

7042

Diag'd. on diag. ch. No. 8864-2

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SU-1245 Office No. H-7042

LOCALITY

State Alaska- Aleutian Ids.

General locality Amchitka I.

Locality Approaches to Constantine Harbor

194 5

CHIEF OF PARTY

C.D. Meaney, Commanding Ship Surveyor

LIBRARY & ARCHIVES

DATE

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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.

REG. NO. ~~H-7042~~ H-7042
Additional work

REGISTER No. H-7042

Field No. SU 1245

State ALASKA - Aleutian Is.

General locality Amchitka Island
~~ALEUTIAN ISLANDS~~

Locality APPROACHES TO CONSTANTINE HBR., AMCHITKA I.

Scale 1:10,000 Date of survey June & Sept. 1945

Instructions dated 3 February 1938

Vessel SURVEYOR - Launch #4

Chief of party C. D. Meaney, Comdg.

Surveyed by R. C. Rowse, K. B. Jeffers, R. H. Brown & R. Mansfield

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

Protracted by C. W. O'Melveny

Soundings penciled by C. W. O'Melveny

Soundings in fathoms ~~feet~~ ^{and tenths} at ~~MLLW~~ MLLW

REMARKS: Processed in Seattle Processing Office

Sounding records are filed with H-7007

DESCRIPTIVE REPORT

To ACCOMPANY

HYDROGRAPHIC SURVEY H-7042 (SU-1245)

APPROACHES CONSTANTINE HARBOR, AMCHITKA, ALEUTIAN ISLANDS

1945 - C.S. 218

Scale: 1:10000

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

Field Work by: Roger C. Rowse

A. PROJECT:

This survey was executed under Instructions for Project C.S. 218 dated 3 February, 1938, Supplemental Instructions dated 6 April, 1943, 1 February, 1944, and Instructions issued by Capt. F.B.T. Siems For Project 11 dated 5 May 1945 and 28 May, 1945. ✓

B. SURVEY LIMITS AND DATES:

This work completes the unsurveyed areas of chart 9123 covering Constantine Harbor and its immediate approaches. The survey was accomplished June 28, 20 and Sept. 27 and 28, 1945. This sheet joins hydrographic survey H-7007. ✓

C. VESSELS AND EQUIPMENT:

Launch No. 4 basing from the SURVEYOR was used thru out this survey except for a range line executed from the SURVEYOR. ✓

D. TIDE AND CURRENT STATIONS:

All tidal data is from 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:

Existing triangulation stations and topographic stations from E-6967^a and ~~T-8986~~ were used. ✓

Not registered

G. SHORELINE AND TOPOGRAPHY:

To be obtained from air photographs.

From T-5777(1944) and T-8016(1944)

H. SOUNDINGS:

Standard methods were used to obtain all depths. An 808 type depth recorder was used by the launch and the Dorsey III by the SURVEYOR. Hand lead verification was obtained in kelp areas.

I. CONTROL OF HYDROGRAPHY:

All sounding lines were controlled by sextant fixes.

J. ADEQUACY OF SURVEY:

This survey is considered adequate for charting purposes.

K. CROSSLINES:

Crossings are satisfactory.

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

This work was accomplished in unsurveyed areas.

Few edgs from ~~Navy~~ surveys in this area

N. DANGERS AND SHOALS:

See reports on previous surveys. No new shoals.

O. COAST PILOT INFORMATION:

See Coast Pilot notes.

P. AIDS TO NAVIGATION:

See report submitted Oct. 11, 1945 on Descriptive Report Sheet H-7007.

Q. LANDMARKS FOR CHARTS:

Form 567 attached. *yes*

R. GEOGRAPHIC NAMES:

Data to be furnished by the Seattle Processing Office.

S. SILTED AREAS:

None

T. BY-PRODUCT INFORMATION:

None.

Z. TABULATION OF APPLICABLE DATA:
Coast Pilot report - Forwarded.

Velocity corrections - Forwarded. *copy attached to report*

Respectfully submitted,

Wilbur R. Porter

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

Approved:

C.D. Meaney

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

STATISTICS FOR HYDROGRAPHIC SURVEY H-7042

LAUNCH No. 4

Day	Date	Vol. No.	No. Pos.	No. Stat. Miles
a	6/28/45	1	70	14.8
b	6/30/45	1	149	25.8
c	9/27/45	1	102	16.6
Ship SURVEYOR				
A	9/28/45	2	10	3.5
TOTAL			331	60.7
Area - 6.0 sq. miles.				

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TIDE NOTE

Standard tide gage at Constantine Harbor.

Old location to June 30	Lat.	51° 24.8'N
	Long.	179° 17.7'E

New location June 30 and on	Lat.	51° 29'-49"N
	Long.	179° 17'-48"E

Zero of old staff was 5.0 feet below M.L.L.W.

Zero of new staff is 6.9 feet below M.L.L.W.

VELOCITY CORRECTIONS

Ship SURVEYOR Dorsey III & SCS Fathometers

Sheets H-7041 (SU-2145); H-7040 (SU-1145); H-7042 (SU-1245)

Amchitka Id.

From	DEPTH To	Fms. Corrections
	15.0	-0.2
13.1	21.5	-0.4
21.7	30.5	-0.5
30.6	39.2	-0.8
39.5	47.9	-1.0
47.9	56.5	-1.2
56.6	65.2	-1.4
65.3	73.8	-1.6
73.9	82.5	-1.8
82.6	91.0	-2.0
91.1	100.0	-2.2
100.1	117.0	-2.5
117.1	139.5	-3.0
139.6	162.5	-3.5
162.6	185.5	-4.0

Corrections R.C.A. Model N.M.C.

No correction 2 - 200 fathoms for Red light.

+ 2.2 fathoms for N.M.C. Recorder (Index)

Corrections for Recorder No. 46 from the above table.

Comp. H.R.P.

Checked K.B.J.

FATHOMETER CORRECTIONS

Launches 2 & 4

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

Amshika 4d.

	Fathometer No. 52			Fathometer No. 59		
	Depth	Corrections		Depth	Corrections	
Bar Check	2.0	8.0 fms.	0.0 fms.	0.0	13.6 fms	0.0 fms.
	8.1	20.0	-0.2	13.7	20.0	-0.2
T. & S.	20.0	28.7	-0.4	20.0	30.4	-0.4
	28.8	37.5	-0.6	30.5	39.3	-0.6
	37.6	46.2	-0.8	39.4	47.9	-0.8
	46.3	55.0	-1.0	48.0	56.4	-1.0
	55.1	63.5	-1.2	56.5	65.0	-1.2
	63.6	72.2	-1.4	65.1	73.9	-1.4
	72.3	80.8	-1.6	74.0	82.2	-1.6
	80.9	89.8	-1.8	82.3	91.2	-1.8
	89.9	98.4	-2.0	91.3	99.8	-2.0
	98.5	101.0	-2.2	99.9	101.0	-2.2
	101.1	124.0	-2.5	101.1	125	-2.5

Comp. by R.H.B.
Checked W.R.P.

LIST OF STATIONS ON SHEET H-7042

Name used In Survey	Origin of Station
(BAW 2) Abe	* T-6988 (1945)
BAW	Triangulation
Big	E-6967b (1944)
Cat	T-6988
Del	T-6988
Doe	T-6988
Dog	T-6988
Ebb	T-6988
Eve	T-6988
Far	T-6988
Fat	T-6988
Gam	T-6988
Hap	E-6967b
Him	T-6988
(Ham) Hum	T-6988
Jef	T-6988
Kam	T-6988
Las	T-6988
Mug	T-6988
Pie	T-6988
Pil	T-6988
REEF	Triangulation
Sud	T-6988
Sir	E-6967b
Tot	T-6988
Was	T-6988
Yel	T-6988
Zig	E-6967b

* Graphic Control sheet was not registered
 Report is in Desc. Report for H-7007 (1945)
 S.F.W.
 1/31/51

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED }
STRIKE OUT ONE

Seattle, Washington

1935

I recommend that the following objects which have ~~(been removed)~~ been inspected from seaward to determine their value as landmarks, be charted on *(deleted from)* the charts indicated.
The positions given have been checked after listing.

C. D. MEARNS

Chief of Party.

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE ° ' "	LONGITUDE ° ' "							
	(Silo-11bs structure NIST 1945 30 feet high)	61 22	179 24	460E	Dealman Trl.	1945				
	North Radio Tower	61 23	179 20	458E	"	"				
	East Radio Tower	61 23	179 20	608S	"	"				Alexander Islands
	South Radio Tower	61 23	179 20	606E	"	"				
	Central Radio Tower	61 23	179 20	480E	"	"				
	West Radio Tower	61 23	179 20	398E	"	"				
	(Silo-11bs structure SIL0 1945 30 feet high)	61 23	179 14	941E	"	"				
	Highest Radar Tower (East end)	61 22	179 18	68E	"	"				
	Main Mangar, B _u ber Runway (Peak on steel framework)	61 22	179 15	590E	"	"				
	Radar Tank	61 21	179 13	341E	"	"				
	TOWER 1944, Ogilven	61 26	178 39	192W	"	1944				
	Control Tower - Baker Runway	61 22	179 15	597E	"	"				
	Control Tower - Charlie Runway	61 22	179 18	469E	"	"				Aeronautics

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

H-7042

SU 1245

Approaches to Constantine Hbr.

Seattle Processing Office Notes

Smooth Sheet:

The projection is hand made on Whatman paper. The rocks in ink are from T-6988a. The three rocks with notations near Lat. $51^{\circ} 24'$ Long. 179 21.9 were located during the hydrographic survey. Other rocks in pencil and also the shoreline are from T-5777.

Rocks and shoreline from T-5777 ~~also~~ inked in Washington Office

Comparison with sheet SU 7007:

The soundings between 62c and 65c at Lat. $51^{\circ} 25.75'$ Long. 179 18 are deeper than on SU 7007 where depths of 44 fms. occur. The reason is not apparent on the fathogram.

This line transferred to H-7007. Speed of fathometer increased between 58 and 68 C. Correction was applied and sdgs are now in agreement

H-7042
SU 1245

Amchitka Island

Approaches to Constantine Hbr.

Geographic Names Penciled on the Smooth Sheet

Amchitka Island

Constantine Harbor

Constantine Point

Kirilof Point

Respectfully submitted,

Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7042

FIELD NO. SU-1245

Alaska-Aleutian Ids., Amchitka I., Approaches to Constantine Harbor
Surveyed in June - September 1945 Scale 1:10,000
Project No. CS-218

Soundings:

Control:

808 Fathometer
Dorsey III Fathometer

Sextant fixes on shore signals

Chief of Party - C. D. Meaney
Surveyed by - R. C. Rowse, K. B. Jeffers, R. H. Brown and
 R. Mansfield
Protracted by - C. W. O'Melveny
Soundings plotted by - C. W. O'Melveny
Verified and inked by - A. R. Stirni
Reviewed by - R. H. Carstens, August 25, 1947
Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline and signals originate with air photographic surveys T-5777 (1944) and T-8016 (1944), and with graphic control surveys ~~T-6988 (1945)~~ and T-6967 (1944).
Not registered - Report in Desc. Report for H-7007 (1945)

2. Sounding Line Crossings

Depths at crossings are in excellent agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated except in foul inshore areas.

The bottom is generally smooth offshore and irregular inshore.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-7007 (1944-45) which falls between the two portions of the present survey. There are no contemporary surveys by this Bureau on the east, north and west, registered at the present time.

5. Comparison with Prior Surveys

H-6906 (1935) 1:150,000
H-6907 (1935) 1:7,500

These are Navy reconnaissance surveys which, taken together, cover the entire area of the present survey. Comparison with prior depths indicates that no changes in bottom have occurred. The rock awash charted in lat. $51^{\circ} 25.22'$, long. $179^{\circ} 15.85'$, from H-6907, falls in present depths of about 20 fms. This rock awash is probably in error on the reconnaissance survey and should be disregarded in charting the area.

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

6. Comparison with Chart 9123 (Latest print date 4/20/46)
Chart 8864 (Latest print date 11/25/46)

A. Hydrography

The charted hydrography originates principally with Bp. 40088 (1945) containing advance information from the present survey. The present survey supersedes this blueprint.

B. Aids to Navigation

The present survey positions of aids to navigation are substantially the same as the charted positions. The sea buoy charted on chart 8864 in lat. $51^{\circ} 25.9'$, long. $179^{\circ} 21.0'$ is shown on the present survey as a radar buoy.

7. Condition of Survey

The field plotting was accurate.

The sounding records and Descriptive Report are complete and comprehensive.

8. Compliance with the Project Instructions

The present survey adequately complies with the Project Instructions except as indicated in the following paragraph.

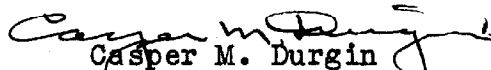
9. Additional Field Work Recommended

When work is resumed in this area, additional bottom characteristics should be taken within the limits of the present survey, and additional development should be made in the vicinity of the 9.6-fm. sounding in lat. $51^{\circ} 24.73'$, long. $179^{\circ} 22.3'$. The 10-fm. curve shown south and southwest of the above sounding should be further developed by running additional east-west sounding lines.

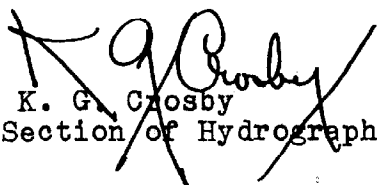
Examined and approved:



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

GEOGRAPHIC NAMES

Survey No.

H-7042

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. Quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>Alaska</u>										1
<u>Aleutian Islands</u>										2
<u>Amchitka Island</u>									USCB	3
<u>Constantine Harbor</u>									"	4
<u>Kirilof Point</u>									"	5
<u>Constantine Point</u>										6
<u>Ivakin Point</u>									"	7
										8
										9
										10
										11
										12
										13
										14
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										25
										26
										27
										M 234

Names waterlined by red approved
by L. Heckman 8/25/47

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. *H-7042*

Records accompanying survey:

Boat sheets; sounding vols.; wire drag vols.;
bomb vols.; graphic recorder rolls;
special reports, etc. *Sounding records are.....*
filed with H-7007.....

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

Number of positions on sheet	.....	<i>331</i>
Number of positions checked	.....	<i>59</i>
Number of positions revised	.....	<i>3</i>
Number of soundings revised (refers to depth only)	.....	<i>20</i>
Number of soundings erroneously spaced	.....	<i>6</i>
Number of signals erroneously plotted or transferred	.....	<i>1</i>
Topographic details	Time	<i>4</i>
Junctions	Time	<i>1</i>
Verification of soundings from graphic record	Time	<i>5</i>

Verification by *A. P. Starni*..... Total time *55*. Date *7/17/47*.

Reviewed by *F. H. Carstens*..... Time *12 hr* Date *8/24/47*

