# 7040

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

### DESCRIPTIVE **REPORT**

Type of Survey Hydrographic

Field No. Su-1145 Office No. H-7040

**LOCALITY** 

State Alaska-Aleutian Islands

General locality Amchitka Island

Locality South Bight and Approaches

194 5....

CHIEF OF PARTY

C. D. Meaney, S.S. Surveyor

LIBRARY & ARCHIVES

7040

ACCOUNT OF THE PROPERTY OF THE

# 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. ii-7040

Field No. SU 1145

State	ALASKA - Alection Islands
	Amchitka Island
. مری Locality	ALEUTIAN ISLAMUS  with and Approaches  BIGHT - AMCHITKA ISLAMU
	Date of survey June 1945
Instructions dated	3 February 1938
Vessel	
Chief of party	C. D. Meaney
Surveyed by	C. D. Meaney, R.C. Rowse, W. R. Porter
	aphic recorder, handsheadx wire
Protracted by	Christine N. Hillman
Soundings penciled by	Christine N. Hillman
Soundings in fathoms for fathoms	at MKW MLLW
REMARKS:	Anchorage Chart at request of U.S. Navy
Processed in the	Seattle Processing Office.

### DESCRIPTIVE REPORT

# To ACCOMPANY

# HYDROGRAPHIC SURVEY H-7040 (SU-1145)

# SOUTH BIGHT AND APPROACHES, AMCHITKA ISLAND

### ALEUTIAN ISLANDS

1945 - C.S. 218

Scale:

1/10000

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

Field work by: C.D. Meaney, R.C. Rowse and Wilbur R. Porter

# A. PROJECT:

This survey was executed under Instructions for Project C.S. 218 dated 3 February, 1938, Supplemental Instructions dated 16 April, 1943 and 1 February, 1944; Instructions issued by Capt. F.B.T. Siems dated 5 May, 28 May and 11 July, 1945. This work was requested by the U.S. Navy. The purpose of the survey was to develope an anchorage secure against northerly weather and convenient to Constantine Harbor.

# B. SURVEY LIMITS AND DATES:

All of South Bight and its southerly, easterly, and westerly approaches were surveyed. Latitude 51° 19'N marks the southerly limit, Longitude 170° 24'E the easterly and Longitude 179° 18'E the approximate westerly limits. The work was accomplished during the latter part of June.

# C. VESSELS AND EQUIPMENT:

The SURVEYOR and launchs Nos. 2 and 4 were used to make the survey, the inshore work being done by the launches and the offshore by the SURVEYOR. The launches based from the ship.

The turning radius of the SURVEYOR is approximately two hundred fifty meters and that of the launches about fifteen meters. The ship used the Dorsey III No. 40, supplemented by either type 808 recorder No. 59 or the R.C.A. Type N.M.C. No. 52 for verification. Type 808 recorder No. 52 was used in launch No. 4 and Nos. 46 and 59 were used in launch No. 2.

# D. TIDE AND CURRENT STATIONS:

All data for tide reducers was obtained from the portable automatic gage operated in South Bight from June 28 thru July 5, 1945. Tide reducers on those days this gage was not in operation were obtained by applying range and time correction to the standard gage at Constantine Harbor.

No current stations were occupied.

### E. SMOOTH SHEET:

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

# F. CONTROL STATIONS:

Triangulation before 1945 and additional triangulation executed in 1945 supplemented by signals located by topography on Table and Table Were used for control. (Graphic Control sheets were not registered)

# G. SHORELINE AND TOPOGRAPHY:

To be obtained from air photographs.

Topography is from T- 8016 (1734-45)

# H. SOUNDINGS:

Standard methods were used to obtain all depths. Soundings obtained by the 808 type recorders in heavy kelp areas were verified by hand lead soundings.

# I. CONTROL OF HYDROGRAPHY:

All sounding lines were controlled by sextant fixes.

# J. ADEQUACY OF SURVEY:

This survey is considered adequate and complete within the area covered, the anchorage area and approaches there-to being well developed. Sufficient bottom samples were taken to determine the bottom characteristics thru out the anchorage.

bottom characteristic coverage outside of anchorage is very sparage.

# K. CROSSLINES:

Crossings are satisfactory.

# L & M. COMPARISON WITH PRIOR SURVEYS AND CHART:

No prior surveys of this character have been made in this area. 8864 is the only chart of the area.

# N. DANGERS AND SHOALS:

There are no dangers except close inshore. There is a shoal extending ENE and WSW at the southwesterly approach to South Bight. This shoal, with 9 - 15 fathom, is about one mile in length with kelp patches in the shoaler parts. A least depth of 9 fathom was obtained in Latitude 51° 20'N, Longitude 179° 20'SE. There are several 10 and 12 fathom depths along the axis of the shoal.

There is a least depth of 98 Pathons found in Lat. 51020.23 N. Longitude 179020.7 E.

83

# O. COAST PILOT INFORMATION:

See special report submitted for 1945 field season in the Aleutian Islands by Lieut. Comdr. C.D. Meaney.

Excerpts from this report applicable to this area follow:

There is an excellent anchorage on the south coast of Amchitka three miles west of East Cape. This harbor, called South Bight provides excellent shelter for northwest to east northeast storms. The anchorage and approaches to South Bight have been surveyed and preliminary charts are available.

Directions Constantine Harbor - South Bight: From a position 100 yards west of the radar cage buoy in 53 fathoms at the approach to Constantine Harbor proceed north for one half a mile, change course to 90° true for four miles, here change course to 140° true and run seven and one half miles, here change course to 232° true and run five and one half miles then steer 310° true and head for the towers on the highest point of the east part of Amehitka Island. When one and one half miles from land dead ahead and nine tenth of a mile from land on the starboard beam, depth 32 fathoms, head north for an anchorage in twenty fathoms, sand bottom in South Bight.

# P. AIDS TO NAVIGATION: None.

Q. LANDMARKS FOR CHARTS: Form 567 is attached.

R. GEOGRAPHIC NAMES:

This data to be furnished by the Seattle Processing Office.

# S. SILTED AREAS:

# T. BY\*PRODUCT INFORMATION:

# Z. TABULATION OF APPLICABLE DATA:

Triangulation - Forwarded to Washington Office, Sept. 19, 1945 Copy to Processing Office

Coast Pilot Report - Forwarded to Washington Office

Velocity Corrections: - Forwarded to Processing Office with this report.

Topggrpahic Sheets - Forwarded to Processing office with this report.

Respectfully submitted,

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

Approved:

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

Statistics for Hydrographic Survey H-7040

Day	Date	Vol.	No.	No. Pos.	No. Stat. Miles
			SHIP		
A	6-21-45	1		91	26.4
В	6-22-45	1 1		192	58 <b>.3</b>
C D	6-23-45	1 &	6	135	41.1
D	6-25-45	6		127	42.3
			LAUNCH NO	2	
8,	6-22-45	2		219	42.6
ъ	6-23-45	. 5		137	23.9
c	6-25-45	5 &	7	101	16.2
đ	6-26-45	7		113	16.7
			LAUNCH NO	0. 4	
a	6-22-45	3	•	154	30.7
b	6-23-45	3 &	4	<b>14</b> 8	24.9
c	6-25-45	4		8 <b>5</b>	11.2
đ	6-26-45	4		138	18.2
	Totals			1735	385.5

Area 12.3 square statute miles.

# TIDE NOTE

# HYDROGRAPHIC SURVEY H-7040

Portable Automatic Gage at South Bight

Lat. 51° 22.7'N Long. 179° 22.9'B

Zero of staff is 4.9 below M.L.L.W.

Standard automatic tide gage at Constantine Harbor to June 30.

Lat. 51° 24.8'N Long. 179° 17.7'E

The zero of the tide staff was 5.0 feet below M.L.L.W.

Standard automatic tide gage at Constantine Harbor after June 30, 1945.

Lat. 51° 29' 49"N Long. 179° 16' 48"E

The zero of the tide staff is 6.9 feet felow M.L.L.W.

Range - 1.3

Time - -30 minutes from Constantine Harbor.

# VELOCITY CORRECTIONS

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

# Signals - Hydrographic Sheet H-7040

Name used in Survey	Origin of Station
Abe	* <del>T=6983 *</del>
ARMS	Triangulation
BAKER (Control Tower)	11
Bet	T-69898
Bil	T <del>-6983 8</del>
B <b>O</b> B •	Triangulation
Cat	<del>T-698<b>3</b> </del>
CHARLIE (Control Tower) CHUCK	Triangulation
Dog	<del>- T-6083                                    </del>
Eat	<del>T-69898</del>
Fat	<del>- T-69</del> 898
Gap	T-69838
HIM 2	Triangulation
Нор	<del>- T-6990</del>
JERP	Triangulation
Jig	-T-69834
Keg	<del>T-6990</del>
Kof	T 6089 A
Lam	_ <del>T=698%                                    </del>
Lit Luc	T-6983
MALL	Triangulation
Mik	T-6983 &
MIST	Triangulation
Mop	<del>T-6990</del>
Nap	<del>T-6990</del>
Ned	T-60828
$ exttt{Nip}$	T-69898
Off	<del>T-6990</del>
ONE (Flag 1)	Triangulation
Pin	<del>-T-698<b>3.8</b></del>
Pop	-T-698 <b>%</b>
RAD U.S.E. 1943	Triangulation
Rub Sad	T-698 <b>3.5</b>
TWO (Flag 2)	Triangulation
Vom	<u>T-698<b>%</b>€</u>
Wug	<del>-1-6983 €</del>
yak	T-6983
Zem	_T-6983
* Graphic control sheets were not	t registered
Data incorporated in T-8016, T-5	199,7-3600
7	6F.J. 13951
	10-101

		,	,	An	nchitka I	i.				
***************************************										
										····
			_	i i	order No.	52	30 9	1 F A	20 8	
	Date	i	Day	2 fms.	5 fms.	7.0 fms.	10 fms.		20 fms.	
	6-16-45	a	L. 2	0.0	-0.1		-0.1	-0.3		H-7007
	n.		11	0.1	-0.2	-0.2	-0.3	-0.4	•	
	2-22-45	A	L. 4	0.0		-0.1	<b>-0.1</b>			
	Ħ		,11	0.0		-0.2	-0.3	-0.4	-0.4	
	6-23-45	Ъ	L. 4	0.0		0.0	0.0	-0.1	-0.2	W- 1145
	tt		Ħ	0.1		0.1	0.2	0.2	0.0	No. 1145
	6-25-45	C,	L. 4	0.1		0.1	0.2	0.2		H-7040
	. 11		11	0.1		0.1	0.0	0.2		
	6-26-45	đ	L. 4	0.0		0.0	-0.1			
•	tt t		11	0.1		0.0	0.0	-0.1		
	6-28-45	a		0.1		0.0	0.0	0.0		3. 3.645
	11		tt .	0.1		0.0	-0.1	-0.1	-0.2	No.1245
	6-30-45	Ъ	L. 4	0.0		0.0	-0.1	<b>-0.2</b>	-0.2	H-7042
	- 11	-		0.1		0.0	-0-1	-0-2	-0.4	
	Totals			0.8		-0.2	-0.8	-1.2	-1.5	
.:	Mean			0.06		-0.02	<b>-0.</b> 6	-0.1	-0.25	
	**			Po	porder No	59				
1	0.05.45		- 0				0.0	0.7	-0.1	
	6-27-45	ď	L. 2	0.0	0.0	0.0	0.0	-0.1	-0.T	
	11 6 <b>-28-4</b> 5	c	" L. 2	0.0	0.0		0.1	0.0 0.0		
	# O=\$O=±0	6	## E	0.2	0.0		0.0	0.0		
	tt t		#	0.0	-0.1		0.0	-0.1		H-7007
	7-29-45	d	L. 2	0.1	0.1		0.0	0.0		11-7001
	1-23-10	u	11	0.1	0.0		0.0			
•	6-30-45	e	L. 2	0.1	0.0		9.0	-0.1		
	11	9	H ~	0.0	0.1		0.0			•
	6-23-45	Ъ	L. 2	0.1	0.0		0.1	-0.2	-0.3	·
•	: 0=20=40 : II		11 11	0.1	-0.2		0.1	-042	-0.0	No.1145
	6-26-45	d	L. 2	0.1	0.0		0.0	-0.1		H-7040
•	Totals	1	20 -	0.8	0.1	0.0	0.0	-0.6	-0.4	
	Mean			0.07	0.01	0.0	0.0	-0.08	-0.20	
	MOST			0.01	0.02					
,				Reco	rder No.	46 (No. 1	145)			
•	6-22-45		L. 2	0.0	-0.2		-0.5(R)	-0.8(R)		
		-		0.0	0.0					
_				0.0	0.0					
				Use T. &	S. Curve	8				
								Checke	d by W.R.	P.
	5							Comp	1 -	
	ř.	1		1	· ·	1	1	- ·	1	

# Velocity Corrections

Ship SURVEYOR

Dorsey III & 808 Fathometers

Sheets H=7041 (SU@2145), H=7040 (SU=1145), H=7042 (SU=1245)

Amohitka Id.

	DH	3PTH	Fms.	
	From	To	Corrections	I
,		13.0	<b>-0.2</b>	
	13.1	21.6	-0.4	
	21.7	30.5	-0.6	
	30.6	39,2	<b>-0.</b> 6	
	<b>39.</b> 3	47.8	-1.0	
	47.9	56 <b>.5</b>	<b>-1.</b> 2	•
•	56.6	65.2	-1.4	
·	65.3	73.8	<b>-1.</b> 6	
	73.9	82.5	-1.8	
	82.6	91.0	-2.0	
	91 <b>.1</b>	100.0	-2.2	·
	100.1	117.0	-2.5	
	117.1	139.5	-3.0	
. •	139.6	162.5	<b>-3.</b> 5	
	162.6	185.5	<b>-4.</b> 0	

Corrections RCA Model NMC

No Correction 0 - 2000 Fathoms for Red light +2.2 fathoms for NMC Recorder (Index)

# PATHOMETER CORRECTIONS

Launches 2 & 4

# 808 Recorders

Corrections for Sheets H-7007, H-7040 (SU-1145), H-7042 (SU-1245)

	1.	aunch /	104	Lo	unch No	. 2	
	Fa:	thometer	No. 52	Pat	hometer N	o. 59	:
,	D	rpth		DE	PTH		
	From	To	Corrections	From	To	Corrections	
Bar Check	2.0	9.0	0.0	0.0	13.6	0.0	:
	9.1	20.0	-0.2	13.7	20.0	-0.2	# F F F F F F F F F F F F F F F F F F F
T. & S.	20.0	28.7	-0.4	20.0	80.4	-0.4	
	28.8	37.5	<b>~</b> 0.6	50.5	37.5	-0.6	į.
	37.6	46.2	-0.8	39.4	47.9	-0.8	Ì
	46.3	55.0	-1.0	48.0	56.4	<del>-</del> 1.0	4
	55.1	63.5	-1.2	56.5	65.0	-1.2	, 1
	63.6	72.2	-1.4	65.1	73.9	-1.4	
-	72.5	80.8	-1.6	74.0	82.2	-1.6	· ·
	80.9	89.8	-1.8	82.5	91.2	-1.8	ţ
	89.9	98.4	-2.0	91.3	99.8	-2.0	
	98.5	101.0	-2.2	99.9	101.0	-2.2	4
	101.1	124.0	-2 · F	101.1	125.0	<b>~2</b> ~5	. \$

Rev. March 1935 on Amchitka I. can not be pictred on ch. 8864, until the Adsition of Island is by values given being TO BE CHARTED STRIKE OUT ONE

7

DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY

# LANDMARKS FOR CHARTS

Seattle, Machington

193

charted on (deleted from) the charts indicated. I recommend that the following objects which have (transmit) been inspected from seaward to determine their value as landmarks, be

The positions given have been checked after listing.

S	Control	TOLE	Rada	F	Til doot	one	3	Contral	South	7	Ford	5		LOCALITY	GENE
Control Tower - Charlie Russing	rol Tower - Baker Russey	TOWER 1944, Office	Hadar Tenk (Tank on steel frame-	Hanger, Baker Russeyy	Badar Town	BILLO 1845 (\$110-1170 structure	Radio Tower	ral Radio Tower	h Radio Torer	Padlo Town	h Haddo Tomer	1945 30 Paot Migh)	NAME AND DESCRIPTION	וחי	RAL
2	2	22	22	23	2	2	22	8	B	22	2	8			
25	\$0 80	8	23	23	22	22	25	***	<b>1</b>	23	2	25	-	LATITUDE	
16198	9777	14161	2901	1600	13831	14808		2048	8	7808	1823	20	D. M. METERS	HODE	
179 18	179 15	278 39	179 13	179 15	DI GLI	77 0.CE	179 20	179 20	179 25 25	179 25	175 20	13 24	o'	LONG	POSITION
469	597E	1381	8	880	8	8	833	8	889	35	5.00	*	D. P. METERS	LONGITUDE	
#	£	2	*	**	a	**	*	4	*	**	*	Tagles &		DATUM	
#	*		*	1	15	3	*	*				7		METHOD OF LOCATION	
5	*	194	*			.10		*				1948		LOCATION	-
	_			-	-					1		_		RBOR CH	
						*								SHORE	
sermentle						1	****	**	an to	neil	,			CHARTS AFFECTED	

considered for the charts of the area and not by individual field survey sheets. This form shall be pr ared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Information under each column he ing should be given. The data should be

U.S. GOVERNMENT PRINTING OFFICE

Form 567 Rev. March 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

# LANDMARKS FOR CHARTS

TO BE CHARTED STRIKE OUT ONE

Section Makington

charted on (deleted from) the charts indicated. I recommend that the following objects which have (Antenny) been inspected from seaward to determine their value as landmarks, be

The positions given have been checked after listing.

				1	0.0.	No. of Street, or other Persons and Street, o		2	Chief of Party
GENERAL			POSITION					RT	ART
	Ę	LATITUDE	Love	LONGITUDE		METHOD	DATE	RE CH	CHARTS
NAME AND DESCRIPTION	-	D. M. METERS	0	D. P. METERS	DATUM	LOCATION	LOCATION	INSHO	OFFSH
Bacher Tours, (South Court Tanage	2	2	173 8			Ĭ	1944	_	TV
Front Range, Constantine Harbor	13 TS	7708	179 16	2000	•		*		\$00
Bear Range	2	2	178.10	73475	*	•	4		100
New Bear Renge	# 12	2	72. Feat	<b>5776</b> 3	*	*	*		afa <sup>1</sup>
									994
					-				
This form shall be prepared in accordance with 1024 Figure Man	oo with 10	)2/ E:_! M		117 A 717	(T 4 ) TO TO TO TO				

considered for the charts of one area and not by individual field survey sheets. This form shall be prepred in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be Information under each column head g should be given.

# H-7040 SU 1145

# South Bight - Amchitka Island

# Seattle Processing Office Notes

# Smooth Sheet-

Projection hand made on K & E Paragon paper N-118 (not German).

The inked bits of shoreline, rocks and ledges are from T-6900 and T-6900. No other shoreline is available.

G.C. Shorts were not registered.

Incorporated in T-600.

# Boat Sheet-

This was returned to the field party, being first carefully examined for information not recorded.

The sheet is fairly open and uncrowded. Arrows are used to point out important features. The necessary items have been discussed in the report by the field party.

Respectfully submitted,

Cartographic Engineer Seattle Processing Office

# H-7040

# SU 1145

# South Bight - Amchitka Island

# Geographic Names Penciled on the Smooth Sheet

Amchitka Island

Pacific Ocean

South Bight

Omega Point

# 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. 80-F-45

	REGISTER NO. T-8088 to State 5-6/
State	ALASKA
Locality	
Scale 1:10,000	Date of survey Jume 21, 22, 19.45
· · · · · · · · · · · · · · · · · · ·	SURVEYOR
Chief of party	C.C. MBANEY
Surveyed by	HCO. FORTING
Inked by	K.B. JEFFERS
Heights in feet abo	veto ground to tops of trees
Contour, Approximat	e contour, Form line interval feet
Instructions dated	JULY 11 , 19 45
Remarks:	

# DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

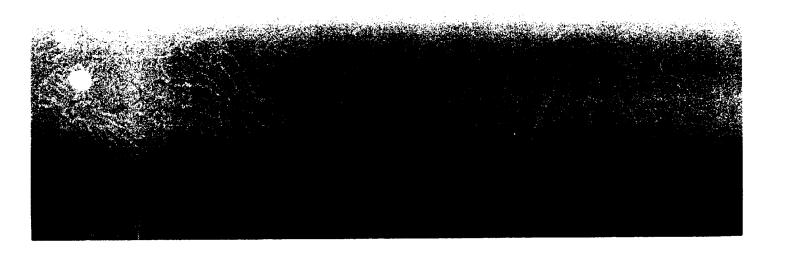
# TOPOGRAPHIC TITLE SHEET

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-G-45

# REGISTER NO. T 6990

State Aleutian Island, Alaska
General locality Amohitka Island
Locality South Bight to East Cape
Scale 1:10,000 Date of survey June 26 & Aug. 7, 1945
VesselSURVEYOR
Chief of party C.D. Meaney
Surveyed by H.O. Fortin & 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 July 11 and Aug. 5 , 19 44
Remarks:
<b>G</b> P O



### DESCRIPTIVE REPORT TO ACCOMPANY

# TOPOGRAPHIC SHEET SU-F-45 (Not registered)

### SOUTH BIGHT & APPROACHES

### INSTRUCTIONS:

This survey was executed in accordance with general instructions for Project C.S. 218, dated 3 February 1938, and specific instructions for Sub-Project 11, dated 16 April 1943 and amended 1 February 1944, 5 May 1945, 28 May 1945 and July 11, 1945.

# PURPOSE

Geographic control in South Bight and approaches was necessary to provide control for a hydrographic survey of the anchorage and surrounding vicinity.

### DATE OF SURVEY:

The work in South Bight and vicinity was done late in June 1945.

### CONTROL:

Second order triangulation was executed by this party in June 1945 and is based on the Unalaska Datum.

# METHODS:

The topography was executed on an aluminum mounted sheet at a scale of 1:10,000.

Standard Survey methods were used.

The signals were located by graphic control, supplemented by stadia readings.

Stations Jig, Rub and Mip were marked with standard topographic station marks. Descriptions of these stations were submitted on form 524.

# PLACE NAMES:

The geographic names of South Bight and Omega Point have been fully discussed in Descriptive Report SU-G-45.

### LANDMARKS FOR CHARTS:

Triangulation MIST, 1945 is fully discussed in Descriptive Report SU-G-45.

# DISCREPANCY

Rock on T-6928 a

A check on the position of two rocks lying approximately 0.4 mile discussion in Northwest of Constantine Point was required as noted on boat sheet No. D.E. of N-room H-7007. Four cuts were taken to the inshore rock which is awash at Not not 1945 M.L.L.W. This position is in agreement with the topographic location shown in the above mentioned boat sheet. Breakers appeared occassionally over the sunken offshore rock but not with sufficient frequency to permit its location. The positions of these rocks were verified by the hydrographic party.

Junctions with previous surveys in Constantine Harbor are satisfactory.

# PLACE NAMES

No additional place names are required.

Respectfully submitted,

Kari os gessere

Lt. Comdr., C. & G. Survey

Approved:

G.D. MEANEY Lt. Comdr., c, & G. Survey Comdg. Ship SURVEYOR This energy has been composed in theair photo complation of T-8016. The signals have been composed with H-7040. No further seriew the Hydrographic Survey Seates received series to receive the present

- Carles

10/-5/46

### DESCRIPTIVE REPORT TO ACCOMPANY

# TOPOGRAPHIC SHEET SU-G-45 (Not registered)

### INSTRUCTIONS

This survey was executed in accordance with general instructions for Project CS-218, dated 3 February 1938, and specific instructions for Sub-Project 11 dated 16 April 1943 as amended 1 February 1944, 5 May 1945, 28 May 1945 and July 11, 1945. The work near East Cape was executed under instructions contained in a dispatch dated 5 August 1945.

# PURPOSE

Topography in the vicinity of South Bight was necessary to provide control forahydrographic survey of the anchorage. The survey near East Cape was done to provide data necessary for salvage operations. The survey also provides control for airial photographs of the area.

# DATE OF SURVEY

The work in the vicinity of South Bight was done late in June 1945, and that near East Cape on 7 August, 1945.

# CONTROL

Second order triangulation was executed by this party in June 1945 and is based on the Unalaska Datum.

# METHODS.

The topography was executed on an aluminum mounted sheet at a scale of 1:10,000.

Standard Survey methods were used.

The signals were located by graphic triangulation supplemented by stadia readings.

The Corp of Engineers furnished a small "Weasel" and driver to assist the party at East Cape. The vehicle was designed for two passengers, however, it was used to carry a party of five, including the driver, and all the necessary gear. This part of the island is very rough, the ground is covered by small rocks in many places, and is badly washed in others. The party traveled a distance of approximately five miles and completed six planetable stations in two hours.

# METHODS (Continued)

There are two types of "Weasels", both of which are amphibious. The smaller of the two, which is the type used in this instance, has a very low free board and a small carrying capacity. The larger one is designed to carry four passengers and has more free board, approximately 6 to 8 inches. Either type will travel at speeds up to 20 miles per hour on roads or clear tundra. They can climb steep grades while carrying a good load.

It is recommended that one of the larger type "Weasels" be acquired for use by each the larger vessels. A variety of uses will be found for them, such as signal building, triangulation and topographic surveys.

# PLACE NAMES

South Bight. This name was assigned by the Army and Navy authorities at Amehitka and is the accepted designation of this anchorage.

Omega Points- This name is suggested from the radio call name assigned to Amchitka during the war. No previously assigned name has been found.

East Cape: - This is a charted name.

# LANDMARKS FOR CHARTS

1,59(1946)

Triangulation station MIST 1945 is a tall grey silo located on the top of the ridge and is a conspicous landmark showing to the north, east and south. It should be shown on chart No. 8864 and any new charts of this area.

net added to 5864.

# AIRPHOTO INSPECTION

A number of the topographic stations have been pricked on the airphotos for control purposes. See special report on Airphoto Inspection.

Respectfully submitted,

KARL B. JEFFERS

Lt. Comdr., C. & G. Survey

Approved:

C.D. MEANEY

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

GEOGRAPHIC NAMES Survey No. H - 70	40	/&	indissi	S. O. O.	oca stor	Mags	suide of	McHally	Jarija	
	6	Chor.	of Contract of Con	of John Co.	a de la constitución de la const	or local mods	o cuide of	A Sed Metalist	J. Jegr. Je	
Name on Survey	/ A	<u> </u>	<u>/ c</u>	/ D	E	/ F	G	<u> </u>	/ K	_
Alaska			for	title	)					
Aleutian Ish	ىلا بى			/						
Amchitka Iskn						_			U.S.6B	
South Bight										L
Omega Point		-								_
										L
										_
				Ne	un und	clined to	tana araba	eves!		
				by	4-1	eckó	(0)23	146		
				<b>Q</b>				, , , , , , , , , , , , , , , , , , ,		
Constantine Ho	1900	(10	cation	to	tide	Sta	17)		U S. G.B	
							/			
	-									
										Ī
1			1			<b>†</b>				Ť
		ł			1		1	1		1

# Hydrographic Surveys (Chart Division)

# HYDROGRAPHIC SURVEY NO. H-7040 ...

Records accompanying survey:  Leturned to Field Party		
Boat sheets; sounding vols7; w	ire drag	; vols;
bomb vols; graphic recorder rolls	.4. <sup>3</sup> .;	
special reports, etc	• • • • • •	
	• • • • • •	
The following statistics will be submitted wit repher's report on the sheet:	th the c	ertog-
Number of positions on sheet		1735
Number of positions checked		35
Number of positions revised		2
Number of soundings revised (refers to depth only)		
Number of soundings erroneously spaced		
Number of signals erroneously plotted or transferred		
Topographic details	Time	4hrs
Junctions	Time	
Verification of soundings from graphic record	Time	10hrs.
Verification by		
Reviewed by Fifth Carateria Time	22 15	Dete Oct. 23/1946

# DIVISION OF CHARTS

# REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7040

FIELD NO. SU-1145

Alaska-Aleutian Is., Amchitka I., South Bight and Approaches Surveyed in June 1945 Scale 1:10,000 Project No. CS-218

Soundings:

Control:

Handlead 808 Fathometer Dorsey III Fathometer NMC Fathometer Sextant fixes on shore signals

Chief of Party - C. D. Meaney
Surveyed by - C. D. Meaney, R. C. Rowse and W. R. Porter
Protracted by - C. N. Hillman
Soundings plotted by - C. N. Hillman
Verified and inked by - C. P. Reed
Reviewed by - R. H. Carstens, October 23, 1946
Inspected by - H. W. Murray

# 1. Shoreline and Signals

The shoreline and signals originate with the unreviewed manuscript of T-8016 (1934-45) and with graphic control sheets T-6988 and T-6990 of 1945.

# 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 unsurveyed inshore areas.

The bottom is fairly smooth except close inshore where there are many rocks awash, pinnacles and reefs, and in lat. 51° 20', long. 179° 20' where there is a knoll with a least depth of about 10 fms. rising from general depths of greater than 30 fms.

# 4. Junctions with Contemporary Surveys

There are no adjoining surveys in this area registered at the present time.

# 5. Comparison with Prior Surveys

# н-6906 (1935) 1:150,000

The few soundings from this small scale U. S. Navy reconnaissance survey are in fair agreement with present depths. The present survey supersedes this prior survey within the common area.

# 6. Comparison with Chart 8864 (Latest print date 6/2/45)

# A. Hydrography

The hydrography charted within the limits of the present survey originates with H-6906 (1935) discussed in the preceding paragraph and needs no further consideration.

# B. Aids to Navigation

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

# 7. Condition of Survey

The field plotting was accurate.

The sounding records and Descriptive Report are complete and comprehensive.

The boat sheet was not available for comparison when the survey was verified. The comparison will be made when the boat sheet is received from the field.

# 8. Compliance with Project Instructions

The survey adequately complies with the Instructions.

# 9. Additional Field Work Recommended

The area close inshore remains to be surveyed.

Additional bottom characteristics should be taken in the deeper offshore areas to complete the bottom characteristic coverage.

Examined and approved:

Chief, Section of Hydrography Chief, Division of Coastal Surveys

FORM 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
REV. JUDE 1937

# TIDE NOTE FOR HYDROGRAPHIC SHEET

Division-of-Hydrography-and-Topography:

September 16, 1946

Division of Charts: H. W. Murray

Plane of reference approved in 7 volumes of sounding records for

HYDROGRAPHIC SHEET 7040

Locality South Coast of Amchitka Island, Aleutian Islands, Alaska

Chief of Party: C. D. Meaney in 1945
Plane of reference is mean lower low water, reading
5.0 ft. on tide staff at Constantine Harbor
9.9 ft. below B. M. 1

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

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

B. GOVERNMENT PRINTING OFFICE 15482

# NAUTICAL CHARTS BRANCH

# SURVEY NO. <u>H-7040</u>

# Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10/6/47	8864	A.7. Stymen	After Verification and Review Completely officed
10/15/47	8863	Steg	After Verification and Review
11/28/58	Bacust 8863	gwalker	Completely applied thru Ch. 8864  Before After Verification and Review
01/93	16450	DON CORDTS	Before After Verification and Review Tully applied
		1	New Metric Chart  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.2169-1

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.