

6988

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

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SU-05144 Office No. H-6988

LOCALITY

State Alaska-Aleutian Islands

General locality Semichi Islands

Locality Shemya Pass

1944

CHIEF OF PARTY

C. D. Meaney

LIBRARY & ARCHIVES

DATE Feb. 13, 1946

B-1870 J (1)

6988

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H6988

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-6988 (1944)

Field No. SU 05144

State ALASKA - Aleutian Is.

General locality Semichi Is.
ALEUTIAN ISLANDS

Locality ~~Balagan~~ Shemya Pass
SEMICHI ISLANDS * Shemya and Nizki Islands

Scale 1:5,000 Date of survey July 11 - Sept. 29, 1944

Instructions dated CS-218 February 3, 1938

Vessel USC&GSS SURVEYOR

Chief of party C. D. Meaney

Surveyed by Ships Officers
J. C. Rose, R. C. Rowse, R. H. Randall

Soundings taken by fathometer, graphic recorder, hand lead, wire

Protracted by Betty B. Jones

Soundings penciled by Betty B. Jones

Soundings in fathoms feet at MLW MLLW

REMARKS: Smooth Sheet and Plotting by the Seattle Processing Office

DESCRIPTIVE REPORT

To Accompany

Hydrographic Sheet H-6988 (Field No. SU-05144)

Semichi Islands, Aleutian Islands

1944

Scale: 1 to 5000

Chief of Party: C. D. MEANEY, Commanding, Ship SURVEYOR.

A. Project. - The survey was made as a part of Project CS-218, Semichi Islands, under instructions dated Feb. 3, 1938; revised instructions April 6, 1943; supplementary instructions Feb. 1, 1944, Mar. 25, 1944, April 1, 1944, May 17, 1944.

B. Survey Limits and Dates. - The survey covers the two passages, separated by small islands, between the larger islands of Shemya and Nizki of the Semichi group. It joins with sheet H-6937 (1:20,000) on the southwest and northwest; and with the 1944 work of the EXPLORER (Alcan Cove and approaches) on the northeast. Field work was executed from July 11 to September 29, 1944. Weather conditions were generally poor, with occasional days of calm and clear weather. In general, if the weather was unsuitable for working on the south side of the pass, it was possible to work on the north side, and vice versa. The use by the Army of certain areas for target practice often prevented sounding in those areas when the weather was favorable.

C. Vessels and Equipment. - The floating equipment used in making the survey were Launches No. 2 and 4 of the Ship SURVEYOR. Both launches operated in all parts of the area. The parties operated from the ship at all times.

The turning radius of both launches is 10 to 12 meters.

The fathometers used on the launches were Type 808A, Nos. 46, 52, and 58.

D. Tide and Current Stations. - A portable tide gage was maintained at Alcan Cove during the entire period of the survey. The U. S. Engineer Department maintained a separate tide staff at the same location, which was read every half hour during most of the period of the survey. There were several short periods in the course of the survey when the observations at Alcan Cove were interrupted. At these times the tides at Massacre Bay, Attu Island, were used, corrections being applied in accordance with a comparison of simultaneous observations.

No current stations were occupied.

E. Smooth Sheet. - The smooth sheet for this survey will be constructed by the Seattle Processing Office. ✓

F. Control Stations. - A scheme of second order triangulation was executed covering the Semichi Islands. This scheme was connected with the main scheme of triangulation of Attu Island and the base located at Massacre Bay. The U.S. Engineer Department executed a local scheme covering Shemya Island, to which a connection was made near the west end of the island. ✓

The combined schemes of triangulation are based on the Gannet 1934 datum. ✓

The main scheme of triangulation was executed in 1943 by the U. S. S. HYDROGRAPHER, W. M. Seife, Commanding; and by the U.S.E.D., N. E. Sylar, Chief of Party. Additional observing was done in 1944 by the U.S.C. & G.S.S. EXPLORER, R. D. Horne, Commanding; and by the U.S.C. & G.S.S. SURVEYOR, C.D. Meaney, Commanding. ✓

Topographic stations were located by standard planetable methods and by triangulation cuts and computations. Topographic sheet No. 6931b covers this area. ^{T-697L, T-6944 & T-697I (1944)} ✓

G. Shoreline and Topography. - The shoreline and topographic details are to be obtained from air photographs taken at various times during the season by the Army. Planetable work was undertaken only for the location of stations for hydrographic control and for shoreline of the two large islets in the center of the pass. ✓

On account of foul ground and the swell which is present at all times, it was impossible to define the low water line by the soundings. ✓

H. Soundings. - Standard methods were used in measuring the depths, using the fathometers listed under Section C. On shoals, where kelp was encountered which gave false echoes on the fathograms, hand lead drift soundings were taken in order to obtain the correct and least depths. ^{Only 2 shoals investigated with the handlead} ✓

I. Control of Hydrography. - Standard methods were used in the horizontal control of the hydrography:- sextant angles between shore stations. ✓

J. Adequacy of Survey. - In the opinion of the writer the survey is adequate. The pertinent depth curves can be drawn in all parts of the area covered. Adequate junctions were made with adjacent sheets and the depth curves can be drawn at the junctions. ✓

K. Crosslines. - The percentage of crosslines in this area is difficult to determine, since many of these lines may be considered also as development of shoal areas. The figure is estimated at about ten per cent. ✓

H-6938

L. Comparison with Prior Surveys. - The work of the previous season was in the nature of a reconnaissance survey. It was done on a scale of 1:20,000, and does not compare in accuracy with the present survey, which was done on a scale of 1:5,000.

M. Comparison with Chart. - Chart 9125, Shemya Island dated Feb. 1944, was compiled from field surveys in this area done in 1943. The present survey comprises expansion from and development of this work. Soundings on the chart are in fathoms.

N. Dangers and Shoals. - The waters near the shoreline in the area covered by this report are dangerous. There are offlying rocks and reefs. Especially dangerous is a rocky area of small extent in the northwest part of the sheet, in Latitude $52^{\circ} 45.15'$, Longitude $174^{\circ} 01.15'$, which breaks in all weathers except flat calm. Between this rock and the shore of Nizki Island the area is generally foul and should be avoided at all times. It is marked by rocks and extensive kelp patches.

The following dangerous shoals were found: -

1.5	9ft	10 ft.,	Lat. $52^{\circ} 43.95'$,	Long. $174^{\circ} 01.90'$;	shoal spot of ridge extending across west passage; no kelp.
1.5	14	10 ft.,	Lat. $52^{\circ} 43.75'$,	Long. $174^{\circ} 01.75'$;	kelp;
2.3		13 ft.,	" $52^{\circ} 43.55'$,	" $174^{\circ} 02.00'$;	kelp; - See Trac. off Rept.
2.5	14	14 ft.,	" $52^{\circ} 43.45'$,	" $174^{\circ} 03.05'$;	no kelp;
		15 ft.,	" $52^{\circ} 43.55'$,	" $174^{\circ} 03.30'$;	marked by red buoy;
2.3		14 ft.,	" $52^{\circ} 43.80'$,	" $174^{\circ} 03.30'$;	marked by red buoy;
2.5		15 ft.,	" $52^{\circ} 44.05'$,	" $174^{\circ} 03.30'$;	shoal spot of ridge extending across east passage; no kelp.
2.5	15	ft.			

The following isolated extensive kelp patches were found:-

Lat., $52^{\circ} 43.1'$, Long. $174^{\circ} 03.5'$; least depth $3\frac{1}{2}$ feet. ^{5.5 fms.}
 Lat., $52^{\circ} 43.2'$, Long. $174^{\circ} 01.2'$; least depth $2\frac{1}{2}$ feet. ¹⁸ on north end

O. Coast Pilot Information. - Coast Pilot notes for the entire area of the Semichi Islands were submitted to the Washington Office on Dec. 9, 1944. A copy of these notes accompanies this report.

P. Aids to Navigation. - Four spherical buoys, two black and two red, have been established by the Army in the east passage. These buoys are located as follows:-

Black buoy,	Lat. $52^{\circ} 43.82'$,	Long. $174^{\circ} 03.11'$;
Black buoy,	" $52^{\circ} 43.59'$,	" $174^{\circ} 02.95'$;
Red buoy,	" $52^{\circ} 43.79'$,	" $174^{\circ} 03.30'$;
Red buoy,	" $52^{\circ} 43.60'$,	" $174^{\circ} 03.24'$.

Q. Landmarks for Charts. - Submitted on Form 567, dated Dec. 30, 1944.

Respectively Submitted
Roger C. Rowse
 ROGER C. ROWSE
 Lt. Comdr., C. & G. Survey

Approved:
C.D. Meaney
 C.D. MEANEY
 Lt. Comdr., C. & G. Survey
 Chief of Party

STATISTICS FOR HYDROGRAPHIC SURVEY H-6988 (1944)

Ship SURVEYOR

Project CS - 218

Vessel: Launch No. 4

Day	Date 1944	Volume	Number Angles	No. Statue Miles
a	July 18	3	117	16.6
b	July 19	3	205	26.9
c	July 21	3 & 4	172	18.5
d	July 24	5	169	20.8
e	July 28	5 & 6	238	26.0
f	Aug. 1	6	82	10.5
g	Aug. 8	6	129	12.2
h	Aug. 10	6 & 7	197	19.0
j	Aug. 14	7	76	5.9
k	Sept. 1	7	17	--
l	Sept. 14	7	112	7.9
m	Sept. 28	7	98	9.2
n	Sept. 29	8	72	6.5

Vessel: Launch No. 2

a	July 11	1	12	1.4
b	July 14	1	65	10.0
c	July 19	1	99	15.4
d	July 28	2	141	14.4

Total Statistics for Survey:

2001 Positions
 221.2 Statue miles
 4.0 Square statue miles

TIDE NOTE FOR HYDROGRAPHIC SURVEY NO. H-6988

Tide Station: Alcan Harbor, Shemya Island.

Latitude 52° - 43.95' N

Longitude 174° - 04.34' E

Two Staffs were used at Alcan Harbor: Staff No. 1 which was established by the Ship EXPLORER was partly destroyed and was replaced by a new staff (No. 2) on September 8, 1944.

The plane of mean lower low water for Alcan Harbor corresponds to a staff reading of 5.0 feet on No. 1, (See directors letter to commanding officer, Ship EXPLORER, dated July 17, 1944) and to a staff reading of 4.9 feet on Staff No. 2.

No correction for differences in time or height was applied.

The gage at Alcan Harbor was inoperative on numerous occasions and is supplemented by staff readings by the U.S. Engineers up to and including August 30, 1944. The plane of mean lower low water on the Engineers staff is 3.0 feet.

For such days during September, when the Alcan Harbor gage was not operating, tides at Massacre Bay have been substituted without time or range correction in accordance with the Director's letter dated December 6, 1944 (36-McC). A value of *3.9 feet, for mean lower low water on the staff at Massacre Bay was furnished by the Ship EXPLORER. The hourly heights for Massacre Bay were also furnished by the Ship EXPLORER.

* A value of 3.6 feet used for mean low water on the staff in use during September in accordance with Director's letter dated January 29, 1945. - reference 36-mlh.

ABSTRACT OF VELOCITY CORRECTIONS FROM BAR CHECKS

Hydrographic Survey H - 6988 SURVEYOR'S Launches
 808 Fathometers Numbers 46, 52 and 58 (820 fms./sec.)

LAUNCH NO. 4

"a" day - July 18, 1944

A Scale		B Scale	
+ 0.5 ft.	0.0 to 8.2 ft.	0.0 ft.	35.0 to 38.6 ft.
0.0	8.3 to 20.2	- 0.5	38.7 to 46.9
- 0.5	20.3 to 32.5	- 1.0	47.0 to 54.4
- 1.0	32.6 to 41.3	- 1.5	54.5 to 63.1
- 1.5	41.4 to 50.0	- 2.0	63.2 to 73.1
- 2.0 ft.	50.1 to 55.0 ft.	- 2.5 ft.	73.2 to 90.0 ft.

C Scale

- 2.5 ft. 73.0 to 106.0 ft.
 - 3.0 ft. 106.1 to 115.0 ft.

"b" day - July 19, 1944, Positions 1b to 135b.

A Scale		B Scale	
0.0 ft.	0.0 to 15.0 ft.	0.0 ft.	35.0 to 36.5 ft.
- 0.5	15.1 to 23.5	- 0.5	36.6 to 42.5
- 1.0	23.6 to 32.5	- 1.0	42.6 to 50.5
- 1.5	32.6 to 43.0	- 1.5	50.6 to 57.0
- 2.0	43.1 to 50.5	- 2.0	57.1 to 67.0
- 2.5 ft.	50.6 to 55.0 ft.	- 2.5	67.1 to 88.0
		- 3.0 ft.	88.1 to 90.0 ft.

C Scale

- 2.5 ft. 70.0 to 88.0 ft.
 - 3.0 ft. 88.1 to 110.0 ft.

LAUNCH Number 4 (Cont.)

"b" day - July 19, 1944. Positions 136b to 205b

A Scale		B Scale	
0.0 ft.	0.0 to 20.9 ft.	0.5 ft.	38.0 to 49.0 ft.
- 0.5	21.0 to 50.0	- 1.0	49.1 to 59.0
- 1.0 ft.	50.1 to 55.0 ft.	- 1.5 ft.	59.1 to 84.0
		- 2.0 ft.	84.1 to 90.0 ft.

C Scale

- 1.5 ft.	70.0 to 84.0 ft.
- 2.0 ft.	84.1 to 110.0 ft.

"c" day - July 21, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 18.3 ft.	- 0.5 ft.	35.0 to 44.8 ft.
- 0.5	18.4 to 38.7	- 1.0	44.9 to 54.8
- 1.0 ft.	38.8 to 55.0 ft.	- 1.5	54.9 to 74.0
		- 2.0 ft.	74.1 to 90.0 ft.

C Scale

- 1.5 ft.	70.0 to 74.0 ft.
- 2.0 ft.	74.1 to 102.0 ft.
- 2.5 ft.	102.1 to 110.0 ft.

"d" day - July 24, 1944. Positions 1d to 43d.

A Scale		B Scale	
0.0 ft.	0.0 to 18.0 ft.	- 0.5 ft.	35.0 to 37.7 ft.
- 0.5	18.1 to 37.7	- 1.0	37.8 to 70.0
- 1.0 ft.	37.8 to 55.0 ft.	- 1.5 ft.	70.1 to 90.0 ft.

"d" day - July 24, 1944. Positions 44d to 169d.

A Scale		B Scale	
0.0 ft.	0.0 to 21.8 ft.	- 0.5 ft.	35.0 to 52.6 ft.
- 0.5	21.9 to 52.6	- 1.0	52.7 to 84.0
- 1.0 ft.	52.7 to 55.0 ft.	- 1.5 ft.	84.1 to 90.0 ft.

"e" day - July 28, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 21.3 ft.	- 0.5 ft.	35.0 to 61.5 ft.
- 0.5	21.4 to 39.4	- 1.0 ft.	61.6 to 90.0 ft.
- 1.0 ft.	39.5 to 55.0 ft.		

LAUNCH Number 4 (Cont.)

"f" Day - August 1, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 19.9 ft.	- 0.5 ft.	35.0 to 69.0 ft.
- 0.5	20.0 to 35.9	- 1.0 ft.	69.1 to 90.0 ft.
- 1.0 ft.	36.0 to 55.0 ft.		
		C Scale	
Phase correction to C scale		- 1.0 ft.	70.0 to 99.5 ft.
+ 0.5 ft.		- 1.5 ft.	99.6 to 110.0 ft.

"g" day - August 8, 1944

A Scale		B Scale	
+ 0.5 ft.	0.0 to 9.1 ft.	- 0.5 ft.	35.0 to 53.0 ft.
- 0.0	9.2 to 23.9	- 1.0	53.1 to 85.0
- 0.5	24.0 to 53.0	- 1.5 ft.	85.1 to 90.0 ft.
- 1.0 ft.	53.1 to 55.0 ft.		
		C Scale	
Use phase correction of + 0.5 ft.		- 1.0 ft.	70.0 to 85.0 ft.
to C scale.		- 1.5 ft.	85.1 to 110.0 ft.

"h" day - August 10, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 34.0 ft.	- 0.5 ft.	35.0 to 61.0 ft.
- 0.5 ft.	34.1 to 55.0 ft.	- 1.0 ft.	61.1 to 90.0 ft.

"j" day - August 10, 1944

A Scale			
0.0 ft.	0.0 to 15.8 ft.	- 1.5 ft.	40.3 to 51.4 ft.
- 0.5	15.9 to 29.2	- 2.0 ft.	51.5 to 55.0 ft.
- 1.0 ft.	29.3 to 40.2 ft.		

"k" day, September 1, 1944

(No fathometer soundings - all handlead)

LAUNCH Number 4 (Cont.)

"l" day - September 14, 1944

A Scale		B Scale	
(Same as for "j" day)		- 0.5 ft.	35.0 to 52.0 ft.
		- 1.0	52.1 to 82.5
		- 1.5 ft.	82.6 to 90.0 ft.

"m" day - September 28, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 21.6 ft.	0.0 ft.	35.0 to 40.7 ft.
- 0.5	21.7 to 50.7	- 0.5 ft.	40.8 to 58.7 ft.
- 1.0 ft.	50.8 to 55.0 ft.		

"n" day - September 29, 1944

A Scale		B Scale	
0.0 ft.	0.0 to 33.0 ft.	- 0.5 ft.	35.0 to 64.0 ft.
- 0.5	33.1 to 53.0	- 1.0 ft.	64.1 to 90.0 ft.
- 1.0 ft.	53.1 to 55.0 ft.		

C Scale

- 1.0 ft.	70.0 to 92.0 ft.
- 1.5 ft.	92.1 to 115.0 ft.

LAUNCH Number 2

"a" day - July 11, 1944

(Depths recorded in fathoms - use velocity corrections derived from temperature and salinity observations.)

"b" day - July 14, 1944

A Scale		B Scale	
+ 0.5 ft.	0.0 to 55.0 ft.	0.0 ft.	35.0 to 59.0 ft.
		- 0.5 ft.	59.1 to 90.0 ft.

(Positions 57 to 65, depths are recorded in fathoms; use temp. and salinity velocity corrections.)

LAUNCH Number 2 (Cont.)

"o" day - July 19, 1944, Positions 1c to 23c

A Scale		B Scale	
0.0 ft.	0.0 to 38.2 ft.	- 1.0 ft.	40.0 to 54.5 ft.
- 0.5 ft.	38.3 to 55.0 ft.	- 1.5 ft.	54.6 to 60.0 ft.

"o" day, July 19, 1944, Positions 24c to 99c

A Scale		B Scale	
0.0 ft.	0.0 to 24.7 ft.	+ 0.5 ft.	35.0 to 46.5 ft.
- 0.5 ft.	24.8 to 55.0 ft.	- 1.0	46.6 to 78.0
		- 1.5 ft.	78.1 to 90.0 ft.

"d" day - July 28, 1944

A Scale (1d to 80d)		A Scale (81d to 140d)	
+ 0.5 ft.	0.0 to 14.8 ft.	+ 0.5 ft.	0.0 to 9.8 ft.
0.0	14.9 to 32.0	0.0	9.9 to 23.0
- 0.5 ft.	32.1 to 55.0 ft.	- 0.5	23.1 to 49.7
		- 1.0 ft.	49.8 to 55.0 ft.

B Scale (entire day)

0.0 ft.	35.0 to 54.0 ft.
- 0.5 ft.	54.1 to 70.0 ft.

ABSTRACT OF VELOCITY CORRECTIONS

for Hydrographic Survey H- 6988(1944).
Positions 1a to 12 a and 57b to 65b, Launch No. 2.

SURVEYOR'S Launches. Period: July 11 to September 29, 1944.

808 Fathometers (820 fms./sec.)

Corrections in feet.

0.0 ft.	0.0 to	18.9 ft.
-0.5 ft.	19.0 to	53.9 ft.
-1.0 ft.	54.0 to	86.9 ft.
-1.5 ft.	87.0 to	114.9 ft.
-2.0 ft.	115.0 to	158.9 ft.
-2.5 ft.	159.0 to	162.9 ft.

NOTE: The above corrections were used only for soundings of Launch Number 2: Positions 1a to 12a, July 11, 1944 and positions 57b to 65b, July 14, 1944, at which times the depths were recorded in fathoms. For all other soundings on this survey, velocity corrections as determined from the bar checks were used. Beyond the range of the bar checks, the deepest bar check value on each scale was held and the velocity correction curve extended from that point.

SU 05144

H-6988

Seattle Processing Office Notes

Datum-

USN GANNET 1934.

There is a difference of ten or eleven meters in longitude between the datum of the smooth sheet and datum of the boat sheet. The smooth sheet datum is based on recomputed G.P.'s. ✓

Control-

1943 and 1944 Triangulation.

Shoreline and topographic signals are from T-6971b and T-6932, T-6964 ✓ and T-6931b. Cuts to locate hydrographic signals are recorded in the sounding records. The local grid of USED is shown by red intersections at intervals of 2,000 feet.

Rocks, rips, kelp, and the outer line of shore ledges shown on the boat sheet by the hydrographer have been transferred to the smooth sheet. ✓

Lapses in profile- Fathograms-

On many parts of the fathograms there are closely adjacent open spaces which add uncertainty to readings at critical points. These lapses seem to be caused by wave action of two or three feet amplitude but disappear or improve on change of course. It is surmised that aeration due to pounding of the boat caused the disturbances, and that there is a relation between good hull form and good fathograms. 2 ✓

H-6988

Shemya Pass

Geographic Names Pencilled on the Smooth Sheet

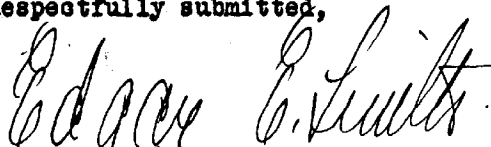
Bering Sea

Nizki Island

Shemya Island

Alcan Cove ^{IA} 814

Respectfully submitted,



Edgar E. Smith
Cartographic Engineer
Seattle Processing Office

Approved and Forwarded,



F. B. T. Siems
Officer in Charge,
Seattle Processing Office.

GEOGRAPHIC NAMES

Survey No. **H6988**

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. Quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K
<u>Alaska</u>									1
<u>Aleutian Is.</u>									2
<u>Semichi Is.</u>								U.S.G.B.	3
<u>Shemya I</u>								"	4
<u>Nizki I</u>								"	5
<u>Alcan Cove</u>									6
<u>Skoot I</u>									7
<u>Hammerhead I</u>									8
<u>Shemya Pass</u>									9
									10
									11
									12
									13
									14
<u>Massacre Bay</u>									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Names underlined in red approved
by L. H. ECH on 8/21/46

(location of tide staff)

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6988**

Records accompanying survey:

Boat sheets ..2...; sounding vols. .8...; wire drag vols.;
 bomb vols.; graphic recorder rolls .11...;
 special reports, etc. *Some lines recorded in records*
of H-6937

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

Number of positions on sheet		2001..
Number of positions checked		246..
Number of positions revised		5..
Number of soundings revised (refers to depth only)		70..
Number of soundings erroneously spaced		30..
Number of signals erroneously plotted or transferred	
Topographic details	Time	24..
Junctions, protracting & plotting	Time	16 + 44
Verification of soundings from graphic record	Time	24.....

Verification by *C.W. O'Neil* Total time *C.W.O.N. 80 hrs* Date *Aug 14, 1946*
ARS. 106 hrs

Reviewed by *R.H. Carstens* Time *42 hrs* Date *Aug 20, 1946*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6988

FIELD NO. SU-05144

Alaska - Aleutian Islands, Semichi Islands, Shemya Pass
Surveyed in July - September 1944 Scale 1:5,000
Project No. CS-218

Soundings:

Control:

Handlead
808 Fathometer

Sextant fixes on shore signals

Chief of Party - C. D. Meaney

Surveyed by - J. C. Bose, R. C. Rowse, M. T. Paulson, R. H.
Brown, R. H. Randall, V. R. Sobieralski and
C. A. George

Protracted by - B. B. Jones

Soundings plotted by - B. B. Jones

Verified and inked by - A. R. Stirni and C. W. O'Melveny

Reviewed by - R. H. Carstens, August 20, 1946

Inspected by - H. W. Murray

1. Shoreline and Signals

The shoreline and signals are from T-6931, T-6932, T-6964 and T-6971 of 1944. The shoreline on these graphic control surveys was derived principally from air photographs. Sextant fixes for supplementary hydrographic signals are recorded in the sounding volumes.

2. Sounding Line Crossings

Depths at crossings are in satisfactory agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were satisfactorily drawn.

The inshore area is generally foul with reefs and kelp. In the northwest part of the survey, the foul area extends about a mile off Nizki Island. Shoal spots with depths less than 3 fms. extend from both Nizki and Shemya Islands to the small islands in the middle of the pass. In the deeper areas, the bottom is relatively smooth.

4. Junctions with Contemporary Surveys

Satisfactory junctions were effected with H-6987 (1944) on the north, H-6975 (1944) on the northeast, and H-6999 (1944) and H-6938 (1943) on the southeast. However in the common area north of lat. 52° 43.2' (approximate) no soundings from H-6938 (1943) were retained. The present larger scale survey reveals all the essential hydrographic information shown on H-6938 and is adequate to supersede it in the common area.

The junction with H-6873 (1945) on the northeast and H-6937 (1943-44) on the west and south will be considered when those surveys are reviewed. (See Par. 7, below).

5. Comparison with Prior Surveys

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

A comparison with H-6989 W.D.(1944) and H-7020 W.D.(1944) will be made when those surveys are reviewed.

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

A. Hydrography

The hydrography charted within the limits of the present survey originates with advance information of the present and contemporary surveys on Bps. 37846 (1943), 38927 and 38928 of 1944. There are numerous differences of 1-3 fathoms between charted and present depths which result from changes made during the verification and review of the present survey, as for example the 1½ fms. charted in lat. 52° 43.79', long. 174° 02.34' which falls in present depths of about 4 fms.

Other discrepancies between charted and present survey information are the following:

- (1) ✓ The two rocks awash charted in lat. 52° 43.89', long. 174° 03.00 were erroneously plotted on the boat sheet and should fall on the ledge 50 m. to the south. The ledge symbol here is adequate for charting purposes.
- (2) ✓ No boat sheet feature could be found for the rock awash in lat. 52° 43.40', long. 174° 03.48', originating with a ¼-fm. depth on Bp. 38928. The symbol should be deleted from the chart as the ¼ fm. appears to be an error in the field compilation.
- (3) ✓ The islets charted in lat. 52° 44.15', long. 174° 03.84' result from an erroneous reproduction of an 8-fm. depth.

- 4. Three rocks awash charted in lat. $52^{\circ} 44.67'$, long. $174^{\circ} 01.33'$ from Bp. 38927 apparently symbolize the rock awash area and are not shown on the present survey. Four other rocks awash charted in this vicinity agree with the present survey.

The chart should be revised to agree with the present survey.

B. Aids to Navigation

The present survey positions of 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 Descriptive Report and sounding records were complete and comprehensive.

Sounding lines from H-6937 (1943-44) in Shemya Pass have been protracted and plotted as part of the present survey. In some places, a few sounding lines differed as much as 2 fms. and were rejected.

8. Compliance with Instructions for the Project

The present survey satisfactorily complies with the Instructions except that a few kelp covered shoals were not investigated with the handlead (See following paragraph).

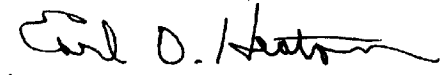
9. Additional Field Work Recommended

- A. It is recommended that additional handlead development and verification of the following shoals be accomplished.

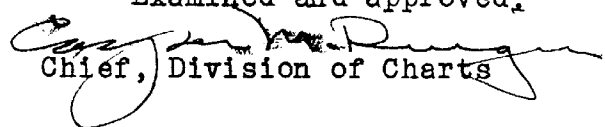
<u>Shoal(fms.)</u>	<u>Latitude</u>	<u>Longitude</u>
3.8	$52^{\circ} 43.70'$	$174^{\circ} 01.33'$
2.4	$52^{\circ} 43.45'$	$174^{\circ} 01.72'$
4.3	$52^{\circ} 43.05'$	$174^{\circ} 01.40'$


- B. In the passage in lat. $52^{\circ} 44.55'$, long. $174^{\circ} 01.2'$ additional hydrography is recommended to determine the prevailing depths in areas where the development is sparse.


Chief, Nautical Chart Branch


Chief, Section of Hydrography

Examined and approved:


Chief, Division of Charts


Chief, Division of Coastal Surveys

74000

TIDE NOTE FOR HYDROGRAPHIC SHEET

15 March 1948

~~Division of Hydrography and Topography~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
8 volumes of sounding records for

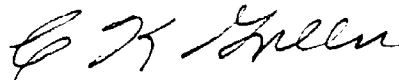
HYDROGRAPHIC SHEET 6988

Locality Pass between Shemya and Nizki Islands, Aleutian Is., Alaska

Chief of Party: C. D. Meaney 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
3.4 ft. on tide staff at Massacre Bay
6.8 ft. below B. M. 1

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

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

