7989

Diag. Cht. No. 8252-2

CS-247

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PA-1352 *Office No.* H-7989

LOCALITY

State S. E. Alaska

General locality PERIL STRAIT

Locality USHK BAY

19 52

CHIEF OF PARTY

Joseph P. Lushene

LIBRARY & ARCHIVES

DATE JUN 15 1953

B-1870-1 (1)

7989

Form 537
(Ed. June 1946)

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. H 7989

Field No. PA 1352

State Alaska

General locality Peril Strait

Locality Ushk Bay

Scale 1/ 10 000 Date of survey 10 to 25 Sept. 1952

Instructions dated 14 April 1947, Sup. 14 Mar. 1950 & 17 Mar. 1952

Vessel USC&GSS PATTON

Chief of party Joseph P. Lushene

Surveyed by William D. Barbee

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

Fathograms scaled by H. Hildahl

Fathograms checked by H. Hildahl & P. Karras

Protracted by Clarence E. Pedersen

Soundings penciled by Clarence E. Pedersen 95%
Clarence R. Lehman 5%

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW
and are based on a velocity of sound of ~~800~~ fms./sec.

REMARKS: Plotted in Seattle Processing Office.

U. S. GOVERNMENT PRINTING OFFICE 693019

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7989 (PA-1352)

PERIL STRAIT, S. E. ALASKA

SCALE: 1:10,000 - DATE 1952

USC&GSS PATTON

JOSEPH P. LUSHENE, COMDG.

# # #

A. PROJECT

Field work was accomplished in accordance with Instructions for Project CS-247, dated 14 April 1947, with Supplemental Instructions dated 14 March 1950 and 17 March 1952.

B. SURVEY LIMITS AND DATES

The survey covers Ushk Bay off Peril Strait in its entirety. The survey covers all water areas inside the bay, and there are no holidays.

Junction is made with contemporary survey H-7988 (PA-1252) at the mouth of the bay. The junction has sufficient overlap for comparison, and the comparison is satisfactory.

Field work commenced 11 September 1952, and was completed 25 September 1952.

C. VESSELS AND EQUIPMENT

All hydrography was accomplished by Launch No. 88, operating from the Ship PATTON. Except for beach lines and lines in extremely shoal water, the launch was operated at approximately $6\frac{1}{2}$ knots, and at this speed the turning radius was 25 meters.

Soundings were taken with 808-A type recording fathometer No. 51.

Bottom samples were obtained by the Ship PATTON, using an electric wire sounding machine.

D. TIDE AND CURRENT

Soundings were reduced from records of the Nismeni Cove Portable Tide Gage, which operated continuously during this survey.

No current stations were established within the limits of this survey during the 1952 field season.

E. SMOOTH SHEET

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

F. CONTROL STATIONS

Basic control was derived from a current second order triangulation scheme that was carried from 1951 stations south of Adams Channel to a strong tie with a 1928 second order arc. Records, computations, and a triangulation report have been forwarded to the Washington Office.

Signals for hydrography were taken from a radial plot from nine-lens photos, for the most part. Control was further supplemented by two signals located by hydrographic means, and one topographic signal located by theodolite cuts.

Control was adequate and satisfactory for hydrography.

G. SHORELINE AND TOPOGRAPHY

The shoreline and topography will be compiled from Air Photographs which were field inspected by this party. Review, par. 1

All mean lower low water line within the limits of this survey was established by hydrography.

H. SOUNDINGS

Soundings were taken with 808-A type recording fathometer No. 51, operated on the fathom scale at a sounding velocity of 800 fms/sec. The entire survey was on the A-scale.

Soundings were corrected for tide, initial deviation, and index error as determined by bar checks.

I. CONTROL OF HYDROGRAPHY

All hydrography was controlled by three-point sextant fixes on signals ashore. No unusual or substandard methods were employed.

J. ADEQUACY OF SURVEY

This survey is adequate and complete, and should supercede previous surveys of the area for charting.

K. CROSSLINES

The crosslines constitute 10.0% of hydrography on this survey. Crossings are good in all parts of the survey.

L. COMPARISON WITH PRIOR SURVEYS

Comparison was made with previous survey H-2238, a 1:80,000 survey completed in 1895.

Despite the sparsity of soundings on H-2238, comparison is, in general, very good. Although there are differences in individual soundings, the general configuration and depths are almost identical on the two surveys.

Although the MLLW line was not developed on H-2238 by hydrographic means, that line as sketched agrees with the MLLW line as found on the current survey. The discrepancy noted on C. F. Jordan's Preliminary Review Sheet dated 25 January 1950:

> "1. The gravel bottom characteristic 'G' was incorrectly charted as a 6-fathom sounding".

A careful search of this area was made. A buoy was planted, and 25 meter lines were run, with no indication of a shoal revealed. Bottom characteristics taken near this area show gravel. Therefor, this survey fully substantiates Mr. Jordan's findings. This feature has already been deleted from the chart.

M. COMPARISON WITH CHART NO. 8248

The comparisons drawn in Paragraph L, are applicable to Chart 8248.

N. DANGERS AND SHOALS

No new dangers or shoals were found on this survey.

O. COAST PILOT

Since this area was covered in a special Coast Pilot project in 1950, no Coast Pilot notes are submitted at this time.

P. AIDS TO NAVIGATION

There are no fixed or floating aids to navigation within the limits of this survey.

Q. LANDMARKS FOR CHARTS

This subject is covered on Field Inspection of Air Photographs, 1952.

R. GEOGRAPHIC NAMES

A special report on geographic names has been submitted.

S. SILTED AREAS

An examination of all factors reveals no evidence of silt or other unstable bottoms on this survey.

T. - Y.

No information for these headings.

Z. TABULATION OF APPLICABLE DATA

The following special reports are applicable:

1. Field Inspection of Air Photographs, 1952
2. Triangulation Report, 1952

The following applicable data is attached to this report:

1. Table of Statistics
2. Tide Note
3. Abstract of Bar Checks
4. List of Rocks

Respectfully submitted,

William D. Barbee
ENS USC&GS

Approved and Forwarded:

Joseph P. Lushene
CDR USC&GS
Cmdg., Ship PATTON

H 7989
Pa 1352

Ushk Bay.
Peril Strait.

Processing Office Notes.

Smooth sheet.
The projection was ruled on the machine in Washington. Shoreline and topography was transferred from map manuscript acetate sheets T 9896 & T 9897 (1952) On the boatsheet you will find the heights of certain rocks lettered in red ink. These heights have been shown on the smooth sheet in pencil.
For "Control" see Par. F-Page 2.

Pinnacles.
In the vicinity of ϕ 57 33.3 λ 135 39.6 see on smooth sheet a number of short arrows, in pencil. These point to soundings which appear on the fathogram as side echoes from pinnacles. These were re-scanned and plotted by the draftsman who observed the pattern of their occurrence. At Pos. 55-56d day is a large indication on the fathogram which appears to be a stray. Beside is a smaller protuberance which we called a side echo. All these indications should have a close examination. See list on smooth sheet. list deleted

Review, par. 7c.

Dangers.
No dangers are revealed on the smooth sheet. Some additional soundings at ϕ 57 34.2 λ 135 36.7 would be desirable when opportune.

Review, par. 9.

Edgar E. Smith

Edgar E. Smith
Cart. Engr.

6/9/53

ABSTRACT OF BAR CHECKS SHEET PA-1352

DEPTH = 2.0 fms

DATE	DAY	DEPTH RECORDED
9-11-52	a	1.70
9-11-52	a	1.70
9-11-52	a	1.70
9-22-52	b	1.70
9-23-52	c	1.75
9-23-52	c	1.80
9-24-52	d	1.60
9-24-52	d	1.60
9-24-52	d	1.70
9-25-52	e	1.60
		16.85

Average = 1.68

Initial correction = +0.32 fms

Comp. W.D.B.
Checked J.P.L.

LIST OF ROCKS ON PA-1352

Date 1952	Position	Volume & Page	Height Above MLLW
5 Sept.	--	1,p.3	-2.0'
6 Sept.	—	1,p.3	-0.7'

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TABLE OF STATISTICS

SHEET PA-1352

DATE 1952	DAY LETTER	VOLUME NUMBER	H.L. & WIRE	POSITIONS	STATUTE MILES SOUNDING
			Launch 88		
11 Sept.	a	1	--	205	28.2
22 Sept.	b	1	--	63	7.4
23 Sept.	c	1 & 2	—	117	12.8
24 Sept.	d	2	--	209	19.8
25 Sept.	e	2	—	14	1.4
				608	69.6
			Ship		
25 Sept.	A	2	—	8	- -
				616	69.6

Area surveyed: 4.34 sq.stat.mi.

7989

TIDE NOTE

The portable tide gage established at Nismeni Cove was used to reduce the soundings for the entire sheet. This gage was in operation for the entire period of this survey. No corrections were applied for either time or range on the entire sheet.

The plane of reference, which was MLLW, was 5.7 feet on the staff, as per Director's Letter of 18 September, Reference 36-rcb.

H 7989
Pa 1352

Peril Strait
Ushk Bay
SE Alaska

List of geographic names
penciled on smooth sheet.

Chichagof Island

Dolph Rock

Peril Strait

Point Marie

Ushk Bay

Ushk Point

GEOGRAPHIC NAMES

Survey No. H-7989

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Southeastern Alaska										1
Peril Strait										2
Chichagof Island									BGN	3
Ushk Bay										4
Ushk Point										5
Point Maria										6
Dolph Rock										7
										8
					Names underlined in red are approved					9
						7-16-53				10
						L. Heck				11
										12
										13
										14
Nismeni Cove			(tide station)							15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7989..

Records accompanying survey:

Boat sheets ..1..; sounding vols. ...2..; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls .1 Env;

special reports, etc. 1 Smooth Sheet; 1 Descriptive Report;.....

.....

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

Number of positions on sheet		614
Number of positions checked		70
Number of positions revised		1
Number of soundings revised (refers to depth only)		2
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	0
Verification of soundings from graphic record	Time	3.2

Prelim. Verification by J A Dinsmore --- 28 --- 1-28-54

Verification by J. L. Chambers .....Total time 19.5 Date 5-9-55

Reviewed by J. A. Dinsmore ..... Time 16. Date 1 Febr. 1954

Review Addendum: JAD 4 26 April 1956

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7989 FIELD NO. PA-1352

S. E. Alaska, Peril Strait, Ushk Bay

Project No. CS-247

Surveyed - Sept. 1952 Scale 1:10,000

Soundings: Control:

808 Fathometer Sextant fixes on shore signals

Chief of Party - J. P. Lushene
Surveyed by - W. D. Barbee
Protracted by - C. E. Pederson
Soundings plotted by - C. E. Pederson, C. R. Lehman
Preliminary Verification by - T. A. Dinsmore
Verified and inked by - J. L. Chambers
Reviewed by - T. A. Dinsmore 1 February 1954
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline and signals originate with the reviewed manuscripts of air-photographic surveys T-9896 and T-9897 of 1952. The fixes for the supplementary hydrographic signals are recorded in the sounding volumes of the present survey.

2. Sounding Line Crossings

Depths at sounding line crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The bottom drops rapidly from the low-water line to depths of 10 fms. Except for a few minor irregularities, the bottom is generally smooth. No unusual submarine features are apparent.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-7988 (1952) on the east. The transfer of junctional soundings is deferred pending the complete verification of the two surveys. Review Addendum

5. Comparison with Prior Surveys

H-2238 (1895) 1:40,000

The present survey falls within the area covered by this prior small-scale survey. A comparison of the prior and present surveys reveals no appreciable differences in depths. As a matter of fact, remarkably close agreement is found between the prior and present depths. However, the present survey reveals numerous inshore rocks not shown on the prior survey. The more complete coverage of the present survey also defines the bottom configuration more clearly.

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

6. Comparison with Chart 8248 (Latest print date 6/8/53)

A. Hydrography

The rock awash and ½-fm. sounding charted in lat. 57° 33.97', long. 135°38.76', and lat. 57°34.28', long. 135°37.80', respectively, originate with advance information of the present survey reported in H.O. Notice to Mariners 28 (1953).

Except as noted above, the charted hydrography originates with the previously discussed survey which needs no further consideration. Review Addendum

The present survey entirely supersedes the charted information.

B. Aids to Navigation

No aids to navigation are charted within the limits of the survey. No dangers to navigation are revealed by the survey.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.

b. The *preliminary inspection and *verification of the survey indicates that the smooth plotting was accurately done.

* Review Addendum

c. Several questionable traces appear on the fathograms in the general vicinity of lat. 57°33.3', long. 135°39.5'. After careful examination, most of the questionable traces were determined to be psuedo recordings and were rejected. The 15-fm. soundings falling in depths of 17 - 18 fms. in lat. 57°33.35', long. 135° 39.30', appear to be from side echos and have been retained.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a good basic survey and no additional field work is necessary.

Examined and approved

H. R. Edmonston
Chief, Nautical Chart Branch

H. Arnold Karo
Chief, Division of Charts

G. R. Fish
Chief, Section of Hydrography

Earl O. Heaton
Chief, Division of Coastal Surveys

REVIEW ADDENDUM

H-7989 (1952)

Verified by - J. C. Chambers
Reviewed by - T. A. Dinsmore 26 April 1956
Inspected by - R. H. Carstens

Junctions with Contemporary Surveys

The junctional soundings have been transferred to the present survey from H-7988 (1952) on the east. The overlapping soundings are in good agreement.

Comparison with Chart 8248 (latest print date 9/12/55)

Charted hydrography originates with the prior survey of 1895 (H-2238) supplemented by partial application of the present survey prior to complete verification. No important discrepancies are noted in the charted information.

Condition of Survey

With the inking of soundings and depth curves and the transfer of junctional soundings, the verification of this survey is now complete.

Approved:

E. R. Lee Carter

Chief, Chart Division

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

17 July 1953

~~Division of Coastal Surveys~~:

Division of Charts: R. H. Carstens

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 7989

Locality Ushk Bay, Southeast Alaska

Chief of Party: J. P. Lushene in 1952
Plane of reference is mean lower low water, reading
5.7 ft. on tide staff at Nismeni Cove
22.6 ft. below B. M. 1 (1952)

Height of mean high water above plane of reference is ~~9.2~~ 14.0 feet.

Condition of records satisfactory except as noted below:

E.C. McKay
Section of Tides

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 877933

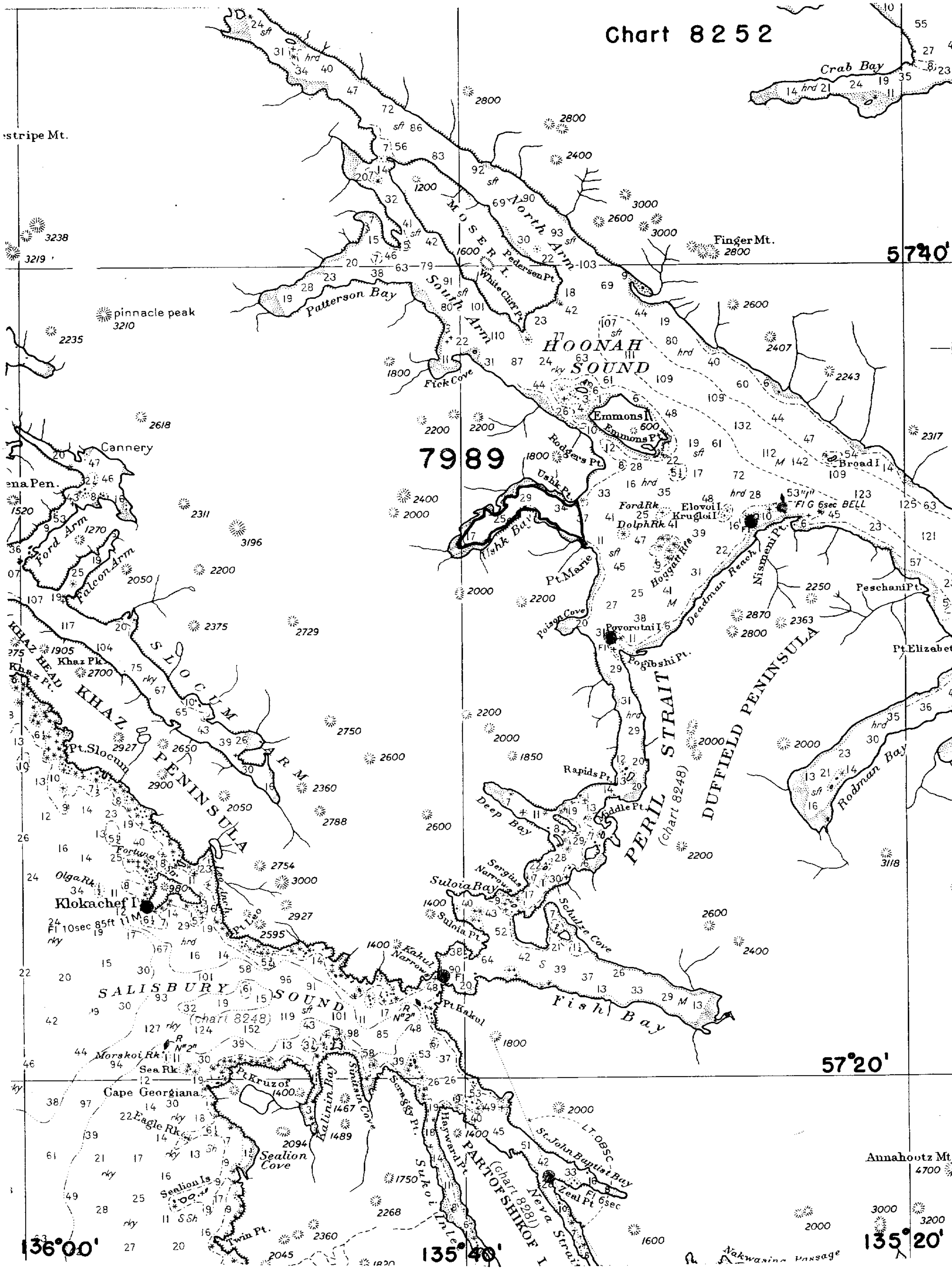
Chart 8252
7989
Crab Bay
Finger Mt.
57°40'
pinnacle peak
Patterson Bay
South Arm
North Arm
MOSER I.
Pedersen Pt.
White Cliff Pt.
HOONAH SOUND
Fick Cove
Emmons I.
Emmons Pt.
Rodgers Pt.
Broad I.
Cannery
Ushk Pt.
Ushk Bay
Pt. Marie
Ford Rk.
Dolph Rk.
Elovoi I.
Krugloi I.
Hoggatt Rfs
Fl G 6sec BELL
Deadman Reach
Nismeni Pt.
Peschani Pt.
Ford Arm
Falcon Arm
Poison Cove
Povorotni I.
Pogibshi Pt.
Pt. Elizabeth
SLOCUM ARM
KHAZ HEAD
Khaz Pk.
Khaz Pt.
KHAZ PENINSULA
PERIL STRAIT
(chart 8248)
DUFFIELD PENINSULA
Pt. Slocum
Rapids Pt.
Rodman Bay
Deep Bay
Middle Pt.
Sergius Narrows
Fortuna
Olga Rk.
Klokachef I.
Fl 10sec 85ft 11M
Suloia Bay
Suloia Pt.
Schulze Cove
Pt. Leo
Kakul Narrows
Pt. Kakul
Fish Bay
SALISBURY SOUND
(chart 8248)
Morskoi Rk.
Sea Rk.
Cape Georgiana
Pt. Kruzof
Kalinin Bay
Sealion Cove
Eagle Rk.
Sealion Is.
Twin Pt.
Sukoi Inlet
Hayward Pt.
PART OF SHIKOF I.
(chart 8281)
Neva Strait
St. John Baptist Bay
Zeal Pt.
Fl 6sec
LT. OBSC
Annahootz Mt.
Nakwasina Passage
57°20'
136°00'
135°40'
135°20'

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7989

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1-18-55	8248	R.K. DeLaubenfels	Partially appld Before ~~After~~ Verification and Review
7/9/56	8252	N. W. Burgoyne	Partially appld ~~Before~~ After Verification and Review
8-10-60	8248	E.W. Burgoyne	~~Before~~ After Verification and Review Comp. appld.
8/1960	8252	E.W. Burgoyne	~~Before~~ After Verification and Review Completely appld from 8248
			~~Before~~ After Verification and Review + signed
8248	8248	D.J. Kennan	Re-applied along the inshore fd, rocks
	"	Reconstruction	Before After Verification and Review kelps, etc. soys 20 fm curve
			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.