7020

WIRE DRAG

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. WD-6938 a *Office No.* 7020

LOCALITY

State Alaska-Aleutian Islands

General locality Sheyma Island

Locality Approaches to Alcan Cove,

1944

CHIEF OF PARTY

R. D. Horne, Lieut. Comdr.

LIBRARY & ARCHIVES

DATE Nov. 13, 1945

H. 870 1 (1)

7020

Form 537
Ed. Dec. 1930

REG. NO. H7020 WIRE DRAG

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. WD 6938a

REGISTER NO. H-7020

State Alaska - Aleutian Is.

General locality Shemya Island ~~Near Islands - Semichi Islands~~

Locality Approaches to Alcan Cove, ~~Shemya Island~~

Scale 1:10,000 Date of survey June 9 - 22, 19~~44~~45

Vessel Ship EXPLORER

Chief of Party Roland D. Horne, Lt. Comdr., C&GS

Surveyed by George R. Shelton, Lt. Comdr., C&GS

Protracted by Christine N. Hillman

Soundings penciled by C.N. Hillman

Soundings in ~~fathoms~~ feet Depths of drag in feet

Plane of reference MLLW

Subdivision of wire dragged areas by George R. Shelton

Inked by R.D. Goodrich

Verified by R.D. Goodrich

Instructions dated March 25 and May 16, 19~~44~~

Remarks: Smooth Sheet and Plotting by Seattle Processing Office

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

TO ACCOMPANY WIRE DRAG SHEET NO. WD6938a

APPROACHES TO ALCAN COVE

SHIP EXPLORER 1944

INSTRUCTIONS:

Project CS-218, dated March 25, 1944. Supplemental Instructions by Lieut. Comdr. C. M. Durgin, Project 10, Survey and Wire Drag of Alcan Cove and Approaches, dated May 16, 1944.

EQUIPMENT:

Two regular hydrographic launches from the EXPLORER, were used to tow the drag with a motor whaleboat acting as drag tender. The drag was set out and picked up by the EXPLORER.

The standard wire drag was used. The ground wire was 3/16" stranded galvanized wire equipped with patent fieges. Aluminum toggles were used. The buoys were of the latest design, all steel construction.

The tester was the standard type, with regulation markings and a greased iron rod at the bottom for registering lift.

METHOD OF SURVEY:

The drag strips were plotted with dual launch control, each launch plotting independent positions of duplicate boat sheets. The area was dragged to an effective depth of 40 feet or more, except over shoals of lesser depth. Most shoals were covered with an effective depth of two feet less than the shoalest sounding obtained. Tests were taken as frequently as needed to compute the lift.

A three thousand foot drag was used with three-hundred-foot sections. Two-hundred-foot tow lines were used, since the positions were taken amidship of the launches fifteen feet was added for the length of the towing bridle on the launches, making an effective length of 215 feet.

LIST OF GROUNDINGS:

Location	Least Depth	Cleared by drag	
Lat. 52° 45.80' ✓ Long.174° 05.20'	49½ feet ✓	44½ feet ✓	added to cht. 9198 added to cht 9125 2/7/46 HTR
Lat. 52° 45.46' ✓ Long.174° 05.73'	27 feet ✓	25½ feet ✓	Not used. Chart 9198 has 44 fms.
Lat. 52° 45.39' ✓ Long.174° 05.41'	41 feet ✓	36 feet ✓	Added to cht. 9198
Lat. 52° 45.30' ✓ Long.174° 05.82'	32 feet ✓	Not cleared by drag. - near limit of drag area ✓	Not used on cht 9198
Lat. 52° 45.02' ✓ Long.174° 04.63'	17 feet obstruction was removed and area cleared with an effective depth of 50½ ft. on Aug. 29, 1944	16 feet	Smooth sheet states this shoal has been removed

J.M.A. 1-23-46

RECORDS:

All reducers have been entered and checked. The depth diagrams have been drawn and checked. All end launch and tender records have been copied into the guide launch record and copy checked. The guide launch records contain all the necessary data for smooth plotting the survey.

TIDAL NOTE:

Portable automatic tide gage on long pier, U.S. Army, Alcan Cove. Latitude 52° 44.0' N., Longitude 174° 04.3' E. (Gannet datum.) Staff reading of M.L.L.W. is 5.04 feet.

Respectfully submitted,

George R. Shelton

George R. Shelton,
Lieut. Comdr., C&GS

APPROVED AND FORWARDED:

Roland D. Horne

Roland D. Horne,
Lieut. Comdr., C&GS,
Commanding Officer

STATISTICS

Wire Drag Sheet No. 6938a

Date	Letter	Volume	Drag Length Feet	Positions	Miles Statute	Sound-ings
June 9, 1944	A	1	3,000	71	5.0	5
June 10, 1944	B	1	3,000	43	3.0	13
June 12, 1944	C	1	3,000	29	3.5	0
June 13, 1944	D	1 & 2	3,000	70	4.0	10
June 22, 1944	E	2	3,000	53	5.7	7
TOTAL				266	21.2	35

Surveyor's Party
August 29 1944 A' 2 600 26 1.6 0

H-7020

Seattle Processing Office Notes

Datum-

The datum of the sheet is USN GANNET 1934, assuming station CHIC 1943 at Chichagof Harbor to be identical with the Navy astro station.

Control-

Basic control is second order triangulation of 1943 and 1944. Topographic signals are from T-6932 (1944) and T-6971b. (1944)

The shoreline is from T-6971b.

17 Foot Shoal on H-6987- (1944) At Lat. 52° 45!02 Long. 174° 04!63

This shoal was plotted from data obtained by the EXPLORER's party from the drag work on H-7020. The removal of this sounding from H-6987 is recommended. The object was caught by the drag on four occasions in surrounding depths of 13 fathoms. It was buoyed, then examined by diver and found to be a part of a submarine net with buoys and gear attached. These obstructions and the attendant obstruction buoy were removed by salvage boat.

The area was then swept by the SURVEYOR's drag at 50½ feet effective depth. The removal of the soundings 17½, 30½, 33½, and 42½ from H-7020 is recommended. They were not shown on the area depth sheet.

Sdgs were erased from H-7020

List of Groundings - H-7020-

Position	Latitude	Longitude	Eff. Depth	Sounding	Depths on H-6987	Remarks
			Ft	Ft	Ft	
40A	52° 45.8	174° 04.4	49½		132	Hung up on buoy C #1 Not grounded
50A	45.8	05.2~~6~~	50½	49½	54-57	Recommended depth 49½' Cleared by drag at 44½'.
21E	45.42	05.7~~65~~	35	30 (not plotted)	42	Cleared at 25½ ft. Recommended depth 27½ ft
10B	"	"	32½	27½-34½	42	"
5B	"	"	42	40-34 (not plotted)	42	"
27E	45.3	05.8	35½	32-34	46	Recommended depth 32 ft. (not cleared by drag - at edge of drag area)
14E	45.37	05.4	43	41	61	Cleared by drag at 36'. Recommended depth 38 ft. Plotted " 41 ft
35E	"	"	40	41	61	"
47E	44.8~~57~~	04.9~~5~~	35½	--	60	Caught on Mooring buoy. Not grounded.
53E	45.03	04.64	39	--	78	Caught on Obstr. buoy. Not grounded.
16B	45.41 grounding not plotted	05.31	33½	~~50½~~	84	Buoy #1 set down to 50 ft. where it touched bottom. Raised again to avoid grounding. The grounding possibly occurred on the 8¼ fathom shoal 100 meters to N.E. See H-6987.
32D	45.02	04.63	31	30½	78	These objects were examined by divers and found to be submerged submarine nets with buoys and gear attached. They were removed by salvage boat and area was dragged by party on SURVEYOR on A' day. Soundings not shown on area depth sheet. Removal of soundings from smooth sheet recommended. The buoy placed near the obstruction was also removed. Recommended depth 78 feet.
45D	"	"	25½	17½	78	
38D	"	"	27½	28 n.p.	78	
25D	"	"	47	33½-42½	78	

Soundings not inked - area cleared at 50½ ft. on A' day.

List of Signals

Signal	Origin
ATE	1944 Triangulation
BOB	" "
Box	T-6971b (1944)
Check	T-6971b
Car	T-6971b
ELBA	1944 Triangulation
GUM	1943 "
HECP	T-6971b
Ken	T-6971b
Lotus	4th Order 1944 Triangulation
Lit	T-6971b
Low	T-6971b
North Radio	T-6971b
PAUL	1943 Triangulation
Point	T-6971b
POST	1944 Triangulation
REK	1944 "
RING	" "
Ship	T-6971b
South Radio	T-6971b
STAR	1944 Triangulation
TALK	" "
TANK	" "
TOP	" "
Tri	T-6971b
Toy	T-6932 (1944)
SUN	1944 Triangulation

H-7020 WD

Approaches to Alcan Cove, Shemya I.

Geographic Names Penciled on Smooth Sheet

Nizki Island

Shemya Island

Alcan Cove

Bering Sea

H-7020 Wire Drag

Approaches to Alcan Cove, Shemya Island

Alcan Cove

Portable Automatic Tide Gage
on long pier, U.S. Army

Latitude 52° 44!0

Longitude 174 04.3

Staff reading of MLLW ------ 5.04 feet

Respectfully submitted,

Edgar E. Smith

Edgar E. Smith
Cartographic Engineer

Approved and Forwarded,

F. H. Hardy,
Officer in Charge,
Seattle Processing Office

GEOGRAPHIC NAMES
Survey No. H7020
WIRE DRAG

Name on Survey	A	B On Chart No.	C On previous survey No.	D On U. S. quadrangle Maps	E From local information	F On local Maps	G P. O. Guide or Map	H Rand McNally Atlas	K U. S. Light List	
Alaska		(for title)								1
Aleutian Islands		"	"							2
Shemya Island									USCB	3
Alcan Cove		(location of tide staff)								4
Shemya Pass										5
										6
										7
										8
		Name underlined is not approved								9
		by L Heck on 11/7/46								10
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M 234

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. 7020

FIELD NO. Ex-6938a W.D.

Alaska-Aleutian Ids., Shemya I., Approaches to Alcan Cove
Surveyed in June 1944 Scale 1:10,000
Project No. CS-218

Soundings:	Control:
Handlead	Dual Control Sextant fixes on shore signals

Chief of Party - R. D. Horne
Surveyed by - G. R. Shelton and H. O. Fortin
Protracted by - C. N. Hillman
Soundings plotted by - C. N. Hillman
Verified and inked by - R. D. Goodrich
Reviewed by - R. H. Carstens, November 6, 1946
Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline and signals are from T-6931, T-6932 and T-6971 of 1944. The shoreline serves only for identification of the area and is superseded by later information.

2. Adjoining Surveys

The present survey joins H-6974 W.D. (1944) on the south in Alcan Cove and H-6989 W.D. (1944) in Shemya Pass.

No other wire drag surveys join the present survey.

3. Comparison with Contemporary Hydrographic Surveys

H-6938 (1943) 1:10,000
H-6987 (1944) 1:10,000
H-6999 (1944) 1:10,000
H-6988 (1944) 1:5,000
H-6975 (1944) 1:2,400
H-6873 (1945) 1:2,400

Effective depths of the present survey do not conflict with soundings on these contemporary hydrographic surveys.

4. Comparison with Chart 9125 (Latest print date 3/31/45)

The effective depths of the present survey are in harmony with the charted depths. The 5-3/4-fm. clearance depth charted in lat. 52° 45.36', long. 174° 05.45' from advance information of the present survey on Bp. 38627 (1944) has been revised in verification to 6 fms. and should be corrected on the chart.

5. Condition of Survey

The field plotting was satisfactory except that no position numbers were shown at detached positions of soundings.

The rule that the difference between adjacent uprights should not be greater than 2-1/2 % of the length of a drag section was not observed in dragging nor in the smooth plotting of effective depths. Corrections in accordance with this rule were made in the Washington Office.

6. Compliance with the Project Instructions

The survey adequately complies with the Project Instructions.

7. Additional Field Work Recommended

No additional work is recommended.

Examined and approved:

Chief, Nautical Chart Branch

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7020 - WIRE DRAG

Records accompanying survey:

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

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

special reports, etc. .1 A & D Sheet.....

.....

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

Number of positions on sheet		292
Number of positions checked		18
Number of positions revised		3
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		———
Number of signals erroneously plotted or transferred		0
Topographic details	Time	0
Junctions	Time	6 hrs.
Verification of soundings from graphic record	Time	———

Verification by R.D. Goodrich ....Total time 56 hrs Date 22 Oct. 1946

Reviewed by R.H. Carstens ..... Time 13 hrs Date Nov. 6, 1946

M-2232-1

HWM

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

21 January 1946

~~Division of Hydrography and Topography~~:

Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
4 volumes of ~~sounding~~ records for
wire drag

HYDROGRAPHIC SHEET 7020

Locality Approaches to Alcan Cove, Shemya Island, Aleutian Islands, Alaska.

Chief of Party: R. D. Horne in 1944
Plane of reference is mean lower low water, reading
5.0 ft. on tide staff at Alcan Cove
6.3 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:

E. K. Allan

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154327

NAUTICAL CHARTS BRANCH

SURVEY NO. H7020 WIRE DRAG

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1-23-46	9198	J. M. R.	Before ~~After~~ Verification and Review Soundings only applied
2-7-46	9125	RFA	Before ~~After~~ Verification and Review Added 8 fm 52°46.8 N 174°-05.2 E
			added 5¼ 52°45.3 174°06.4
			Before After Verification and Review
2/13/48	9130	R.A. McGann	~~Before~~ After Verification and Review no correction
10/5/49	9125	R.A. McGann	~~Before~~ (After) Verification and Review
9-29-92	16423	Ed Martin	~~Before~~ After Verification and Review New Chart
			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.