

7988

Diagram Chart No. 8252-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey ..... HYDROGRAPHIC

Field No. PA-1252 ..... Office No. H-7988

LOCALITY

State ..... S. E. ALASKA

General locality ..... PERIL STRAIT

Locality ..... POGIBSHI POINT TO RODGERS POINT

19~~4~~ 52

CHIEF OF PARTY

JOSEPH P. LUSHENE

LIBRARY & ARCHIVES

DATE ..... SEPT. 23, 1953

B-1870-1 (1)

88621  
7988

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 7988

Field No. PA 1252

State Alaska ✓

General locality Southeast Alaska ✓

Locality Peril Strait ✓

Scale 1/ 10 000 ✓ Date of survey 14 Aug. - 2 Oct. 1952 ✓

Instructions dated 14 Apr. 1947: Sup. 14 Mar. 1950 & 17 Mar. 1952

Vessel PATTON

Chief of party Joseph P. Lushene ✓

Surveyed by Joseph P. Lushene, E.L. Jones, William D. Barbee. ✓

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

Fathograms scaled by H. Hildahl

Fathograms checked by H. Hildahl

Protracted by H.C. Parsons

Soundings penciled by H.C. Parsons

Soundings in fathoms ~~feet~~ at ~~MLLW~~ MLLW ✓  
and are based on the velocity of sound of 800 fms. per second

REMARKS: Smooth sheet and plotting by Seattle  
Processing Office.

1956



DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY NO. H-7988 (PA-1252)

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 Peril Strait from an east-west line at Pogibshi Point north to Rogers Point. The northern limit of the survey is  $57^{\circ} - 35' N$ . The survey extends eastward from the east shore of Chichagof Island to  $135^{\circ} - 23.5' W$ ., and includes all water areas within these limits except a holiday in the southeast corner of the sheet. This holiday is covered on Sheet H-7985 (PA-05152).

(1952)

The following named areas are covered on this survey: Poison Cove, Hoggatt Reefs, Hoonah Sound, Deadman Reach and Favorite Anchorage.

Junctions were made with the following contemporary surveys: H-7988 (PA-1152) in the south; H-7989 (PA-1352) at the entrance to Ushk Bay—northwest corner of H-7988; H-7985 (1952) (PA-05152) which fills the southeast corner of H-7988.

*incorrect PA.*

*Review,  
par. 4.*

All junctions have an overlap sufficient for comparison and comparison is satisfactory.

Field work commenced on 14 August 1952, and was completed on 2 October 1952.

\* BFN decision

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 STATIONS

The soundings were reduced from the records of both the Povorotni Island and Nisemi Cove portable tide gages. For further discussion see Tide Note at end of this report.

No current stations were established within the limits of this survey.

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 arc 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.

Control was augmented by signals located by theodolite cuts; by signals graphically triangulated on planetable sheet PA-A-52; and by isolated signals with sextant locations. The signals in Poison Cove were located by means of a field radial plot.  
T-7108 a & b. (1952)

Control was adequate and satisfactory for hydrography.

G. SHORELINE AND TOPOGRAPHY

The\*shoreline and topography will be compiled for the most part from air photographs which were field inspected by this party. In the field, a preliminary manuscript from the Division of Photogrammetry was used.\**(See Processing Office Notes, pg. 7.)*

Despite the fact that this manuscript was prepared without field inspection notes, it proved most satisfactory.

The topography to be obtained from the air photos was supplemented by the following means:

The MHW line at Hoggatt Island and all connecting rock ledges was located on planetable sheet PA-C-52. (T-7108 b., 1952)

All rock ledges extending offshore from the MHW line and all off-lying rocks and reefs within the limits of the survey, were located by sextant fixes and heights were determined above MLLW.

The MLL Water line was established wherever possible. In that approximately 10% of the MLLW which could not be determined by hydrography -- off abrupt rocky ledges -- lines were run as far inshore as circumstances would permit.

#### 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 fathometer was supplemented by hand lead soundings in critical areas on shoals and reefs, etc.

Several phase comparisons between A & B scales, B & C scales, and C & D scales were taken during the season. Comparisons were taken on calm, flat days, and over flat bottoms.

Soundings were corrected for tides, initial deviation, phase correction 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 used.

#### J. ADEQUACY OF SURVEY

This survey is adequate and complete and should supersede previous surveys of the area for charting purposes.

All junctions with concurrent surveys are satisfactory, and depth curves can be adequately drawn at junctions and within the survey.

#### K. CROSSLINES

The crosslines constitute 6.1% of hydrography exclusive of development on this survey. Crossings are good in all parts of the sheet.

L. COMPARISON WITH PRIOR SURVEYS      *See Review, par. 5*

Comparison was made with previous surveys H-2238 (completed in 1895 at 1:20,000) and H-2242 (completed in 1895 at 1:10,000).  
4

✓ Despite the relative sparsity of soundings on the old surveys, there were few changes, and the general agreement was excellent.

✓ In general, depths in the current and more complete survey agree with the 1895 work. Some new shoals were discovered — these are enumerated in paragraph N.

✓ Suspected discrepancies as enumerated in the preliminary review by G. F. Jordan, 25 January 1950 were investigated with the following results:

1. ✓ The 11 fathom sounding at 57° - 33.3' N., 135° - 33.6' W., does exist. This sounding was circled as questionable in the review. A sounding of ~~9.8~~ fms was obtained on Position 45z.  
10.0 fms smooth sheet ✓

2. ✓ Rock awash at 57° - 31.1' N., and 122° - 31.0' W. This area was inspected visually at a -2.0' tide, and 50 meter sounding lines were run in the area, with no indication being found of a rock or shoal. No rock exists in this area. This feature has already been deleted from the chart.

3. ✓ The one-fathom reef at 57° - 30.6', 122° - 33.2' does not exist. Fifty meter soundings were run over this area without indications of any shoal. This shoal has already been deleted from the chart.

M. COMPARISON WITH CHART NO. 8248      *See Review, par. 6*

✓ The comparison drawn in paragraph L concerning agreements in depth and general character of bottom are applicable to Chart No. 8248.

✓ Two dangers and two shoals not previously charted were found, however, and will be discussed in Paragraph N.

N. DANGERS AND SHOALS

✓ Approximately 50% of the shoreline on this survey is rocky and numerous rock ledges extend past MLIW. These rocks and ledges were located by this field party, but because of their proximity to the shore, they do not constitute dangers, and will not be listed in this paragraph. A list of all rocks and ledges on this survey is appended to this report, however.

Dangers.

1. ✓ Chart No. 8248 (and Survey H-2242) show a safe passage carrying 4 fathoms between Pogibshi Point and the bare rocks south of Povorotni Island (57° - 30.7', 135° - 33.0'). This area is in fact, very foul, and no more than 3 fathoms can be carried. In the center of this "passage" -- at position 159e + 15 seconds -- a reduced sounding of 1.6 fms was recorded. This passage is frequently used by fishing boats and so the discrepancy is important.
2. ✓ A rock awash was found near the mouth of Ushk Bay -- 57° - 34.2', 135° - 34.4'. A height of 0.0 feet at MLW was obtained on position 46z. Both Chart 8248 and Survey No. 2238 show a sounding of 1-3/4 fathoms here. It is recommended that this be replaced by a rock awash symbol.

*-0.3 fm \*(2)  
Hand lead  
Pop. 532*

Shoals.

1. ✓ A new shoal with a least depth of 7.1 fathoms on Position 38z at 57° - 34.7', 135° 32.15'. No indication of this is shown on either survey 2238 or Chart 8248.
2. ✓ A shoal of 15 fathoms in 35 fathoms was found (and developed) at 57° - 34.3', 135° - 26.9' (Position 45p + 15 seconds).

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 floating aids to navigation within the limits of this survey.

✓ The only fixed aid -- Povorotni Island Light -- was located as a triangulation inter-section station and was reported on Form 567.

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.

*On file with 854.  
L.H.*

S. SILTED AREAS

An examination of fathograms from this survey reveals no evidence of silting. Although bottom characteristics reveal some mud bottom, the agreement of this survey with those of 1895 would tend to classify the area as stable. ✓

T. to 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. Descriptive Report to Accompany Topographic Survey PA-C-52 (77108 by 1952)
3. Triangulation Report

Applicable data attached to this report

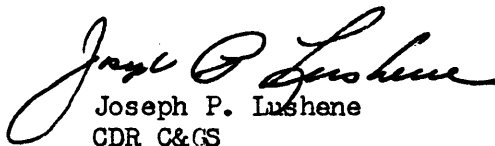
1. Statistics
2. Tide Note
3. List of Rocks and ~~Signals~~ Shoals ✓
4. Abstract of Bar Checks

Respectfully submitted by



William D. Barbee  
ENSIGN C&GS

Approved and Forwarded



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

H 7988  
Pa 1252

Peril Strait

Processing Office Notes.

Smooth sheet.

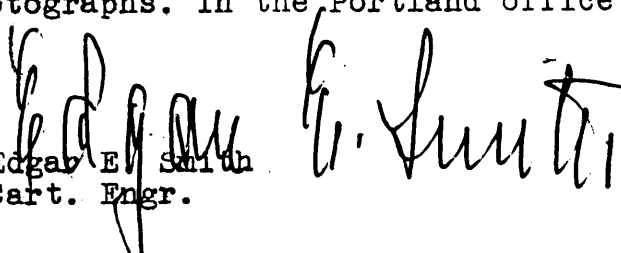
The projection was made by hand on a cut sheet.

Shoreline is from T 98<sup>(1942-52)</sup>27 and T <sup>11292(1948-52)</sup>9898. The hydrographer made notes and sketches in sounding record Vol.5 for correction to the northern shoreline between meridians 135 34 and 135 35. A copy of these data <sup>was</sup> sent to Portland for correction to T 9897. The corrections were applied to the map manuscript in the photogrammetric office. A tracing of the change was returned to us so that the hydro sheet could be made to agree. The tracing is attached to this report.

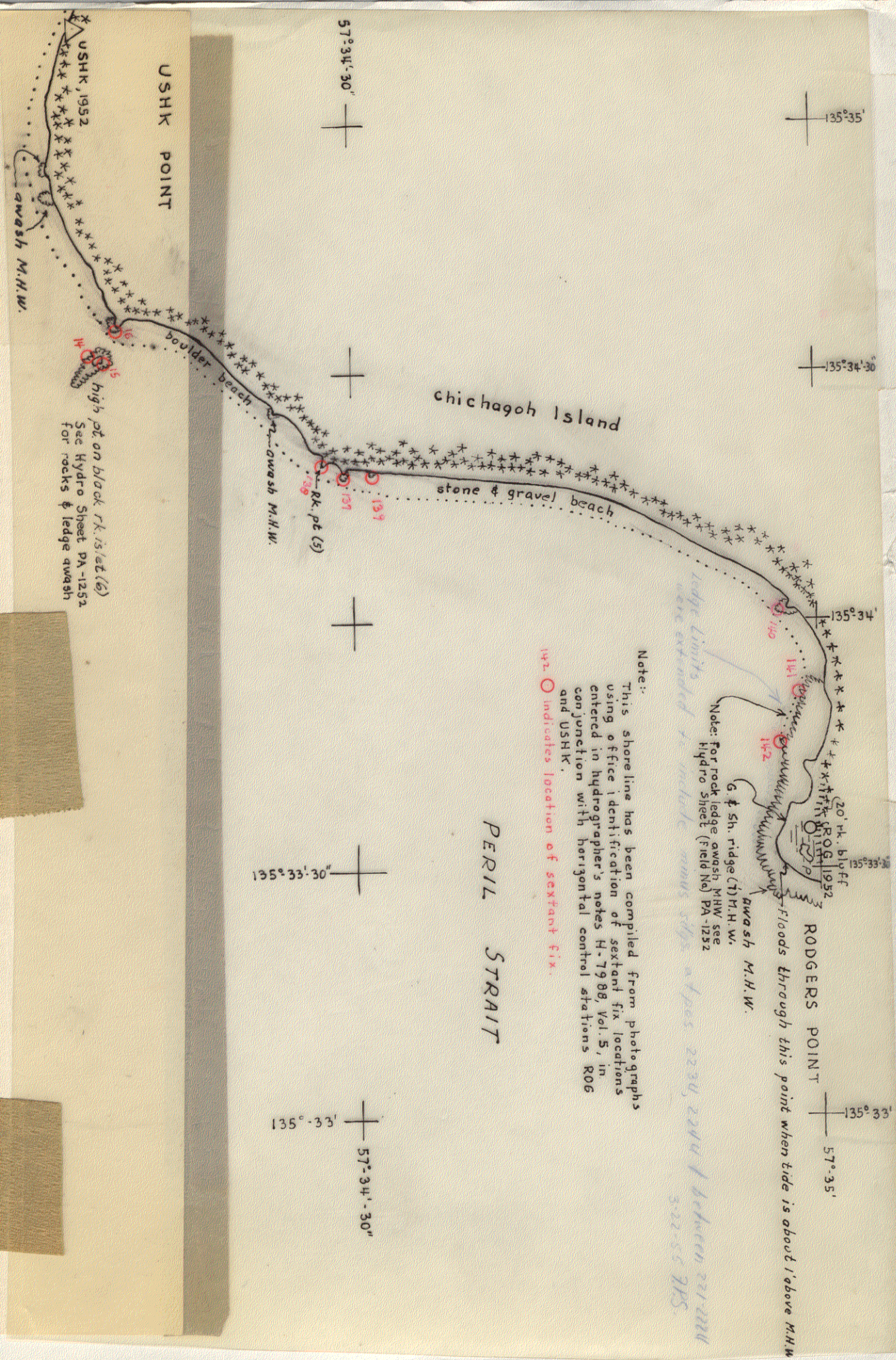
Signals are from second and fourth order field computations of 1952 by this party, and from graphic control sheet Pa-A-52. Signals in Poison Cove are from T. 9897. <sup>(T-7108a+b)</sup>  
1952

Photogrammetric sheets T 9897 and T <sup>11292</sup>9898 were plotted from inspected photographs. in the Portland office.

Edgar E. Smith  
Cart. Engr.







high pt on black rk. islet (6)  
See Hydro Sheet PA-1252  
for rocks & ledge awash

Note:  
This shoreline has been compiled from photographs using office identification of sextant fix locations entered in hydrographer's notes H-7988, Vol. 5, in conjunction with horizontal control stations, ROG and USHK.  
**142** O indicates location of sextant fix.

*Ridge limits were extended to include minus slope as per 2230, 2000 / between 21-21 and 32-55 985*

Note: For rock ledge awash M.H.W. see Hydro Sheet (Field No) PA-1252  
G. & Sh. ridge (7) M.H.W.  
Floods through this point when tide is about 1 above M.H.W.

PERIL STRAIT





TIDE NOTE

Two tide stations -- Povorotni Island Portable Tide Gage and Nismeni Cove Portable Tide Gage -- were used to reduce soundings for this sheet. As per Director's Letter, refer 36-rcb, dated 26 July 1950, the limit of hydrography for each tide gage was a line connecting Point Marie and Favorite Anchorage. Since these features -- especially Favorite Anchorage -- are large and indefinite, the dividing line was set by the field party as that line which connects  $57^{\circ} - 33.0'$  N., and  $135^{\circ} - 34.0'$  W. (Point Marie) with  $57^{\circ} - 32.5'$  N., and  $135^{\circ} - 28.0'$  W. (Favorite Anchorage). Povorotni Island tides were used southwest of this line, and Nismeni Cove tides were used northeast of it. No time and range corrections were applied on this survey.

The plane of reference -- MLLW -- was 5.7 feet on the staff at Nismeni Cove and 4.6 feet on the staff at Povorotni Island as per Director's Letter of 18 September 1952, Reference No. 36-rcb.

ABSTRACT OF BAR CHECKS

SHEET 1252

DEPTH = 2.0 fms

DATE	DAY	DEPTH RECORDED	DATE	DAY	DEPTH RECORDED
8-11-52	a	1.80	9-6-52	p	1.70
"	a	1.80	"	p	1.70
"	a	1.80	9-9-52	q	1.70
8-15-52	b	1.80	"	q	1.70
"	b	1.80	"	q	1.70
"	b	1.80	9-12-52	r	1.70
8-18-52	c	1.80	"	r	1.80
"	c	1.80	"	r	1.70
8-19-52	d	1.70	9-19-52	s	1.70
"	d	1.70	"	s	1.70
8-20-52	e	1.80	"	s	1.80
"	e	1.70	9-20-52	t	1.65
"	e	1.70	"	t	1.60
8-21-52	f	1.70	"	t	1.70
"	f	1.70	9-21-52	u	1.60
"	f	1.70	"	u	1.70
8-22-52	g	1.80	"	v	1.70
"	g	1.70	9-22-52	v	1.70
"	g	1.70	"	v	1.65
8-25-52	h	1.80	"	v	1.60
"	h	1.60	9-23-52	w	1.80
8-29-52	j	1.80	"	w	1.75
8-30-52	k	1.70	9-25-52	x	1.60
"	k	1.70	"	x	1.70
9-3-52	l	1.70	"	x	1.60
"	l	1.70	9-26-52	y	1.70
"	l	1.70	"	y	1.70
9-4-52	m	1.80	10-2-52	z	1.70
"	m	1.80	"	z	1.70
"	m	1.80			
9-5-52	n	1.80			
"	n	1.80			
"	n	1.80			

Total: 106.85

Average: 1.72

Initial correction = +0.28 fathoms

7988

## STATISTICS PA-1252

DATE 1952	DAY LETTER	VOL. NO.	HL & WIRE	POSITIONS	STAT. MILES SOUNDING
14 Aug.	a	1	—	223	41.3
15 "	b	1 & 2	—	223	45.5
18 "	c	2	—	67	17.1
19 "	d	2	—	124	13.8
20 "	e	2 & 3	—	174	21.9
21 "	f	3	—	180	21.6
22 "	g	3 & 4	—	165	15.4
25 "	h	4	—	126	13.8
29 "	j	4	—	40	2.3
30 "	k	4	—	92	14.8
3 Sept.	l	4 & 5	—	103	16.6
4 "	m	5	—	142	17.0
5 "	n	5 & 6	—	143	21.5
6 "	p	6	—	74	10.9
9 "	q	6	—	228	37.7
12 "	r	7	—	249	40.1
19 "	s	7 & 8	—	282	38.6
20 "	t	8 & 9	—	262	33.3
21 "	u	9	—	235	38.4
22 "	v	9 & 10	—	166	22.5
23 "	w	10	—	110	15.0
25 "	x	10	9	55	3.2
26 "	y	10	—	86	16.0
2 Oct.	z	10 & 11	<u>3</u>	<u>46</u>	<u>4.9</u>
			12	3595	513.2
23 Sept.	A	12	—	17	--
25 "	B	12	—	4	--
GRAND TOTAL:				3616	513.2

AREA SURVEYED: 36.5 sq. naut. miles



LIST OF ROCKS & LEDGES ON SHEET 1252

DATE 1952	POSITION	VOL. & PAGE NO.	HEIGHT*	DATE 1952	POSITION	VOL. & PAGE NO.	HEIGHT
14 Aug.	32a	Vol. 1, P. 8	-12.6 ✓	4 Sept	130m	Vol 5 P 50	- 0.6 ✓
20 "	15e	2, 62	- 1.1 ✓	4 Sept.	131m	Vol. 5, P. 51	- 2.2 ✓
20 "	16e	2, 63	- 8.8 ✓	4 "	132m	5, 51	+ 1.2 ✓
21 "	1f	3, 23	+ 0.4 ✓	4 "	133m	5, 51	+ 1.0 ✓
21 "	2f	3, 23	+ 0.6 ✓	4 "	134m	5, 51	+ 1.0 ✓
21 "	3f	3, 23	- 1.9 ✓	4 "	135m	5, 51	+ 0.8 ✓
21 "	4f	3, 23	+ 0.6 ✓	4 "	136m	5, 51	- 3.4 ✓
21 "	5f	3, 24	-14.4 ✓	4 "	137m	5, 52	- 6.4 ✓
21 "	6f	3, 24	+ 0.6 ✓	4 "	139m	5, 52	-13.4 ✓
21 "	7f	3, 24	+ 1.7 ✓	4 "	140m	5, 52	-10.0 ✓
21 "	8f	3, 24	+ 0.7 ✓	4 "	141m	5, 53	-10.0 ✓
21 "	9f	3, 24	+ 0.1 ✓	4 "	142m	5, 53	-11.2 ✓
21 "	10f	3, 24	- 2.4 ✓	5 "	1n	5, 55	- 5.4 ✓
21 "	11f	3, 24	- 3.4 ✓	5 "	2n	5, 55	+ 2.6 ✓
21 "	12f	3, 25	- 2.4 ✓	5 "	3n	5, 56	+ 2.6 ✓
21 "	13f	3, 25	- 0.2 ✓	5 "	4n	5, 56	- 2.6 ✓
21 "	14f	3, 25	- 1.2 ✓	5 "	5n	5, 56	+ 2.4 ✓
21 "	15f	3, 25	- 0.2 ✓	5 "	6n	5, 56	-13.8 ✓
21 "	16f	3, 25	- <del>3.2</del> -1.4 ✓	6 "	1p	6, 17	- 4.2 ✓
21 "	17f	3, 25	- <del>1.2</del> +0.6 ✓	6 "	2p	6, 17	- 6.2 ✓
21 "	18f	3, 26	+ 0.6 ✓	12 "	209r	7, 45	- <del>10.4</del> ✓
21 "	19f	3, 26	+ 0.4 ✓	2 Oct.	{ 46z	11, 14	0.0 ✓
21 "	20f	3, 26	+ <del>0.4</del> -0.6 ✓	Sept 25	{ 53x	10, 47	- 0.3 ✓
22 "	1g	3, 57	- 0.4 ✓				
22 "	2g	3, 57	- 0.4 ✓				
22 "	3g	3, 57	- 1.4 ✓				
22 "	4g	3, 58	- 3.4 ✓				
22 "	5g	3, 58	- 4.2 ✓				
22 "	6g	3, 58	- 4.2 ✓				
22 "	7g	3, 58	- 1.0 ✓				
22 "	8g	3, 58	- 1.7 ✓				
22 "	12g	3, 59	- 0.2 ✓				
22 "	13g	3, 59	- 0.4 ✓				
22 "	14g	3, 59	- 0.4 ✓				
22 "	15g	3, 59	- 0.6 ✓				
22 "	16g	3, 60	- 0.6 ✓				
3 Sept.	1 - 4 <sup>52</sup>	4, 68	-1.4 ✓	10 -	-1.9 ✓		
4 "	1m	5, 24	- 9.0 ✓	20 -	-3.4 ✓		
4 "	2m	5, 24	- 7.2 ✓	30 -	-7.4 ✓		
4 "	4m <sup>3m</sup>	5, 25	-10.3 ✓	40 -	-2.6 ✓		
4 "	5m	5, 25	- 2.6 ✓				
4 "	6m	5, 25	-10.3 ✓				
4 "	7m	5, 26	- 6.4 ✓				
4 "	8m	5, 26	- 5.8 ✓				
4 "	9m	5, 26	- 2.4 ✓				
4 "	10m	5, 27	- 0.6 ✓				
4 "	11m	5, 27	- 1.2 ✓				
4 "	12m	5, 27	- 3.0 ✓				
4 "	13m	5, 27	- 3.6 ✓				
4 "	15m	5, 28	-10.4 ✓				
4 "	16m	5, 28	- 9.8 ✓				

/ rock awash symbol  
\* Ledge symbol

Comp. W.D.B.

\*Heights in feet, "-" above MLLW, "+" below MLLW



PHASE COMPARISON

1952

SHIP PATTON

PA 1252  
VOL. 10, PAGE 45

<u>B</u>	<u>C</u>	<u>Corr'n (to C)</u>	
78.0	78.0	0.0	
80.2	80.0	+0.2	
82.6	82.2	+0.4	
83.0	82.6	+0.4	
84.0	83.6	+0.4	
84.4	84.0	+0.4	Corr'n = +0.3 fm
84.8	84.5	+0.3	
85.4	85.0	+0.4	
85.6	85.6	0.0	
86.2	85.8	+0.4	
		<hr/>	
		2.9	

<u>C</u>	<u>D</u>	<u>Corr'n (to D)</u>	
112.6	112.5	+0.1	
112.7	112.6	+0.1	
112.9	112.8	+0.1	
112.9	112.8	+0.1	
112.8	112.7	+0.1	Corr'n = +0.1 fm
112.8	112.7	+0.1	
113.0	112.8	+0.2	
112.8	112.7	+0.1	
113.0	112.9	+0.1	
112.9	112.8	+0.1	
		<hr/>	
		1.1	

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<u>A</u>	<u>B</u>	<u>Corr'n (to B)</u>	
40.5	40.3	+0.2	
40.5	40.4	+0.1	
40.4	40.3	+0.1	
40.4	40.2	+0.2	
40.5	40.3	+0.2	Corr'n = +0.2 fm
40.5	40.3	+0.2	
40.4	40.2	+0.2	
40.4	40.1	+0.3	
40.4	40.1	+0.3	
40.4	40.1	+0.3	
		<hr/>	
		2.1	

PHASE COMPARISON, Continued

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A	B	<u>Corr'n (to B)</u>	
42.0	41.9	+0.1	
41.4	41.4	0.0	
41.2	41.0	+0.2	Corr'n = $\frac{0.3}{8} = 0.04$
40.8	40.8	0.0	
40.5	40.4	+0.1	Corr'n = 0
40.0	40.0	0.0	
39.8	39.8	0.0	
39.4	39.5	-0.1	
		+0.3	

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Vol.13 Page 13

B	C	<u>Corr'n (to C)</u>	
78.0	77.8	+0.2	
78.2	77.7	0.5	
78.0	77.7	0.3	
77.8	77.6	0.2	
77.7	77.0	(0.7)R	
77.2	76.8	0.4	
77.2	76.8	0.4	Corr'n = +0.34 fm
77.1	76.6	0.5	
77.1	76.8	0.3	
77.1	76.8	0.3	
		3.1	

Final corrections for phase:

A Scale = 0

B Scale =  $\frac{+0.21 + .04}{2} = +0.12$  fms

C Scale =  $\frac{+.29 + .34}{2} + 0.12 = +0.44$  fms

D Scale =  $+.11 + .44 = +0.55$  fms

H 7988  
Pa 1252

List of Geographic names  
penciled on smooth sheet.

Baranof Island  
Chichagof Island  
Deadman Reach  
Dolph Rock  
Elovoi Island  
Favorite Anchorage  
Ford Rock  
Hoggatt Reefs  
Hoonah Sound  
Krugloi Island  
Peril Strait  
Pogbishi Point  
Pogbishi Anchorage  
Poison Cove  
Pt. Marie  
Povorotni Island  
Ushk Bay  
Ushk Point  
Rodgers Point

GEOGRAPHIC NAMES

Survey No. H-7988

Name on Survey	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		
	A	B	C	D	E	F	G	H	K	
<u>Southeastern Alaska</u>										1
<u>Baranof Island</u>									B.G.N	2
<u>Chichichagof Island</u>									"	3
<u>Peril Strait</u>										4
										5
<u>Pogibshi Point</u>									B.G.N	6
<u>Pogibshi Anchorage</u>										7
										8
<u>Povorotni Island</u>										9
										10
<u>Poison Cove</u>										11
<u>Favorite Anchorage</u>										12
<u>Hoggatt Reefs</u>										13
<u>Hoggatt Island</u>										14
										15
<u>Deadman Reach</u>										16
<u>Krugloi Island</u>										17
<u>Elovoi Island</u>										18
<u>Rodgers Point</u>										19
<u>Ushk Point</u>										20
<u>Ushk Bay</u>										21
<u>Point Marie</u>										22
<u>Dolph Rock</u>										23
<u>Ford Rock</u>										24
										25
										26
										27
<u>Nismeni Cove</u>										28

use instead Goose Cove, recommended in project names report. Chart 824 is being changed to agree.

(new name)

Names underlined in red are approved. 11-28-53  
L. HECK

(tide station)



Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7988....

Records accompanying survey:

Boat sheets ...1.; sounding vols. 11....; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 2 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		3616
		.....
Number of positions checked		198
		.....
Number of positions revised		7
		.....
Number of soundings revised (refers to depth only)		47
<i>Minor scanning corrections of ± tenths</i>		200
		.....
Number of soundings erroneously spaced		13
		.....
Number of signals erroneously plotted or transferred		0
		.....
Topographic details	Time	8 hrs
<i>Resolving conflicts in rock elevations -</i>		32 hrs
Junctions	Time	11 hrs
		.....
Verification of soundings from graphic record	Time	5 hrs
		.....

Verification by *F. P. SAULSBURY*..... Total time 2.95... Date 4-10-55.

Reviewed by *J. A. Dinsmore*..... Time 31... Date 6 May 1955

DIVISION OF CHARTS  
REVIEW SECTION - NAUTICAL CHART BRANCH  
REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7988

FIELD NO. PA-1252

Alaska, S. E. Alaska, Peril Strait

Project No. CS-247

Surveyed Aug. - Oct., 1952

Scale 1:10,000

Soundings:

Control:

808 Fathometer  
Hand lead

Sextant fixes on  
shore signals

Chief of Party - J. P. Lushene  
Surveyed by - J. P. Lushene, E. L. Jones and W. D. Barbee  
Protracted by - H. C. Parsons  
Soundings plotted by - H. C. Parsons  
Verified and inked by - F. P. Saulsbury  
Reviewed by - T. A. Dinsmore      6 May 1955  
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with planetable survey T-7108 a and b (1952) and the unreviewed manuscripts of air-photographic surveys T-9897 (1942-52) and T-11292 (1948-52). *Compared with reviewed manuscripts*

The origin of the signals is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in very good agreement. In a few localities, differences of 1 fm. were resolved by rescanning the fathograms.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The low-water line was determined where practicable.

The bottom for the most part drops rapidly from the low-water line to depths of 10 fms. Several conspicuous reefs and ledges which rise rather abruptly from considerable depths are scattered

throughout the area. These together with prominent shoals and mounds contribute to the general unevenness of the bottom.

#### 4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7985 (1952) on the east and H-7989 (1952) on the west. The transfer of junctional soundings with H-7989 is deferred pending the complete verification of that survey. The junction with H-7986 (1952) on the south will be considered in the review of that survey. No contemporary surveys are available at this time on the north and northeast. However, at these limits, charted depths are in harmony with the present survey depths.

#### 5. Comparison with Prior Surveys

##### a. H-1627 (1884), 1:20,000

This early reconnaissance survey may be disregarded as lacking sufficient reliable information for a comparison of any value.

##### b. H-2238 (1895), 1:40,000

##### H-2242 (1895), 1:10,000

The present survey falls within the area covered by these prior surveys. 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 many shoaler depths and numerous rocks not shown on the prior surveys. The more thorough coverage of the present survey also defines the bottom configuration more completely and clearly.

The following discrepancies on the prior surveys are noted:

(1) The 25-fm. sounding charted in lat.  $57^{\circ}34.39'$ , long.  $135^{\circ}27.20'$ , from H-2238 should be disregarded. Falling in 35-fm. depths on both the prior and present surveys, the prior sounding is considered to be 10 fms. in error.

(2) The 39-fm. sounding charted in lat.  $57^{\circ}33.85'$ , long.  $135^{\circ}29.79'$ , from H-2238 should be disregarded. Falling in smooth-bottom depths of 45-46 fms. on the present survey, the prior unsupported sounding is considered discredited by the present survey depths.

(3) The 15-fm. sounding charted in lat.  $57^{\circ}33.45'$ , long.  $135^{\circ}30.20'$ , from H-2238 should be disregarded. Falling in 35-fm. depths on the present survey, the prior sounding is considered to be out of position and should actually fall on the slope about 180 meters southward where comparable depths were obtained on the present survey.

(4) The  $7\frac{1}{2}$ -fm. sounding charted in lat.  $57^{\circ}31.97'$ , long.  $135^{\circ}29.46'$ , from H-2238 should be disregarded. Falling in 19-fm. depths on the present survey, the prior sounding is considered to be out of position and should actually fall about 160 meters closer inshore where comparable depths were obtained on the present survey.

Three soundings and several bottom characteristics have been retained from the prior surveys. With these additions, the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 8248 (C. P. Drawing No. 5, April 6, 1955)  
Chart 8283 (Latest print date March 23, 1953)

A. Hydrography

Charted hydrography originates principally with the prior surveys which need no further consideration. Several rocks and critical soundings have been charted from the present survey prior to verification and review. Numerous revisions have been made to smooth-sheet soundings during verification.

The 13-fm sounding charted in lat.  $57^{\circ}31.00'$ , long.  $135^{\circ}32.98'$ , is erroneously positioned. Originating with H-2242 (1895) the 13 in it's charted position falls in 30-fm. depths on the present survey. In its correct position in lat.  $57^{\circ}30.96'$ , long.  $135^{\circ}32.80'$ , on H-2242 the prior sounding falls in 13-fm. depths on the present survey. The charted position should be corrected accordingly. ?

The present survey entirely supersedes the charted information.

B. Aids to Navigation

The survey and charted positions of the light in lat.  $57^{\circ}30.87'$ , long.  $135^{\circ}33.21'$ , are identical. There are no other aids to navigation within the limits of the present survey. The dangers to navigation are apparent on the survey smooth sheet.

7. Condition of Survey

- a. The sounding records are complete; The Descriptive Report covers all matters of importance.
- b. The smooth plotting was accurately done.
- c. In the reduction of rock elevations with reference to the plane of mean high water, the mean range of tide (12.4 ft.) was used on both the hydrographic survey and the photogrammetric

surveys instead of the difference (14.0 ft.) between mean lower low water and mean high water. Considerable extra time was expended during verification in resolving these discrepancies. The discrepancies were brought to the attention of the Division of Photogrammetry who revised the manuscripts accordingly.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is required. As a matter of record it is noted that the 21-fm. shoal in lat.  $57^{\circ}31.97'$ , long.  $135^{\circ}32.15'$  is sparsely developed.

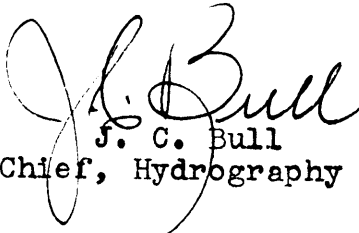
Examined and Approved:



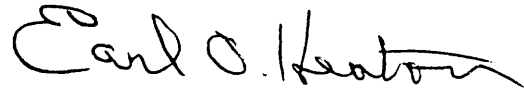
H. R. Edmonston  
Chief, Nautical Chart Branch



E. R. McCarthy  
Acting Chief, Chart Division



J. C. Bull  
Chief, Hydrography Branch



Earl O. Heaton  
Chief, Division of Coastal Surveys

839

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~NOV 18 1953~~ ~~COAST AND GEODETIC SURVEY~~

13 October 1953

Division of Charts: R. H. Carstens

Plane of reference approved in  
11 volumes of sounding records for

HYDROGRAPHIC SHEET 7988

Locality Peril Strait, Alaska

Chief of Party: J. P. Lushene in 1952

Plane of reference is mean lower low water, reading

4.6 ft. on tide staff at Povorotni Island

21.9 ft. below B. M. 2 (1952)

5.7 ft. on tide staff at Nismeni Cove, Peril Strait

22.6 ft. below B. M. 1 (1952)

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

Condition of records satisfactory except as noted below:

*E.C. McKay*  
Section of Tides

Chief, Division of Tides and Currents.

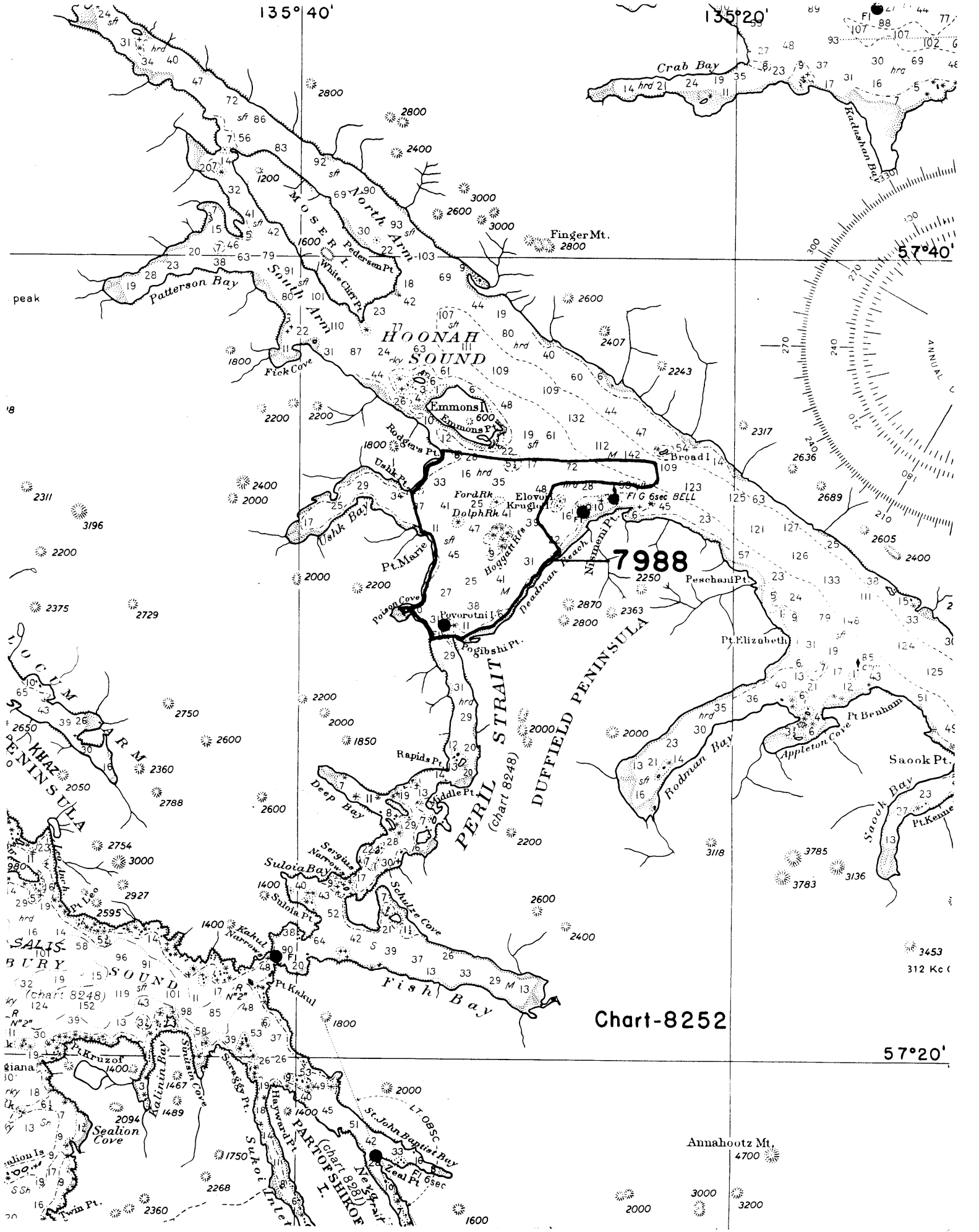


Chart-8252

57°20'

Annahootz Mt.  
4700

2000 3000 3200

