	Position	Depth	Remarks
53° 00.0	172° 59.7	52-53b 89-90a	8 ~~6.5~~ 8	Irregular bottom close to shore
53 00.5	173 01.8	173-174b 156-157b	22.7 20.5 ok	The shoaler of these two may be erroneous. See fathogram.
53 00.15	173 01.85	155-156b	6.7	Scanned by field party. Fathogram looks like kelp or stray with bottom 10 ft. deeper.

Other crossings are very good.

All other pertinent matters have been covered by the field party. The sheet is simple and clear and requires no explanation.

H-6867

North Coast Attu Island

414 ✓

List of Geographic Names Pencilled on the Smooth Sheet

Bering Sea

Attu Island

Steller Cove

Austin Cove

Respectfully submitted,

Edgar E. Smith

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office.

GEOGRAPHIC NAMES

Survey No. H6867

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	
Alaska		(for title)								1
Aleutian Islands		"	"							2
Attu I		"	"						USGB	3
Steller Cove		"	"						"	4
Austin Cove										5
Earle Cove										6
Red Head									USGB	7
										8
										9
										10
Massacre Bay		(location of tide staff)								11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved by L. Heck on 9/24/46

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...H6867

Records accompanying survey:

Boat sheets Not in Yet; sounding vols. 3....; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls .2...;

special reports, etc. ....

....

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

Number of positions on sheet		621
Number of positions checked		7
Number of positions revised		0
Number of soundings revised (refers to depth only)		59
Number of soundings erroneously spaced		3
Number of signals erroneously plotted or transferred		0
Topographic details	Time	1hr.
Junctions	Time	8hr.
Verification of soundings from graphic record	Time	10hr.

Verification by C.P. Reed ....Total time ..68.. Date 12 Sept. 1946

Reviewed by R. H. Carstens..... Time 14 hr Date 9/24/46
(See 1946 wk. by [illegible])

M-2232-1

HWM

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 29, 1946

~~Division of Hydrography and Topography~~:

Division of Charts: H. W. MURRAY

Plane of reference approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6867

Locality North Coast of Attu Island, Aleutian Is., Alaska

Chief of Party: R. D. Horne in 1945
Plane of reference is mean lower low water, reading
3.4 ft. on tide staff at Massacre Bay
6.8 ft. below B. M. 1

Height of mean high water above plane of reference is 3.3 feet.

Condition of records satisfactory except as noted below:

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

U. S. GOVERNMENT PRINTING OFFICE 154327

6867

Diag'd. on Diag. Ch. No. 9198-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. EX-2445 *Office No.* H-6867

LOCALITY

State Alaska - Aleutian Islands

General locality Attu Island

Locality Austin Cove to Earle Cove

194 5-'6

CHIEF OF PARTY

Al P. Ratti and Ronald D. Horne

LIBRARY & ARCHIVES

DATE Dec. 1, 1947

8-1870-1 (1)

6867

DEC 1 1947

ADDITIONAL WORK

Form 537
Ed. Dec. 1930

REG. NO. H6867

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. EX ~~2245~~ 2445

REGISTER NO. H-6867

State Alaska, Aleutian Islands

General locality ~~Near Is., North Coast of~~ Attu I.

Locality Austin Cove to Earle Cove

Scale 1:20,000 Date of survey 1945 and 1946, 19

Vessel SURVEYOR

Chief of Party A. P. Ratti

Surveyed by Ship's Officers

Protracted by R.D. Broad & Betty B. Jones

Soundings penciled by Betty B. Jones

Soundings in fathoms ~~feet~~

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated 3 Feb. 1938 and 21 March, 1946

Remarks: E. Part of the sheet was surveyed by EXPLORER during 1945 season.
Smooth Sheet & Plotting by Seattle Processing Office

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

To ACCOMPANY

HYDROGRAPHIC SURVEY H-6867(Field No. EX-2245)

North Coast Of Attu Island

PROJECT CS-218 ----1946

Scale: 1/20,000

Chief of Party: A. P. RATTI, Commanding Ship SURVEYOR

Field work by: Ship's Officers, Ship SURVEYOR

A. PROJECT:

Project No. CS-218, Original instructions dated February 3, 1938. Supplemental instructions issued by Liaison Officer, dated March 21, 1946.

B/ SURVEY LIMITS AND DATES:

This survey covers the area on the North Coast of Attu Island from Red Head to Earle Cove, and extends northward to Latitude 53° 05'. Satisfactory junctions were made with the following surveys: H-7016 (1944) to the east. H-7135 (1946) (EX-6146 Scale 1:80,000) to the north and H-7142 (1946) (SU-1146,Scale 1:10,000)to the west. Field work was accomplished between July 28 and August 14, 1946. & H-7013 (1944) 1:80,000

* Note: Work on this sheet was begun by the Ship EXPLORER in 1945.

C. VESSELS AND EQUIPMENT:

The hydrography was done using the Ship SURVEYOR and Launch No. 2 operating from the Ship. All soundings were obtained using an 808 type recorder No. 47-S, 52 and a Navy NMC type fathometer (graph)

D. TIDE AND CURRENT STATIONS:

All tidal data were obtained from a portable automatic tide gage at Steller Cove.

No current stations were occupied.

E. SMOOTH SHEET:

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

F. CONTROL STATIONS:

Triangulation control was established by the Ship EXPLORER in 1944 and the Ship SURVEYOR in 1946 . Additional stations were established by graphic control (See Sheet SU-B-46). (T-7033b(1946), T-7034(1946)

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography of this area will be taken from air photos supplemented by topographic sheet SU-B-46. (T-7033b(1946) T-7034(1946)

H. SOUNDINGS:

All soundings were obtained by standard methods.

I. CONTROL OF HYDROGRAPHY:

Sounding lines were controlled by sextant fixes on shore objects.

J. ADEQUACY OF SURVEY:

The survey is considered adequate for the area covered. Numerous rocks and beds of heavy kelp prevented development of close inshore areas.

K. CROSSLINES:

The crossings are satisfactory.

L. COMPARISON WITH PRIOR SURVEYS:

There have been no prior surveys of this area.

M. COMPARISON WITH CHART:

There are no existing large scale charts covering this area.

N. DANGERS AND SHOALS:

See DESCREPANCIES on page 3.

O. COAST PILOT INFORMATION:

See Coast Pilot Report, Aleutian Islands, 1946.

P. AIDS TO NAVIGATION:

None.

Q. LANDMARKS FOR CHARTS:

None.

S. SILTED AREAS:

None

Z. TABULATION OF APPLICABLE DATA:

Tide observations- Tabulated by personnel of Ship SURVEYOR-
Forwarded to Washington.Office.
Velocity Corrections-Compiled by personnel of Ship EXPLORER.
Coast Pilot Report- Forwarded to Washington Office.

DESCREPANCIES:

Attention is called to apparent descrepancies on 8 fathom shoal 0.80 of a mile N.E. of triangulation signal station PART. Shoaler soundings on graph are thought to be from submarine growth. The last day of sounding was rough and no indication of breakers were observed on this shoal while breakers were observed inshore on deeper rocks.

See Processing Office notes, 8/4. plotted.

Respectfully submitted,

Henry O. Fortin
HENRY O. FORTIN,
Lt. Comdr., C. & G. Survey

Approved:
A. P. Ratti
A. P. RATTI
Comdr.,C. & G. Survey
Commanding Officer,Ship SURVEYOR

DRAFT & INSTRUMENTAL CORRECTIONS SHIP SURVEYOR

Season 1946

Aleutian Islands
Near Islands Grp.

In Fathoms

Date	Osc. Draft-Fathoms	NMC Red Light Init.2.0 Fathoms Inst.Er. -0.3	NMC Rec. (Graph) Init.0.0 Fathoms Inst.Er. + 0.1	808 Initial 2.0 Fms. A-Scale 47-S +0.4	52 -0.1	104-S +0.3	808 Initial 2.0 Fms. B-Scale 47-S +0.5	52 —	104-S -0.8	808 Init. 2.0 Fms. C-Scale 47-S —	52 0.0	104-S —	808 Init. 2.0Fms. D-Scale 47-S —	52 -0.3	808 #46 A-Scale Inst.Er. + 0.1
5/25/46	+ 2.3	0.00	+ 2.4	+0.7	+0.2	+ 0.6	+0.8	+ 0.3	-0.5	+0.3	+0.3	+0.3	+ 0.3	0.0	
5/26/46	2.3	0.00	2.4	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
5/27/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
5/28/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
5/30/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
5/31/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
6/6/46	2.4	+ 0.1	2.5	0.8	0.3	0.6	0.9	0.4	0.4	0.4	0.4	0.4	0.4	+0.1	
6/14/46	2.3	0.0	2.4	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
6/20/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
7/3/46	2.3	0.0	2.4	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
7/23/46	2.4	+ 0.1	2.5	0.8	0.3	0.7	0.9	0.4	0.4	0.4	0.4	0.4	0.4	+0.1	
7/24/46	2.3	0.0	2.4	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
7/28/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
7/29/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
7/31/46	2.2	- 0.1	2.1	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
8/26/46	2.0	- 0.3	2.1	0.4	-0.1	0.3	0.5	0.0	0.8	0.0	0.0	0.0	0.0	-0.3	
8/27/46	2.0	- 0.3	2.5	0.4	-0.1	0.3	0.5	0.0	0.8	0.0	0.0	0.0	0.0	-0.3	
8/28/46	2.4	+ 0.1	2.4	0.8	0.3	0.7	0.9	0.4	0.4	0.4	0.4	0.4	0.4	+0.1	
8/30/46	2.3	0.0	2.5	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
9/19/46	2.4	+ 0.1	2.3	0.8	0.3	0.7	0.9	0.4	0.4	0.4	0.4	0.4	0.4	+0.1	
9/26/46	2.2	- 0.1	2.3	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
9/27/46	2.2	- 0.1	2.5	0.6	0.1	0.5	0.7	0.2	0.6	0.2	0.2	0.2	0.2	-0.1	
10/1/46	2.4	+ 0.1	2.4	0.8	0.3	0.7	0.9	0.4	0.4	0.4	0.4	0.4	0.4	+0.1	
10/3/46	2.3	0.0	2.4	0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	
10/5/46	2.3	0.0		0.7	0.2	0.6	0.8	0.3	0.5	0.3	0.3	0.3	0.3	0.0	

LIST OF STATIONS on H-6867 (1946)

Name used in Survey	Origin of Station
Ado	SU-B-46
Bar	SU-B-46
Cap	SU-B-46
Cup	SU-C-46
Day	SU-B-46
Doris	Doris-1946 *
Ear	SU-B-46
Fad	SU-C-46
Fit	SU-B-46
Fox	Fox-1944
Gal	SU-B-46
Gem	SU-C-46
Heat	Heat-1946*
Hop	SU-B-46
Hot	SU-C-46
Hump	SU-B-46
Hunt	Hunt-1946 *
Ida	SU-B-46
Jim	SU-B-46
Joy	SU-B-46
Kid	SU-B-46
Log	SU-B-46
Nor	T-6971a
Old	SU-B-46
Pup	SU-B-46
Prit	Prit-1944
Red	SU-B-46
Rest	SU-B-46
Ruth	Ruth-1946 *
Sac	SU-B-46
Sea	T-6971 a
Sharp	T-6971 a
Sou	T-6971 a
Vance	SU-B-46

* Ship to Shore Triangulation in 1946.

H-6867

(EX 2445)

North Coast of Attu Island

Seattle Processing Office Notes

The part of this sheet east of Steller Cove was surveyed by the EXPLORER's party in 1945. It was plotted, sent to Washington, verified, inked, and returned to Seattle. The 1946 work by the SURVEYOR west of Steller Cove has now been added to the smooth sheet.

Questioned Sounding- Fathogram Reading 105-106 d day:

At Lat. 53° 01.37 Long. 172° 49.60 is a shoal which appears on the smooth sheet at depths of 7.9 fms. See Vol. 4, Page 11. See Fathogram. Line 105-106 d crosses it showing a steep ridge which falls abruptly on the north side to depths of 35 fms. The least sounding on this profile is in question. It could be read as 3 fms. or 8 fms. The field party thinks the shoaler reading is kelp, although they did not see kelp. Other fathogram readings on this shoal are:

8 fms. accepted. Depth above 8 fms. appears to be kelp.

Pos. 98e		12 fms.
100-101e	7.7	8
15-16d		7.6"
105-106d		7.9" or 3 fms.

This has been plotted 7.9 fms. as preferred by the field party. It was not examined with the hand lead. We would appreciate comment on this shoal supported by a photostat of the fathogram.

Irregular Bottom-

Inside the 20 fm. curve the bottom is irregular and broken, with pinnacle formations. Attention is called to the 11.5 fms. at Lat. 53 01.4 Long. 172 50.8, Pos. 32-33d, accompanied by tide rips. Additional development is suggested for this point. See also the 7.6 fms. at Lat. 53 01.37 Long. 172 49.50 and the 7.9 fms. at Lat. 53 01.37 Long. 172 49.60

see Par. 9, Review.

Dangers

The outermost dangers revealed are the shoal ending at Lat. 53°01.30', Long. 172°49.25' and the foul area ending at the 5.7 fm. sounding at Lat. 53°01.15', Long. 172°48.35'. See the 6.2 fms. at Lat. 53°01.25', Long. 172°47.02'. The broken character of the bottom indicates that between Steller Cove and Long. 172°47', vessels larger than 500 tons should keep outside the 20 fm. curve.

Fath. appears to be corrected by redd.

Attention is called to the following notes in the sounding records-

5.4 fm. confirmed by 5.6 fm. (pos. 62-63 a.)

(1) See note, Page 38, Vol. No. 3, Pos. 99b. Shoal sdg. on fathogram of 5.4 plotted at Lat. 53°00.50', Long. 172°52.32'. 30 min. spent by the field party sounding over this spot. Shoalest H.L. sdg. was 9 fms.

(2) See also Pos. 100b, Page 38, Vol. No. 3. Soundings taken to verify shoal on H-7013 (1944) at Lat. 53°00.37', Long. 172°52.60'.
3.6 fm. on H-6867 confirms 2.5 fm. on H-7013 (1944).

(3) Note on Page 39, Vol. No. 3 - Comparison with H-7013 (1944).
13.4 fm (not plotted) on H6867, confirms 10 fm on H-7013 at Lat. 53° 00.44', Long. 172°53.63'

Comparison with H-7016 (1944) to eastward-

Along the junction north of Lat. 53°03', there are differences of 2 fms. in depths of 45 to 55 fms. Along the southern part of the junction there are differences of half to one fathom. There are also numerous points of agreement south of Lat. 53°04'. Sheet H-6867 (1946) tends to be deeper.

See #4 of Review.

Comparison with H-7013 (1944)-

The overlap on this sheet is slight, but the agreement is good. The 3.6 fms. on H-6867 (1944) at Lat. 53°00.37', Long. 172°53.60', Pos. 100b, is close to the 2.5 fms. at Lat. 53°00.38', Long. 172°53.62' on H-7013 (1944).

See (2) above.

Comparison with H-7142 (1946)-

The agreement with H-7142 (1946) to westward is good.

Comparison with H-7135 (1946)-

The lower two lines of H-7135 (1946) between Long. 172°45.0' and 172°55.0', while they do not coincide with the lines on H-6867 (1946) seem to be shoaler by approximately 2 fms. than the soundings on the latter sheet when the slope of the bottom is considered.

Junction adequate.

Respectfully submitted,

/s/ EDGAR E. SMITH
Cartographic Engineer
Seattle Processing Office

H-6867

Geographic Names

Steller Cove

Earle Cove

Red Head

STATISTICS FOR HYDROGRAPHIC SURVEY H- 6867

SHIP SURVEYOR

DAY	DATE	VOL. NO.	NO. POS.	STAT. MI. OF SOUNDING LINE
A	28 July 1946	1	162	69.0
B	29 July 1946	1-2	42	17.8
C	31 July 1946	2	12	5.2
			216	92.0

Area Square Statute Mi.----------33.7

****

Launch #2, Ship SURVEYOR Project CS-218

DAY	DATE	VOL. NO.	NO. POS.	STAT. MI. OF SOUNDING LINE
a	28 July 1946	1	100	18.7
b	29 July 1946	1	136	31.9
c	31 July 1946	1	77	16.2
d	13 August 1946	1-2	121	27.2
e	14 August 1946	2	108	23.4
			542	116.4

Area Square Statute Mi.----------8.75

GRAND TOTALS ----------758 208.4 42.4

Hydrographic Surveys (Chart Division)

Additional work

HYDROGRAPHIC SURVEY NO. H6867

Records accompenying survey:

Boat sheets ..1...; sounding vols. ..4...; wire drag vols. 0.....;

bomb vols. 0....; graphic recorder rolls ..2..;

special reports, etc. .....

.....

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

Number of positions on sheet		758
Number of positions checked		45
Number of positions revised		3
Number of soundings revised (refers to depth only)		36
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	1
Junctions	Time	14
Verification of soundings from graphic record	Time	8

Verification by L. Lobeck Jr. Total time 89 Date 9/30/48

Reviewed by [signature] (1944+1946) Time 61 Date 11/19/48

M-2232-1

Form

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~: 9 January 1948

Division of Charts: H. W. MURRAY

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 6867 (additional work)

Locality- North Coast of Attu Island, Aleutian Islands

Chief of Party: A. P. Ratti in 1946
Plane of reference is mean lower low water, reading
4.5 ft. on tide staff at Stellar Cove
9.6 ft. below B. M. 1

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.~~

U. S. GOVERNMENT PRINTING OFFICE 154327

H-6867

TIDAL NOTE

Tide reducers were obtained from the Portable Automatic Gage established in Steller Cove.

Latitude	52°	59.6	N
Longitude	172	54.6	E

Mean lower low water was used as the plane of reference and is 4.5 feet above the zero mark of the tide staff.

Hourly heights were tabulated by personnel of the Ship SURVEYOR. Tide reducers have been entered & checked.

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-6867

FIELD NO. EX-2445

Alaska, Aleutian Islands, Austin Cove to Earle Cove
Surveyed in July 1945 to August 1946 Scale 1:20,000
Project No. CS-218

Soundings:

808 & NMC Fathometers

Control:

Three-point fixes on shore signals

Chief of Party - A. P. Ratti; Ronald D. Horne
Surveyed by - E. C. Baum; W. Weidlich
Protracted by - R. H. Woodcock; R. D. Broad; B. B. Jones
Soundings plotted by - R. H. Woodcock; B. B. Jones
Verified and inked by - C. P. Reed; L. Lubbers, Jr.
Reviewed by - I. M. Zeskind; R. H. Carstens, Nov. 18, 1948
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with planetable sheets T-6971a (1944), T-6973a (1944), T-7033b (1946) and T-7034 (1946) on which the topography was transferred from air photographs.

The control originates with the above-mentioned surveys and graphic control survey T-7009 (1945).

2. Sounding Line Crossings

Agreement of depths at crossings is considered adequate.

3. Depth Curves and Bottom Configuration

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

The shore is fringed with reefs and off-lying rocks. Outside the 20-fm. curve, the bottom is generally smooth. The head of a small submarine canyon is shown in the northwest part of the present survey.

4. Junctions with Contemporary Surveys

The present survey consists of 2 parts, the portion east of long. 172° 58.7' which was accomplished in 1945 and the portion west of long. 172° 54.0' which was accomlished in 1946.

In the eastern portion of the present survey adequate junctions were effected with H-7019 (1944-45) on the north, H-7017 (1944-45) on the east, H-7016 (1944) on the northwest and H-7013 (1944) on the southwest.

In the western portion of the present survey adequate junctions were effected with H-7135 (1946) on the north and west, H-7142 (1946) on the southwest, H-7016 (1944) on the east and H-7013 (1944) on the southeast.

Discrepancies of 1-2 fms. in depths greater than 40 fms. occur in the junction with H-7016 (1944). These discrepancies are apparently caused by inaccurracies due to phasing of the 808 fathometer used on H-7016. However, the curves are in adequate agreement and in these depths no difficulty in compilation should result.

5. Comparison with Prior Surveys

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

6. Comparison with Chart 9198 (Latest print date 6/16/47)

A. Hydrography

The charted hydrography within the limits of the survey originates with advance information of the present survey shown on Bps. 42134 and 42135. A few revisions of 1 to 2 fms. in 40 to 50-fm. depths were made during verification. The 3-fm. sounding (charted in lat. 52° 00.8', long. ~~179°~~ 172° 47.0' (chart datum) was scaled on the fathogram from the top of kelp and is superseded by 5½ fathoms. The present survey, supersedes the charted information.

B. Aids to Navigation

No aids to navigation are charted in this area.

7. Condition of Survey

a. The protracting and plotting were accurately accomplished and are in compliance with the requirements of the Hydrographic Manual.

b. The sounding records and Descriptive Report are complete and adequate.

c. Very few bottom characteristics were obtained.

8. Compliance with Instructions for the Project

The survey adequately complies with the Project Instructions, except as noted under par. 7.c.

9. Additional Field Work Recommended

It is recommended that the following additional work be accomplished at the first convenient opportunity:

a. Split lines should be run in the inshore area lying between Steller Cove and long. 172° 48' in depths of about 10 fms. and less.

b. Additional bottom characteristics should be obtained in the western portion of the survey.

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

NAUTICAL CHARTS BRANCH

SURVEY NO. H.6867

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4-23-46	9198	J.M.A.	Before ~~After~~ Verification and Review
"	8865	J.M.A	Before ~~After~~ Verification and Review 1945 work only
4/23/46	9127	JFW	Before ~~After~~ Verification and Review
4-29-63	8865	[illegible]	~~Before~~ After Verification and Review Examined Partially Revised Soundings & 1 corrn
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After 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.