

7084

Diag'd. on Diag. Ch. No. 8863-2

Form 504
Rev. June 1941

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Photographic
Flux Table
Hydrographic

Survey No. *Pa-6915*
(Field)

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3(a), EXECUTIVE ORDER 12356.

LOCALITY

State *Alaska*

General locality *Aleutian Islands*

Locality *Sweeper Cove, Adak Island*

1945

CHIEF OF PARTY

R. F. A. Studts

U. S. GOVERNMENT PRINTING OFFICE 316551

APR 18 1946

7084

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.

H7084

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. PA 6915 7084

REGISTER NO. H-7084

State Alaska - Aleutian Is.

General locality Adak I.
Aleutian Islands

Locality Sweeper Cove and Approaches, Adak Island

Scale 1" = 100' 1:5000 Date of survey 23 May to 29 June 13 Sept, 1945

Vessel USC&GSS PATTON

Chief of Party R. F. A. Studds

Surveyed by S. B. Grenell

Protracted by C. A. J. Pauw

Soundings penciled by C. A. J. Pauw

Soundings in fathoms ~~feet~~ and tenths

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by R. E. Elkins

Verified by R. E. Elkins

Instructions dated CS-218, 2/1/44; Liaison Officer, 5/17/45

Remarks: Soundings in Sweeper Cove by tagline;
soundings in approaches by Graphic Recorder.
Smooth Sheet and Plotting by the Seattle Processing Office.

DESCRIPTIVE REPORT

TO ACCOMPANY

SUPPLEMENTAL HYDROGRAPHIC SURVEYS; H-6917; ^{H-7084} Pa H-6915; H-6924

ADAK ISLAND, 1945

SHIP PATTON R. F. A. STUDDS, COMMDG.

PROJECT: Project CS-218 dated 1 February 1944; 8 August 1945, Project 23, Paragraph 6(a)(b)(c)(d), issued 30 April 1945 by Liaison Officer.

SURVEY LIMITS AND DATES:

Sheet ^{Pa} H-6915; Scale 1:5,000; Sweeper Cove and approaches ^{H-7084}

Sheet H-6917; Scale 1:10,000; Scabbard Bay

Sheet H-6924; Scale 1:5,000; Finger Bay and approaches

The original, registered boat sheets were used in the field and hydrography was done at various times on these sheets as weather permitted between 12 June and 13 September. Most of the work on H-6917 and H-6924 was development inside of area previously covered.

H-6915 was extended eastward to cover the approaches to Sweeper Cove.

^{Pa} ~~An Index of Hydrographic Sheets, attached to this report, shows the number and location of all adjoining sheets and the approximate limits of hydrography on each sheet.~~ ^{H-7084}

VESSEL AND EQUIPMENT: The launch used on this survey was a 33 foot, Higgins type, landing craft powered by a 110 HP Chrysler Marine gas engine with a top speed of 10½ knots. Type 808 recorder No. 74 was mounted in the forward end of the cockpit and a standard type "fish" holding the transceiver units was secured amidships on the port side. The launch was operated from Sweeper Cove or left at a mooring on the working grounds in Blind Cove. No data on turning radius were obtained, as soundings were not recorded on turns.

CONTROL STATIONS: Since the boat sheets were originally constructed, the control datum has been changed from U. S. Navy to Unalaska. The Unalaska Datum is indicated in pencil on the boat sheets, and new control, computed on the Unalaska Datum only, has been plotted on the boat sheets from the pencilled datum.

New control, added in 1945 to the original boat sheets is listed as follows:

^{Pa}
Sheet H-6915
H-7084

Triangulation GANNET, 1945, R. F. A. Studds
(same location as topographic station GAN-
1943, Ship EXPLORER)

Hydrographic signals, located by sextant cuts
from launch in area between Sweeper Cove and
Lucky Point. See Vol. I, pages 4 to 10. Sig-
nal NUN was located by a fix at the signal;
Vol. I, Page 9.

Topographic signals located by planetable in
Hammerhead Cove: LEG, BOL, ARM, GAB, BAR; Sheet
PA-A-1945.76998

Sheet H-6917 No new control established or used in 1945.

Sheet H-6924 No new control established or used in 1945.

SHORELINE AND TOPOGRAPHY: There was no new shoreline delineation on
Sheets H-6917 and H-6924. In the area covered by Sheet ^{Pa}H-6915, ^{H-7084}revision
topography was done along the west side of Kuluk Bay and on the north and
west side of Sweeper Cove where construction operations had altered the
shoreline. See topographic sheets PA-A-45(1:5,000) and PA-C-45(1:10,000). & 76930a
76998 76998a (1943)

On none of these sheets was it possible to
determine the low water line by soundings due to the low tide range and
the fact that the steep-to, rocky shoreline was guarded by thick kelp or
too dangerous to approach closely with the sounding launch. The inshore
lines were run as close to the beach as safety permitted.

SOUNDINGS: All soundings on these sheets were taken
with the 808 type recording fathometer supplemented by hand lead in-
vestigation of shoal areas. Standard hydrographic practice was followed.
Soundings are recorded in fathoms and feet instead of in fathoms and
tenths to conform with the original soundings which were in fathoms and
feet. *Smooth plotting in fms. & tenths*

CONTROL OF HYDROGRAPHY: All hydrographic lines were controlled by
the standard three-point-fix method of sextant angles to located sig-
nals. See paragraph "Control Stations" for method of location of sig-
nals. *Tagline survey in Sweeper Cove*

ADEQUACY OF SURVEY: The area covered by hydrography on all
three sheets is complete. There are no holidays and the junctions with
all adjoining sheets are complete and in agreement so that depth curves
can be accurately drawn. The junctions between the 1945 hydrography
and previous soundings on the same sheet are in agreement. Where ad-
ditional development of shoals was executed, no major changes were noted
in the original least depths recorded. Since the soundings for the
1945 hydrography have not been reduced, the final depths for charting
should be taken from the completed smooth sheet.

COMPARISON WITH PRIOR SURVEYS: The original surveys in this area were made by the U. S. Navy and numerous discrepancies were noted when compared with our recent work. The Navy soundings are in general, more widely spaced and apparently less accurately controlled than the Coast Survey hydrography. This has resulted in the displacement of depth curves, and in better delineation of shoals and deeps missed on the original survey *is found on the present survey*

One outstanding discrepancy occurs at a point midway on a line between Lucky Point and Gannet Rocks where the Navy survey showed a depth of 62 fathoms and Sheet N-6915 shows a considerable area less than 40 fathoms with a least depth of 29 fathoms surrounded by depths from 45 to 50 fathoms, and no indication of any depths of over 60 fathoms as charted.

There are numerous other discrepancies of this nature, but of less importance, which should be investigated after the smooth sheets are plotted. The most recent issues of charts 9119 and 9141, which cover this area, have been revised to include surveys through 1944. The additional data accumulated in 1945, when applied to the charts, should make the area covered complete.

A discussion of the shoals discovered in the bight west of Lucky Point, N-6915, will be covered in the next paragraph.

DANGERS AND SHOALS: No new dangers or shoals were found on sheets H-6917 and H-6924. Additional development work was done on shoals previously indicated on these sheets, but no important differences in least depths were found. A study of the completed smooth sheet will readily show the changes.

On Sheet N-6915, no new dangers were found except in one small area extending approximately one half mile westward from Lucky Point. This area is shown on Chart 9141 as relatively free from dangers. The survey of the area found the bight to be full of shoals with least water varying from 4 fathoms to 2 foot. These shoals are listed with latitude and longitude on the U. S. Navy datum and least depths from the boat sheet.

USN Datum	Latitude	Unalaska Datum	USN Datum Longitude	Unalaska Datum	Boat Sheet Least Depth (Fms.)	Smooth Sheet
	51° 51' 23"	51° 51' 33" ✓	176° 35' 57"	176° 35' 40" ✓	2	2 ¹ ✓
	51° 51' 18"	27" ✓	176° 36' 02"	35 45 44	2-2/6	2 ¹ ✓
	51° 51' 17"	26" ✓	176° 36' 10"	35 53	2-5/6	1 ✓
	51° 51' 13"	24" ✓	176° 36' 09"	35 52	0-1/6	0 ³ ✓
	51° 51' 10"	20" ✓	176° 36' 05"	35 49	0-1/6	0 ³ ✓
	51° 51' 13"	23" ✓	176° 36' 20"	36 03	1-4/6	* 18 ✓
	51° 51' 13"	23" ✓	176° 36' 34"	36 16	2-4/6	26 ✓
	51° 51' 17"	27" ✓	176° 36' 07"	35 51	1-1/6	1 ¹ ✓
	51° 51' 11"	20" 21 ✓	176° 36' 06"	35 50	1-1/2	16 ✓
		26 ✓		35 45		18 2 ✓

These shoals were reported immediately to the local Naval authorities and a tracing of the area furnished from which copies could be printed for distribution to ships operating in the area.


TABULATION OF APPLICABLE DATA:

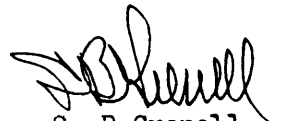
The following reports and forms have been,
or will be submitted under separate cover:

- (1) Coast Pilot Notes
- (2) Landmarks for Charts C.L.#824(1945)
- (3) Salinity and Temperature - Velocity Corrections
- (4) Report of Triangulation

Respectfully submitted,

Approved and Forwarded:


R. F. A. Studds
Lt. Comdr., C&GS
Cmdg., USS PATTON


S. B. Grenell
Lt. Comdr., C&GS

Kuluk Bay - Adak Island

LIST OF FLOATING AIDS

Name	Latitude and Longitude		Method of Location	Date of Location	Hydro Sheet
	D.M. Meters	D.P. Meters			
Finger Shoal Buoy	51°51' 1282	176°34' 184	Sext. Fix	9/18/48	H-6915 H-7084
	(Unalaska Datum)			Pos. # 1h	
Obstruction Buoy (wreck)	51 51 1573	176 37 307	"	9/11/48	H-6915 H-7084
	(Unalaska Datum)			Pos. # 5f	
<i>Yippee</i> Buoy (Seabee Shoal)	51 55 510	176 36 1048	"	9/13/48	H-7078
	(Unalaska Datum)			Pos. # 98d	

Note: This list is being submitted as a memorandum only.
All three buoys have been previously located and charted.)

S. B. Grenell

STATISTICS FOR HYDROGRAPHIC SHEET N-6915

SHIP PATTON, PROJECT CS-218 SUPPLEMENTAL 23

Vol.	Day	Date	Sndgs.V.C.	Positions	Miles Stat.	Vessel
I	a	12 June	15	145	13.0	Launch
	b	13 June	2	76	7.7	Launch
	c	15 June	1	25	1.7	Launch
	d	20 June	2	24	1.1	Launch
II	e	8 Sept.		169	37.0	Launch
	f	11 Sept.		95	17.1	Launch
	g	13 Sept.		44	6.3	Launch
Totals:			20	578	83.9	
Area in Sq. Stat. Miles: 2.9						

STATISTICS, SHEET H-6917

I	a	16 June	2	68	7.1	Launch
	b	19 June	7	76	14.5	Launch
Totals:			9	144	21.6	

STATISTICS, SHEET H-6924

I	a	18 June	6	31	4.7	Launch
	b	19 June	-	13	1.6	Launch
Totals:			6	44	6.3	

TOPOGRAPHIC STATIONS LOCATED BY TRIANGULATION

Two whitewashes on the south side of Kuluk Bay were located by triangulation as a check on the topographic location. The computations are being forwarded with the triangulation report under separate cover.

Topo Station: CUR (unmarked)
JUT "

Both stations fall on hydrographic sheet H-6915

*Pa H-708**

TIDE NOTE - SHEETS ^{Pa}N-6915; H-6917; H-6924

The tide reducers for these surveys were taken from the record of the standard gage at Sweeper Cove, Adak Island. The value of MLLW on the staff was 3.1 feet. No correction for either time or range was made for any part of the survey.

VELOCITY CORRECTION ABSTRACT

An abstract of velocity corrections has been made from the data listed in the Report of Velocity Corrections and a copy of the abstract of reducers applicable to the survey is pasted inside the front cover of Sounding Vol. No. I

APPROVAL SHEET

The records and the boat sheet for Survey ^{Pa} H-6915 ^{M-7084}
are approved.

The records were examined frequently in the field, generally daily.

The Survey is considered complete and adequate. The descriptive report covers all pertinent detail.



R. F. A. Studds
Lieut. Comdr., C&GS
Commanding, Ship PATTON

DESCRIPTIVE REPORT

TO ACCOMPANY

TAGLINE SURVEY - SWEEPER COVE

1945

SHIP PATTON

R. F. A. Studds, Commdg.

S.B.Grenell, Officer in Chg.

Garrison Areas Layout Sheets - - Scale 1" = 100'

U. S. Navy, C. B. Survey - - - - Scale 1" = 60'

Project: No. 23, dated 17 May, 1945; issued by Liaison Officer to Commanding Officer, Ship PATTON.

SURVEY LIMITS AND DATES: Work was begun 23 May and ended 9 June 1945. The survey extended from the west side of the breakwater at the entrance to Sweeper Cove westward along the north and west side of the cove to and including the small boat harbor. The soundings covered all areas in the vicinity of the Army and Navy docks and extended offshore to approximately the ten fathom curve to a junction with Sheet H-6915, Ship EXPLORER, 1943. The entire Small Boat Harbor was included in the survey. Parts of the area covered by this survey were originally sounded on Sheet H-6915, but new construction and dredging made necessary a new survey. The tagline survey covers all dredged areas including the small boat harbor, which was nonexistent at the time of the original survey.

VESSEL AND EQUIPMENT: All soundings were made with a standard leadline marked in feet. The boat used was a 20' dory with a tagline reel mounted in the bow and powered with an outboard motor. The operating crew consisted of a leadsman, recorder, engineer and reel operator in the dory and the officer in charge on the dock or shore, setting the ranges.

TIDE STATION: Tide reducers for the hydrography were taken from the record of the standard tide gage operating in Sweeper Cove.

CONTROL STATIONS AND TOPOGRAPHY: The boat sheets of the dock areas consisted of U. S. Army Garrison Layout Sheets on a scale of 1" = 100' which were laid out on a rectangular coordinate system. Six triangulation stations were established and located by standard second order methods from existing control in the area adjusted to the Unalaska Datum. A topographic sheet of the area on a scale of 1:5,000 was executed by standard plane table methods controlled by this triangulation. The six triangulation stations mentioned were located as follows: On piers 1, 5, 7, 8, 9, and 11. This control and topography make it possible to construct a geodetic grid on the Garrison Layout Sheets, Unalaska Datum. The small boat harbor area was sounded on a boat sheet

which was a print of the U. S. Navy C. B. construction on a scale of 1" = 60'. This area contained one triangulation control point (Pier 11) and is shown on the 1:5000 scale topographic sheet, PA-A-1945. ^{T-6998} This sheet is printed on a rectangular coordinate system but can be converted to geodetic coordinates, Unalaska Datum.

CONTROL OF HYDROGRAPHY AND SOUNDINGS: Sounding Vol. ³ 3, page 3, shows a typical sketch of the method of locating and recording sounding line control. First, all dock or bulkhead lines were taped and checked against the print. In every case, the print was found to be correct. These taped points were recorded from a "zero" which in every case was an offshore corner of a long dock or the end of a bulkhead. Except where noted, all sounding lines run perpendicular to the dock or bulkhead face; angle lines are recorded in degrees plus or minus from an initial direction, which is the long face of the dock, and all angle lines originate at a "zero" point.

Each sounding line was controlled in direction by a pair of range poles set on the dock by the officer in charge. The end of the tagline was secured to a piling at the waterline directly below the front range and the boat backed offshore the required distance and sounding begun. Each sounding was a vertical cast with a handlead with the boat on range and the motor reversed to hold the tagline tight. The tagline was regular wire core leadline marked every 20 feet to 600 feet. The strayline at the end was equipped with a snaphook for securing around piling and so adjusted for length that the sounding position was at exactly 20 foot intervals from the dock face when the line marker was at the bow sheave.

ADEQUACY OF SURVEY: The tagline survey is complete and adequate for the area covered. The dredged areas showed considerable change from the original survey, but the junctions with H-6915 at the outer limits are excellent and all depth curves can be completely drawn. There are no holidays.

COMPARISON WITH CHART: The tagline survey shows considerable change from Chart 9119 in the dredged areas around the docks. The tagline survey is final and the chart should be corrected to conform. Agreement between chart and survey outside the dredged areas is excellent.

DANGERS AND SHOALS: The only danger found during the survey was a 16 foot spot near the southeast corner of Pier No. 2. This was immediately reported to the local authorities and a tug was sent to attempt a deepening of the area by scouring with propeller wash. After several attempts, the area was considerably deepened except for one 21 foot spot close to the corner of the pier. A final check resurvey of the area was then made and the final results shown on an overlay on the boat sheet. See Vol. ~~III~~ ^V, Page 18, for notes on final results for charting. *Final depths on smooth sheet.*

After completion of this survey, a tracing of Sweeper Cove was prepared on a scale of 1:5,000 from the revised topographic survey and the revised hydrography of all areas shown. This tracing was turned over to the local authorities through the Liaison Officer.

TABULATION OF APPLICABLE DATA:

Control - Triangulation Report, 1945

Control - Report Topographic Sheet; ^{T6998} PA-A-1945

Respectfully submitted,

Approved:

R. F. A. Studds
R. F. A. Studds, Lt. Comdr.
Cmdg., Ship PATTON

S. B. Grenell
S. B. Grenell
Lt. Comdr., C&GS

Note: One vol. of log-line sdps taken along the face of the docks in 1946 by Comdr I. E. Rittenburg of the DERICKSON was accomplished subsequent to the present survey. This work was accomplished and furnished directly to the U. S. Navy. No plotting on the present smooth sheet is considered necessary because the changes noted are slight. Newmurray 4/16/47

STATISTICS FOR TAGLINE SURVEY
 GARRISON LAYOUT SHEETS - SWEEPER COVE
 SPECIAL INSTRUCTIONS, LIAISON OFFICER

Vol.	Day	Date	H.L.Sndgs.	Stat. Miles	Vessel
I	a	23 May	202	0.8	Dory
	b	24 May	205	0.8	Dory
	c	25 May	408	1.8	Dory
	d	26 May	453	2.1	Dory
	e	28 May	595	2.1	Dory
II	f	29 May	308	1.5	Dory
	g	30 May	199	0.8	Dory
	h	1 June	16*		Dory
	j	1 June	60	0.8	Dory
	k	2 June	157	1.1	Dory
III	l	3 June	480	2.0	Dory
	m	4 June	253	1.0	Dory
	n	6 June	82	0.3	Dory
	p	8 June	344	1.5	Dory
	q	9 June	24	0.2	Dory
Totals:			3786	16.8	
Area in Sq. Stat. Miles: 0.5 (approx.)					

*Soundings at buoys.

Pa 6915

TIDE NOTE - SHEET: Tagline Survey

The tide reducers for this survey were taken from the record of the standard gage at Sweeper Cove, Adak Island. The value of MLLW on the staff was 3.1 feet. No correction for either time or range was made for any part of the survey.

VELOCITY CORRECTION ABSTRACT

An abstract of velocity corrections has been made from the data listed in the Report of Velocity Corrections and a copy of the abstract of reducers applicable to the survey is pasted inside the front cover of Sounding Vol. No. I.

APPROVAL SHEET

The records and the boat sheet for Survey TAGLINE
are approved.

The records were examined frequently in the field, generally daily.

The Survey is considered complete and adequate. The descriptive report covers all pertinent detail.



R. F. A. Studds
Lt. Comdr., C&GS
Cmdg., USS PATTON

Comparison with Chart 9119-

Latitude		Longitude		H-7084 PA 6915	Chart
				fms.	fms.
51°	52' 08"	176°	33' 33"	62	72 -
	52 30		33 34	38	42 ✓
	52 07		34 16	58.9	69 -
	52 03		34 55	56	64 ✓
	52 03		35 02	55	70 ✓
	52 02		35 12	50	61
	52 07		35 27	47-48	56
	52 08		35 40	45	54.8 ✓
	52 00		35 57	43	52 ✓
	52 11		35 57	44	59 ✓
	52 23		35 56	41	53 ✓
	52 04		36 03.5	43-53.45	51 ✓
	52 00		36 16	45	60 ✓
	51 53		34 40	38-43	27 ✓
	51 56		34 28	49-50	66 ✓
	51 47		34 03.5	8.8	10 ✓
	51 47		34 33	7.5	10 ✓
	51 58		35 41	43-44	53 ✓
	51 49		35 42	49-50	62 ✓
	51 49.7		35 37-19	51 47-50	56 ✓
	51 53		35 12	53	61 ✓
	51 51		35 06	41	24 ✓
	51 51		36 23	43	55 ✓
	51 47		36 38	40	49 ✓
	51 44		36 54	35	43 ✓
	51 34		36 30	41	50 ✓
	51 40		37 02	32	44 ✓
	51 33		37 12	30.5	39 ✓

H-7084
Comparison of PA 6915 with USN H-6889-

Latitude		Longitude		<i>H-7084</i> PA 6915	H-6889
				fms.	fms.
51° 51' 44"		176° 33' 32"		67	75 ✓
51 53		33 35		55 60	69 ✓
52 05		34 15		61	69 ✓
52 27		34 15		40-41	47 ✓
52 30		34 30		46-48	51 ✓
52 15		34 35		46	62 ✓
52 06		34 35		52-54 (<i>48 nearby</i>)	46 ✓
52 03		35 02		55	70 ✓
51 56		34 35		38-44	28 ✓
51 57		34 26		60 50	66 ✓
51 54		35 44 45		48-57	64 ✓
52 15		35 00		48	54-64
52 32		34 55		45	52 46 ✓
52 10		34 17		47-48	64 ✓
51 57		35 20		51-52	66 ✓
51 45		35 30		43-46	55 ✓
51 55		35 30		51	57 ✓
52 25		35 42 38		41	51 ✓
52 08		35 38		45	58 ✓
51 28		35 42		50	62 ✓
51 28		36 03		9.1	14 ✓
51 48		35 55		47	62 ✓
51 53		35 59		29.5	45-46 ✓
52 30		36 00		42	50-52 ✓
51 58		36 15		45	60 ✓
51 30		36 20		41	50 ✓
51 36		36 45		39-40	50 ✓
51 45		36 45		38	51 ✓
51 30		37 00		34	42 ✓
51 45		37 00		34	44 ✓
51 24		37 15		31	35 ✓
51 35		37 15		28	38-39 ✓
51 30		37 30		26	29-34 ✓

The datum difference was applied to H-6889 when making comparison.

H-6889 tends to be 10 fathoms deeper than PA 6915. The foregoing list is typical of differences which pervade the sheets. The new survey shows smoother and usually shoaler bottom than H-6889.

Plane Coordinates-

<u>Station</u>	<u>X Coordinate (Ft.)</u>	<u>Y Coordinate (Ft.)</u>
LUK	200 000.0 E	200 000.0 N
MT "X"	193 057.2 E	193 336.3 N
SWEEPER	198 196.5 E	190 413.5 N
LEE	189 501.7 E	187 088.0 N
FIVE "A"	198 659.7 E	193 094.3 N
WATER	200 489.0 E	192 743.6 N
ONE	200 043.3 E	193 175.8 N
SEVEN	197 983.6 E	192 862.9 N
EIGHT	196 896.6 E	192 518.2 N
NINE	195 483.8 E	191 179.7 N
ELEVEN	195 377.3 E	189 747.0 N

Soundings in the Approaches to Sweeper Cove-

This area is uncongested and clear. The field party has covered the items needing attention.

Comparisons-

Comparisons of this sheet with H-6889 of USN and with Chart 9119 dated 11/7/45 follow.

H-7084
PA-6915

Sweeper Cove & Approaches

Seattle Processing Office Notes

The 1945 work on this sheet consists of a tagline survey about the wharves of the inner harbor and a conventional sounding sheet in the approaches to Sweeper Cove. They were intended to be plotted on separate sheets, the outer work being plotted as an addition to H-6915. The field party prepared separate reports on this basis. The Officer in Charge of the Processing Office decided to make a projection to accommodate both of these surveys. It will carry a new registry number. Meanwhile, it has been called PA 6915. H-7084

Tagline Survey-

The sounding records of this work were reduced in the field and carefully plotted on four blueprints of the harbor area, scale 1" = 100', or 1:1,200. One of these, covering the small boat harbor, was loaned to the harbor engineers who misplaced it, so it could not be traced. It was not found while the PATTON was at Adak, and later correspondence brought no results. There are attached: (1) A letter from C.O. PATTON to C.O. Adak dated 26 November 1945; (2) A memorandum from Lt. Comdr. Grenell to the Processing Office dated 17 December 1945; (3) A letter from Chief of Staff officer to C.O. PATTON dated 1 January 1946. Mr. Grenell then made a layout of the tagline survey of the small boat harbor from hydrographic notes and the planetable sheet T-6998. This was carefully replotted on scale 1:1,200 and the reduced soundings plotted along the taglines.

The Officer in Charge decided to accept the field plotting of the other three sheets, after checking against the sounding books, and to make a reduction of the soundings from 1:1,200 to 1:5,000. This was done. Selected soundings from the three prints and the replotted sheet of the boat harbor were reduced in scale and transferred to the smooth sheet.

Topography is from T-6998.

The plain coordinates of certain triangulation stations are listed on the page following.

C O P Y FOR PROCESSING OFFICE

USS PATTON, 400 Insurance Building, Seattle 4, Washington

SBG/dd

26 November 1945

To: Commanding Officer
U. S. Naval Operating Base
Adak, Alaska

From: Commanding Officer
U. S. Coast and Geodetic Survey
400 Insurance Building
Seattle 4, Washington

Subject: Survey Sheet. Small Boat Harbor, Sweeper Cove

Attention: Hydrographic Office; Capt. of the Port

It is requested that two (2) copies of the hydrographic survey of the Small Boat Harbor, executed in June 1945 by the C&GS Ship PATTON, be forwarded to me at the above address at your earliest convenience.

If copies of this survey are not available, please forward two (2) copies of the Small Boat Harbor layout showing all wharf and bulkhead lines. Your office has the print in question on a scale of 1" = 60'.

R. F. A. Studds
Lt. Comdr., C&GS
Cmdg., Ship PATTON

17 Dec. 1945

The U.S. Navy print of the Small Boat Harbor, Sweeper Cove, was turned back to the Navy for reproduction. One print only was secured and used as a boat sheet - hence, no copy is now available.

A letter was written to N.O.B., Adak requesting two prints of the survey but no reply to the letter has been received. A copy of the letter is attached.

If a blank print of the Small Boat Harbor is received, notify Mr. Lennell and he will replot the sounding lines from the record. If a print of the boat sheet is received, all lines run will be shown.

A second request for this print should be made by the Processing Office to hasten action.

(V.B.P.)

12/18/45

Ship will write again for this sheet

ON5/N12-8

U. S. NAVAL OPERATING BASE
ADAK, ALASKA
(NAVY 230)

WLC/clj

Serial

01

1 JAN 46

DECLASSIFIED BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
1.3(a), EXECUTIVE ORDER 12356.

To:

Commanding Officer, U. S. Coast & Geodetic Survey,
Ship PATTON.

Subj: Survey Sheet of Small Boat Harbor, Adak.

Ref: (a) C.O. USC&GS Ship PATTON ltr., dtd 20 Dec 1945.

1. The print requested by reference (a) is not available nor can any record of it be found in our hydrographic files.

2. N.O.B. Adak's Hydrographic Distributing Office is now being decommissioned, and should the requested print be located in the process it will be forwarded to you via air mail.

By direction of the Commander.

R. D. SCATTERGOOD,
Chief Staff Officer.

PA 6915

LIST OF GEOGRAPHIC NAMES PENCILED
ON SMOOTH SHEET

Adak Island

Kuluk Bay

Sweeper Cove

Hammerhead Cove

814 ✓

LIST OF SIGNALS

TOPOGRAPHIC

AGE	T-6930a
ARM	T-6998
ARK	T-6930b
BAS	"
BAR	T-6998
BOL	"
DIP	T-6930a
DEE	T-6998
EGG	T-6930a
FOG	T-6933a
FOG	T-6930a
GUN	"
GAB	T-6998
HEX	T-6930a
LEE	T-6930b
LEG	T-6998
MAN	T-6930b
PIN	T-6930a
RIB	T-6930b
SON	T-6998
TOW	T-6930a
TOP	"
WASH	T-6933a
YEN	T-6998

TRIANGULATION

BAK	1943
ELEVEN	1945
EIGHT	"
FIVE	"
GANNET	"
HALF	1943
HEEL	"
LUCKY	"
MT. X (TOW)	"
NINE	1945
ONE	"
PIT	1933
SWEEPER(USED)	1943
SEVEN	1945
TOWER (CONTROL)	1943
WATER	1945
CUR (Fourth Order)	1945
JUT (Fourth Order)	1945

HYDROGRAPHIC

ASH
BAY
DOT
EX
EYE
LOW
MID
MAG
NEW
NUN
TRI
TEE
UP

Respectfully submitted,

Edgar E. Smith

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office.

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division-of-Hydrography-and-Topography:

May 27, 1946

Division of Charts: H. W. MURRAY

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 7084

Locality Sweeper Cove, Adak Island, Aleutian Is., Alaska

Chief of Party: R. F. A. Studds in 1945
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

Height of mean high water above plane of reference is 3.4 feet.

Condition of records satisfactory except as noted below:

C. J. Green
Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No.

H7084

Name on Survey	Sources											
	A	B	C	D	E	F	G	H	K			
<u>Alaska</u>											1	
<u>Aleutian Islands</u>											2	
<u>Adak Island</u>										USGB	3	
<u>Sweeper Cove</u>			(tide staff location)							"		4
<u>Hammerhead Cove</u>											5	
<u>Gannet Rocks</u>									"		6	
<u>Lucky Point</u>											7	
<u>Pit Rocks</u>											8	
<u>Finger Shoal</u>											9	
											10	
											11	
											12	
											13	
			ARTICLES UNDERTAKEN IN CONNECTION WITH BY L. HECK ON 9/19/46									14
											15	
											16	
											17	
											18	
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											25	
											26	
											27	

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **..H7084**

Records accompanying survey:

Boat sheets *Not ref.*; sounding vols. 5.....; wire drag vols.;
 bomb vols.; graphic recorder rolls **1**....;
 special reports, etc.

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

Number of positions on sheet	.....	<i>578 + tagline survey of 3786 soundings</i>
Number of positions checked	.....	<i>123 (49 detached)</i>
Number of positions revised	.....	<i>7</i>
Number of soundings revised (refers to depth only)	.....	<i>11</i>
Number of soundings erroneously spaced	.....	<i>68</i>
Number of signals erroneously plotted or transferred	.....	<i>—</i>
Topographic details	Time	<i>20</i>
Junctions	Time	<i>43</i>
Verification of soundings from graphic record	Time	<i>5</i>

Verification by..... *Roy E. Elkins*..... Total time *153*..... Date *8-28-46*

Reviewed by..... *R. H. Carstens*..... Time *27^{hr}*..... Date *9/19/46*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7084

FIELD NO. Pa-6915

Alaska-Aleutian Is., Adak I., Sweeper Cove and Approaches
Surveyed in May - September 1945 Scale 1:5,000
Project No. CS-218

Soundings:

Handlead
808 Fathometer

Control:

Sextant fixes on shore signals
Tagline measurements from piers
and wharves

Chief of Party - R. F. A. Studds
Surveyed by - S. B. Grenell
Protracted by - C. A. J. Pauw
Soundings plotted by - C. A. J. Pauw
Verified and inked by - R. E. Elkins
Reviewed by - R. H. Carstens, September 18, 1946
Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline and signals originate with planetable surveys T-6930 (1943), T-6933 (1943), T-6998 (1945) and T-7000 (1945) (graphic control). Supplemental hydrographic signals are recorded in the sounding volumes.

The tagline survey in Sweeper Cove is controlled by measurements from piers and wharves.

2. Sounding Line Crossings

Depths at crossings are in satisfactory agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were satisfactorily drawn except in foul areas close inshore.

The bottom is smooth except for inshore reefs west of Lucky Point and off Finger Shoal.

4. Junctions with Contemporary Surveys

Satisfactory Junctions-were effected with H-6910 (1943-44) and H-7078 (1945) on the north, H-7079 (1945) on the east, H-6917 (1943) and H-6924 (1943-45) on the southeast, and H-6915 (1943) on the northwest and in Sweeper Cove. Where harbor improvements have changed the bottom in Sweeper Cove, H-6915 has been superseded by the present survey.

5. Comparison with Prior SurveysA. H-6889 (1933) 1:15,000

This U. S. Navy survey covers the entire area of the present survey. Prior depths are generally 5 to 10 fms. deeper than present depths. The discrepancies result from the less accurate control and method of surveying on the Navy survey. The 24 fms. (charted) falling in present depths of about 50 fms. in lat. $51^{\circ} 51.84'$, long. $176^{\circ} 35.09'$ and the 27 fms. falling in present depths of about 40 fms. in lat. $51^{\circ} 51.89'$, long. $176^{\circ} 34.65'$ are considered to be in error and should be disregarded. The present survey supersedes this prior survey except for bottom characteristics.

B. H-6911 (1943) W.D. 1:20,000

Present depths do not conflict with the effective depths of this wire drag survey.

6. Comparison with Chart 9119 (Latest print date 11/17/45)A. Hydrography

The hydrography charted within the limits of the present survey originates with the Navy survey previously discussed and with advance information of the present survey on blueprints 39895 (1945), 39991 (1945), and chart letter 654 (1945).

The present survey supersedes this information except that inshore rocks awash charted from the advance information should be retained pending receipt of the boat sheet of this survey. The two obstructions charted in lat. $51^{\circ} 51.25'$, long. $176^{\circ} 39.22'$ from bp. 39895, were not disproved on the present survey and should be retained on the chart. *unalaska*

B. Aids to Navigation (Also see "Note to Compiler," par. 10)

The present survey positions of some mooring buoys differ from charted positions by as much as 60 meters.

The buoys in lat. $51^{\circ} 51.15'$, long. $176^{\circ} 39.18'$; lat. $51^{\circ} 51.19'$, long. $176^{\circ} 39.09'$; the mooring buoy in lat. $51^{\circ} 51.27'$, long. $176^{\circ} 38.86'$; and three mooring buoys in

Hammerhead Cove on the present survey have not been charted.

Mooring buoy A charted in lat. $51^{\circ} 51.69'$, long. $176^{\circ} 37.32'$, from H. O. Notice to Mariners R 15 (1945) is not shown on the present survey. This buoy may not have been on station at the time the other buoys in this vicinity were located.

The present survey buoy in lat. $51^{\circ} 51.68'$, long. $176^{\circ} 34.16'$ has been removed. The charted buoy in lat. $51^{\circ} 51.74'$, long. $176^{\circ} 34.11'$ has been established subsequent to the present survey. Other aids to navigation are in satisfactory agreement with the charted positions and adequately mark the features intended.

7. Condition of Survey

The field plotting was accurately accomplished. The boat sheet of the area east of long. $176^{\circ} 37.75'$ was in the field at the time the survey was verified; consequently detail originating with the boat sheet may be lacking. When the boat sheet is received in this office a comparison with the present survey will be made.

The Descriptive Report and sounding records are complete and comprehensive.


8. Compliance with Project Instructions

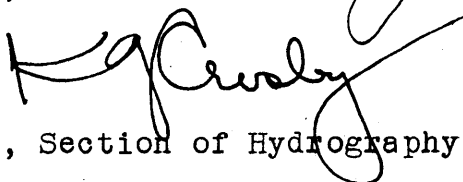
The present survey adequately complies with the Instructions.

9. Additional Work Recommended

This is a basic survey and no additional work is required.


10. Note to Compiler: Before applying to the charts any of the aids to navigation or mooring buoys from this survey, consult later information obtained during the 1946 field season. Information is now in Seattle and is also included in Coast Pilot revision notes.


Chief, Nautical Chart Branch


Chief, Section of Hydrography

Examined and approved:


Chief, Division of Charts


Chief, Division of Coastal Surveys

