

7986

Diag. Cht. No. 8252-2

Form 504

CS-247

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey **HYDROGRAPHIC**
Pa 1152 &
Field No. **PA-05252** Office No. **H-7986**

LOCALITY

State **Alaska**
General locality **S. E. Alaska**
Locality **Peril Strait**

1952

CHIEF OF PARTY

Joseph P. Lushene

LIBRARY & ARCHIVES

DATE **AUG 11 1952**

B-1870-1 (1)

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 7986

Field No. Pa 05252 & Pa 1152

State Southeast Alaska

General locality Peril Strait

Locality Yellow Point to ~~Spasni Islands~~ Pogibshi Point

Scale 1/ 5 000 & 1:10,000 Date of survey 3 Aug. - 12 Sept. 1952
~~3 - 13 August 1952~~

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

Vessel U S C & G S S PATTON

Chief of party Joseph P. Lushene

Surveyed by Joseph P. Lushene, E.L. Jones.

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

Fathograms scaled by H. Hildahl.

Fathograms checked by H. Hildahl & P. Karras

Protracted by WM. M. Martin

Soundings penciled by WM. M. Martin

Soundings in fathoms ^{and tenths} 9/100 at MLW MLLW
and are based on a velocity of sound of 800 fms. per sec.

REMARKS: Smooth sheet plotted in Seattle Processing Office.

JPL

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY NO. H-7986 (PA-05252)

PERIL STRAIT, S. E. ALASKA

SCALE 1:5,000 - 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 the Arthur Island - Yellow Point line north to latitude $57^{\circ} - 27' - 52''$.

The following named areas are covered in this survey:

Rose Channel and Adams Channel

Junctions were made with the following contemporary surveys:

H-7987 ⁸ (1952) ~~(PA-1152)~~ in the north and
H-7931 (PA-1151) in the south
(1951)

*Review,
par. 4.*

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

Field work was commenced on 3 August 1952 and finished 13 August 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 very shoal water, the launch was operated at a speed of 4 knots and at this speed the turning radius was 20 meters

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

Bottom samples were taken with a snapper using a hand wire sounding machine mounted forward on the launch.

D. TIDE AND CURRENT STATIONS

The soundings were reduced from the records of the Povorotni Island tide gage.

A current station was observed in Adams Channel. For specific details see Report On Current Stations, 1952 by Joseph P. Lushene.

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 second order triangulation arc that was carried from 1951 stations west 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 in 1951 and still standing in good condition; by signals graphically triangulated on planetable sheet PA-B-52.
(subsequently destroyed)

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.

Despite the fact that this manuscript was prepared without field inspection notes, it proved satisfactory in most instances. A slight discrepancy was found in the MHWL of Big Rose and Little Rose Islands which will be corrected by a new manuscript prepared on field inspection notes. See T-9897 & T-9899 (1952)

The shoreline in the southeast corner of this sheet was obtained from preliminary manuscript RS-386 compiled prior to field work and is 0.8 feet above MHW. Mean High Water in this area is very difficult to determine visually. On 3 August 1952 at 1231 ± 15 minutes (when high water was 12.3 feet predicted; mean range of Povorotni Island is 12.4 feet) stakes were driven at MHW and located with a planetable and MHW line delineated. See planetable Sheet PA-B-52. (Transferred to T-9899, 1952)

Review,
par. 1

A rock above MHW between Little and Big Rose Islands was also located on Sheet PA-B-52.

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 determined above MLLW

The MLL waterline was well established.

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, shoals, reefs, etc. ✓

Soundings were corrected for tides, initial deviation and index error as determined by bar checks. All the soundings were taken on phase scale A and, therefore, no phase corrections were necessary.

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 super^sede 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 percentage of cross lines is considered adequate. Crossings are good in all parts of the sheet. ✓

L. COMPARISON WITH PRIOR SURVEYS

Comparison was made with previous surveys H-2242 (completed in 1895) on a scale of 10,000.

In general, depths in the present survey agree with the 1895 work. Despite the relative sparsity of soundings on the old surveys, there were few changes and the agreement is considered excellent. ✓

*Review,
par. 5.*

M. COMPARISON WITH CHART NO. 8248

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

*Review,
par. 6.*

N. DANGERS AND SHOALS

All charted dangers, shoals, and bare rocks as charted were found.

A shoal 200 meters north-northwest of Station GIST 2 1952 with a hand lead sounding of *1.9 fathoms was found. This may be a danger for a vessel plying too closely to the shore.

** 1.7 fms. was obtained by fathometer between 9-10h
and is inked on s. s. as shoalest sdg.*

O. COAST PILOT INFORMATION

Coast Pilot notes were prepared in 1950. No changes have occurred since that time and no report submitted at this time.

The Rose Channel and Adams Channel are the two natural channels. The Rose Channel is used by small boats and has a heavy flow of traffic. The Adams Channel is used by the large ships of The Alaska Steamship Company. A few small boat owners not familiar with Rose Channel also use the Adams Channel.

Adams Channel was preferred by the Ship PATTON.

Except at slack water, the water is very turbulent over 3 shoals about 200 meters southeast of Rapid Point.
(noted on smooth sheet)

P. AIDS TO NAVIGATION

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

Two fixed aids - Rose Channel Day Beacon and Rose Island Rock Light were located as triangulation intersection stations and reported on Form 567.

Q. LANDMARK 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 fathograms from this survey reveals no evidence of silting. This area appears to be stable. The current in the channels tends to keep silting and shoaling to a minimum.

T. - Y.

No information applicable for these headings.

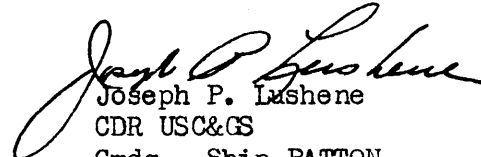
Z. TABULATION OF APPLICABLE DATA

1. Field Inspection of Air Photographs 1952
2. Descriptive Report to Accompany Topographic Survey PA-B-52 (*enclosed with D.R. of present survey*)
← destroyed after review of " "
3. Triangulation Report
4. Report on Current Stations 1952

Applicable Data attached to this Report

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

Respectfully submitted,


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

7986

STATISTICS PA-05252

<u>DATE</u> <u>1952</u>	<u>DAY</u> <u>LETTER</u>	<u>VOL.</u> <u>NO.</u>	<u>HAND LEAD</u> <u>& WIRE</u>	<u>POSITIONS</u>	<u>STATUTE MILES</u> <u>SOUNDING</u>
3 Aug.	a	1	-	157	12.4
4 "	b	1 & 2	-	294	19.2
5 "	c	2 & 3	-	175	11.7
6 "	d	3	-	196	13.6
7 "	e	3 & 4	-	223	12.7
8 "	f	4	-	93	5.5
11 "	g	4 & 5	-	142	8.9
12 "	h	5	2	193	10.4
13 "	j	6	-	<u>142</u>	<u>6.8</u>
Totals:			2	1615	101.2

Area = 0.9 sq. statute miles

✓

LIST OF ROCKS & LEDGES ON PA-05252

DATE 1952	POSITION	VOL. & PAGE	HEIGHT	DATE 1952	POSITION	VOL. & PAGE	HEIGHT
5 Aug.	1c	2 - 37	+4.2	6 Aug.	6d	3 - 10	+3.0
5 "	2c	2 - 37	0	6 "	7d		
5 "	3c	2 - 37	-3.0	6 "	8d	3 - 10	+2.2
5 "	4c	2 - 38	+3.8	6 "	9d	3 - 10	+2.2
5 "	5c	2 - 38	+3.8	6 "	10d	3 - 10	-1.0
5 "	6c	2 - 38	+3.4	6 "	11d	3 - 11	+0.6
5 "	7c	2 - 38	-10.8	6 "	12d	3 - 11	-3.6
5 "	8c	2 - 38	-1.0	6 "	13d		
5 "	9c	2 - 38	-1.0	6 "	14d	3 - 11	-3.8
5 "	10c	2 - 38	-7.2	6 "	15d	3 - 11	-10.4
5 "	11c	2 - 39	-1.6	6 "	16d	3 - 11	-2.4
5 "	12c	2 - 39	-1.6	6 "	17d	3 - 11	-3.6
5 "	13c	2 - 39	-2.0	6 "	18d	3 - 12	-2.8
5 "	14c	2 - 39	-12.2	6 "	19d	3 - 12	0
5 "	15c	2 - 39	-1.4	7 "	1e	3 - 55	+4.6
5 "	16c	2 - 39	-6.4	7 "	2e	3 - 55	+4.6
5 "	17c	2 - 40	-2.0	7 "	3e	3 - 55	+4.8
5 "	18c	2 - 40	-4.0	7 "	4e	3 - 56	+4.8
5 "	19c	2 - 40	-3.6	7 "	5e	3 - 56	+5.0
6 "	1d	3 - 9	-3.2	7 "	6e	3 - 56	+5.0
6 "	3d	3 - 9	+3.4	7 "	7e	3 - 56	+5.0
6 "	4d	3 - 10	-1.1	7 "	8e	3 - 56	+4.8
6 "	5d	3 - 10	+3.2	7 "	9e	3 - 56	+4.0

Comp. W.D.B.

Heights in feet (-) above MLW, (+) below MLW

*all positions checked
and proper action taken.
F.E.H. 8.3.55*

ABSTRACT OF BAR CHECKS

SHEET 05252

True Depth = 2.0 fms

<u>DATE</u>	<u>DAY</u>	<u>DEPTH RECORDED</u>
1952		
8-3	a	1.80
8-3	a	1.70
8-4	b	1.70
8-4	b	1.70
8-4	b	1.65
8-5	c	1.80
8-5	c	1.80
8-6	d	1.70
8-6	d	1.80
8-6	d	1.70
8-7	e	1.70
8-7	e	1.75
8-7	e	1.70
8-8	f	1.70
8-8	f	1.70
8-11	g	1.70
8-11	g	1.80
8-12	h	1.70
8-12	h	1.70
8-12	h	1.80
8-13	j	1.80
8-13	j	1.80
8-13	j	1.80
	Total	<u>40.00</u>

Average = 1.74

Initial correction = +0.26 fms

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

H 7986
Pa 05252

Peril Strait

Southeast Alaska

Processing Office Notes.


Smooth sheet.

The projection was made by hand on Whatman paper. The coordinates of all computed points are from the field computations of 1951 and 1952 by this party. Topographic signals are from graphic control sheet * Pa-B-52. Shoreline was transferred from Map Ms T 989^g which was compiled from inspected photographs.

The low water limits of the shore ledges which were sketched on the boatsheet by the hydrographers were transferred to the smooth sheet. The north part of Big Rose I. was not accurately drawn on the boatsheet for lack of inspected shoreline at that time. At this place the shore ledges have been made to conform with inspected shoreline and hydrography.

Revised
during
verification

* subsequently destroyed


Edgar E. Smith
Cart. Engr. 8/3/53

Pa 1152

DESCRIPTIVE REPORT TO ACCOMPANY
7986
HYDROGRAPHIC SURVEY NO. H-~~7987~~ (PA-1152)

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 midway between the northern end of Big Rose Island and the southern extremity of Nixon Shoal northward to an east-west line through Pogibshi Point. The survey covers all water areas within these limits, and there are no holidays. ✓

Junctions ^{was} ~~are~~ made with contemporary surveys ~~H-7986~~ (PA-05252) in the south, and H-7988 (PA-1252) in the north. All junctions have an overlap sufficient for comparison, and comparisons are satisfactory. ✓

Review,
par. 4.

Field work commenced 26 August 1952, and was completed 12 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 launch, using a hand wire sounding machine.

D. TIDE AND CURRENT STATIONS

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

During the 1952 field season, one current station, located just south of Pogibshi Point, was established on this survey. For specific details, see REPORT ON CURRENT STATIONS, 1952 by Joseph P. Lushene.

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 one (1) signal located by hydrographic means.

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.*

A preliminary manuscript prepared by the Division of Photogrammetry without benefit of field inspection was used in the field with excellent results.

All rock ledges and off-lying rocks within the limits of this sheet were located by sextant fixes.

All mean lower low water line within the limits of this survey was established by means of 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 within the limits of 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 and signals ashore. No unusual or substandard methods were employed.

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 delineated at junctions and within the survey.

K. CROSSLINES

The crosslines constitute 5.4% 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-2242, a 1:10,000 scale survey completed in 1895.

Review, par. 5.

Although there is a relative sparsity of soundings on H-2242, comparison is very good.

On H-2242, the MLLW line was apparently not developed, but was sketched in. It is fairly accurate in most places, but discrepancies occur--notably on the shoal at the northern end of the survey. This shoal, which makes out from the Chichagof Island side actually extends somewhat farther into the channel than shown on the old survey.

M. COMPARISON WITH CHART NO. 8248

The comparisons drawn in Paragraph L, including those concerning the shoal between stations KIL 2, 1952 and GOAL 2, 1952, are applicable to Chart No. 8248.

Review, par. 6

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 fathograms from this survey, together with a study of depth curves, and bottom characteristics reveals no evidence of silting. ✓

Both Nixon Shoal and the shoal mentioned in Paragraph L would appear to be stable, in view of the comparison with 50 year old surveys.

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. Report on Current Stations, 1952
 3. Triangulation Report, 1952
- ✓

The following applicable data is attached to this report.

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

Respectfully submitted

William D. Barbee

William D. Barbee
Ensign, USC&GS

Approved and Forwarded:

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

7987⁶SHEET PA-1152

DATE	DAY LETTER	VOL. NO.	H. L. & WIRE	POSITIONS	STATUTE MILES SOUNDINGS
1952					
26 Aug.	a	1	—	273 237	30.7
27 Aug.	b	1	—	102	10.9
28 Aug.	c	1 & 2	—	231	15.3
29 Aug.	d	2	—	158	12.1
12 Sept.	e	2	—	<u>1</u>	<u>0.0</u>
		Grand Total		765 729	69.0
		Area surveyed: <u>3.1</u> sq. stat. mi.			

6
7987

Pa 1152 &
Pa 05252

TIDE NOTE

The portable tide gage established at Povorotni Island 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 time or range.

The plane of reference - MLLW - was 4.6 feet on the staff, as per Director's letter of 18 September, Reference No. 36-rcb.

φ 57 30.89

λ 135 33.2

} Povorotni T.G.

✓

ABSTRACT OF BAR CHECKS

SHEET PA-1152 - ACTUAL DEPTH = 2.0 fms.

<u>DATE</u> <u>1952</u>	<u>DAY</u>	<u>DEPTH RECORDED</u>
8-26	a	1.80
8-26	a	1.70
8-26	a	1.70
8-27	b	1.80
8-27	b	1.70
8-27	b	1.80
8-28	c	1.80
8-28	c	1.80
8-28	c	1.80
8-29	d	1.80
8-29	d	<u>1.80</u>
		19.50

Average = 1.77

Initial correction = +0.23

Comp. W.D.B.

H 7986

Pa 1152

Peril Strait

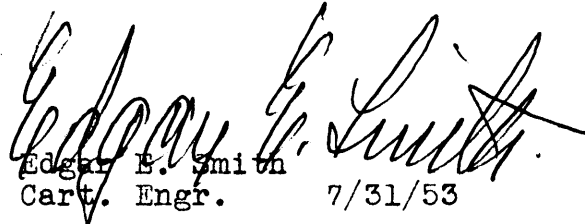
Processing Office Notes.

Smooth sheet.

The number ~~H 7987~~ H 7987 was originally assigned to Pa 1152. The number was cancelled to permit this survey to be plotted on the same smooth sheet as H 7986 Pa 05252. The field party had already prepared a separate descriptive report which is here included as a part of the report for H 7986. ✓

The projection was made by hand on Whatman paper. The shoreline was transferred from Map MSS T 9897 and T 9899, which were compiled from inspected photographs. (1452)

Other subjects are covered in the report of the field party.


Edgar E. Smith
Cart. Engr. 7/31/53

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: 1500 Westlake Ave. North, Seattle 9, Wash.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

4 March 1953

To: The Director
U S Coast & Geodetic Survey
Washington, D.C.

Thru: Supervisor NW District.

Subject: Cancellation of registered number
hydrographic sheet H 7987 Pa 1152.

In Peril Strait, SE Alaska, there are two contiguous surveys H-7986 and H-7987 which can be plotted easily on one Whatman sheet. As they are on different scales two projections would be required. It is requested that the number H 7987 be cancelled so that the two surveys can be plotted on one sheet.


Edgar E. Smith
Cart. Engr.

Forwarded.

Charles Pierce
Supervisor NW Dist,

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON 25 ..

AND REFER TO NO. 839-bdh

11 March 1953

To: Officer in Charge
Seattle Processing Office
U. S. Coast and Geodetic Survey
1500 Westlake Avenue, N.
Seattle 9, Washington

Subject: Cancellation of survey registry number H-7987
(Field No. PA-1152)

In accordance with your request of 4 March 1953,
survey number H-7987 has been cancelled. The hydrography
is to be plotted on a section of smooth sheet H-7986 and
the records are to be registered under this number.



Acting Director

H 7986
Pa 05252

Peril Strait
Southeast Alaska

List of geographic names
penciled on smooth sheet.

Adams Channel
Arthur Island
Baranof Island
Big Rose Island
Chichagof Island
Little Rose Island
~~Quasi Islands~~
Peril Strait
Rapids Point
Rose Channel
Yellow Point

H 7986
Pa 1152

Peril Strait

Southeast Alaska

List of geographic names
penciled on smooth sheet.

Baranof Island

Chichagof Island

Nixon Shoal

Peril Strait

Pogibishi Point

Povorotni Island

GEOGRAPHIC NAMES

Survey No. H-7986

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
<u>Southeastern Alaska</u>												1
<u>Peril Strait</u>												2
<u>Baranof Island</u>											B.C.N.	3
<u>Chichagof Island</u>											"	4
												5
<u>Arthur Island</u>												6
<u>Yellow Point</u>												7
<u>Rapids Point</u>												8
<u>Rose Channel</u>												9
<u>Big Rose Island</u>												10
<u>Little Rose Island</u>												11
<u>Adams Channel</u>												12
<u>Nixon Shoal</u>												13
<u>Pogibshi Point</u>											B.G.N.	14
<u>Povorotni Island</u>											"	15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27

Names underlined in red are approved. 10-6-53. h. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~H-7986~~ H-7986

Records accompanying survey:

Boat sheets ².....; sounding vols. ⁸.....; 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	.....	2344
Number of positions checked	.....	91
Number of positions revised	.....	1 (10d)
Number of soundings revised (refers to depth only)	.....	46
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	32 hrs.
Junctions	Time	8 hrs.
Verification of soundings from graphic record	Time	2 hrs.

Verification by *J.E. Gearhart*..... Total time ¹⁶⁵..... Date *8-3-55*.....

Reviewed by *J.A. Dinamore*..... Time ⁴⁰..... Date *15 Aug. 1955*.....

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No.

Field No. PA-B-52

Scale 1:5000

State S. E. Alaska General locality Peril Strait

Specific locality Adams Channel

Dates: Survey began 11 August 1952 Completed 11 August 1952

Photography, Supplemented by ground surveys to

Project No. CS-247 Instructions dated 14 April 1947

Vessel } or PATTON Chief of party Joseph P. Lushene
Party }

Field work by William D. Barbee Office work by William D. Barbee

Final inking by William D. Barbee

Ground elevations } in feet above { M. H. W.
Treetop elevations } or {

Contours } by { Planetable } Interval ft.
Approximate contours } { Multiplex }
Form lines } {

REMARKS Graphic control

DESCRIPTIVE REPORT TO ACCOMPANY
TOPOGRAPHIC SHEET NO. PA-B-52
ADAMS CHANNEL

USC&GSS PATTON, JOSEPH P. LUSHENE, CHIEF OF PARTY
1952

AUTHORITY:

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

PURPOSE:

The purpose of this survey was for graphic location of signals for control of hydrography, and to delineate the mean high water line in the mudflats SE of Big Rose Island.

LOCALITY:

The area surveyed lies in Peril Strait, from Yellow Point northward to the north edge of Nixon Shoal.

GENERAL DESCRIPTION:

The area surveyed is heavily wooded, with, in general, a strip of grass between the edge of the woods and the water line. The water line varies from rocky ledges to boulder-strewn, with mud flats in the logical areas.

CONTROL:

Adequate control was provided by a scheme of Second Order Triangulation through the area. ✓

DETAILS OF SURVEY:

Field work was accomplished on 11 August. Intersections for the location of signals were good, and a check was provided for the location of each signal.

In the mud flats to the southeast of Big Rose Island, the mean high water line was indefinite, and so stakes were driven at the water's edge at a time when the stage of the tide was plus or minus 0.3 feet from MHW by predicted tides, offsets were taped, and the stakes were rodded in at a later time, and the sketch transferred to the planetable sheet. ✓

GEOGRAPHIC NAMES:

A special Report on Geographic Names has been submitted. ✓

LAND MARKS FOR CHARTS:

This subject is covered in the report on Field Inspection of Air Photographs, 1952. ✓

COMPARISON WITH PREVIOUS SURVEYS:

Due to the limited extent of actual topography accomplished on this sheet, comparison is meaningless. ✓

MAGNETIC DECLINATION:

Since a magnetic survey using transit magnetometer was made concurrently with this survey, no Declinatoire values were taken. ✓

RECOVERABLE TOPOGRAPHIC STATIONS:

Since triangulation stations satisfy requisites of Instructions concerning marked stations, no recoverable topographic stations were established. ✓

REGISTRY NUMBERS:

In compliance with Director's Instructions, no registry numbers were requested for this sheet. ✓

Submitted by

William D. Barbee

William D. Barbee
Ensign, USC&GS

Approved and Forwarded:

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

The topographic signals and other information of value have been transferred to H-7986 (1952). The graphic control sheet is of no further value so will be destroyed.

J.A. Drismore
16 Aug. 1955

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7986

PA-1152
FIELD NO. PA-05252

S. E. Alaska, Peril Strait, Yellow Point to Pogibshi Point

Project No. CS-247

Surveyed - Aug. - Sept., 1952

Scale 1:5,000 and
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 and E. L. Jones
Protracted by - W. M. Martin
Soundings plotted by - W. M. Martin
Verified and inked by - J. E. Gearhart
Reviewed by - T. A. Dinsmore 16 August 1955
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with the reviewed manuscripts of air-photographic surveys T-9897 and T-9899 of 1952.

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The outer limits of the ledge symbolization represents the low-water line where not otherwise shown.

The bottom for the most part drops rapidly from the low-water line to depths of 10 fms. Several conspicuous reefs and shoals which rise rather abruptly from considerable depths in the southern part of the survey contribute to the general unevenness of the bottom.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7988 (1952) on the north and H-7931 (1951) on the south.

5. Comparison with Prior Surveysa. 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-2242 (1895), 1:10,000

The present survey falls within the area covered by this prior survey. A comparison of the prior and present surveys reveal 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 shoals and rocks not disclosed by the sparse sounding lines on the prior survey. The more thorough coverage on the present survey also defines the bottom configuration more completely and clearly.

The following discrepancies with the prior survey are noted:

(1) The $4\frac{1}{2}$ -fm. sounding (uncharted) in lat. $57^{\circ}27.22'$, long. $135^{\circ}32.71'$, on H-2242 should be disregarded. Falling in present depths of 12 fms. on a steep slope, the prior sounding is considered to be out of position and should actually fall about 80 meters northeastward where comparable depths were obtained on the present survey.

(2) The $3\frac{3}{4}$ -fm. sounding (uncharted) in lat. $57^{\circ}27.06'$, long. $135^{\circ}34.30'$, on H-2242 should be disregarded. Falling in present depths of 16 fms., the prior sounding which is on a sounding line running normal to the shoreline is considered to be out of position because of faulty spacing of soundings. The prior sounding should actually fall about 90 meters northward (inshore) where comparable depths were obtained on the present survey.

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

6. Comparison with Chart 8248 (Drawing No. 5, April 6, 1955)A. Hydrography

Charted hydrography originates principally with the previously discussed survey which needs no further consideration. Several critical soundings together with additional ledge

symbolization and minor revisions to depth curves have been applied to the chart from the present survey prior to verification and review. There are no important discrepancies on the chart. It is, however, noted that the 10-fm. sounding marking the offshore limits of Nixon Shoal in lat. $57^{\circ}28.25'$, long. $135^{\circ}32.10'$, is not charted.

The present survey entirely supersedes the charted information.

B. Aids to Navigation

There are no floating aids to navigation within the limits of the survey. The fixed aids to navigation located on the present survey are in agreement with the charted aids and adequately serve the purpose intended.

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) Much of the high water line and ledge symbol was redrafted by the verifier because of improper symbolization, inaccurate transfer from the topographic sheets and poor density of line.


8. Compliance with Project Instructions


The survey adequately complies with the Project Instructions.


9. Additional Field Work

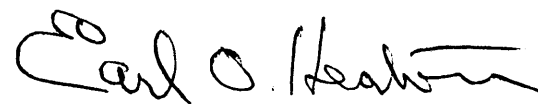
This is an excellent basic survey and no additional field work is required.

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

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF COASTAL SURVEYS~~

13 October 1953

Division of Charts: R. H. Carstens

Plane of reference approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 7986

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)

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.

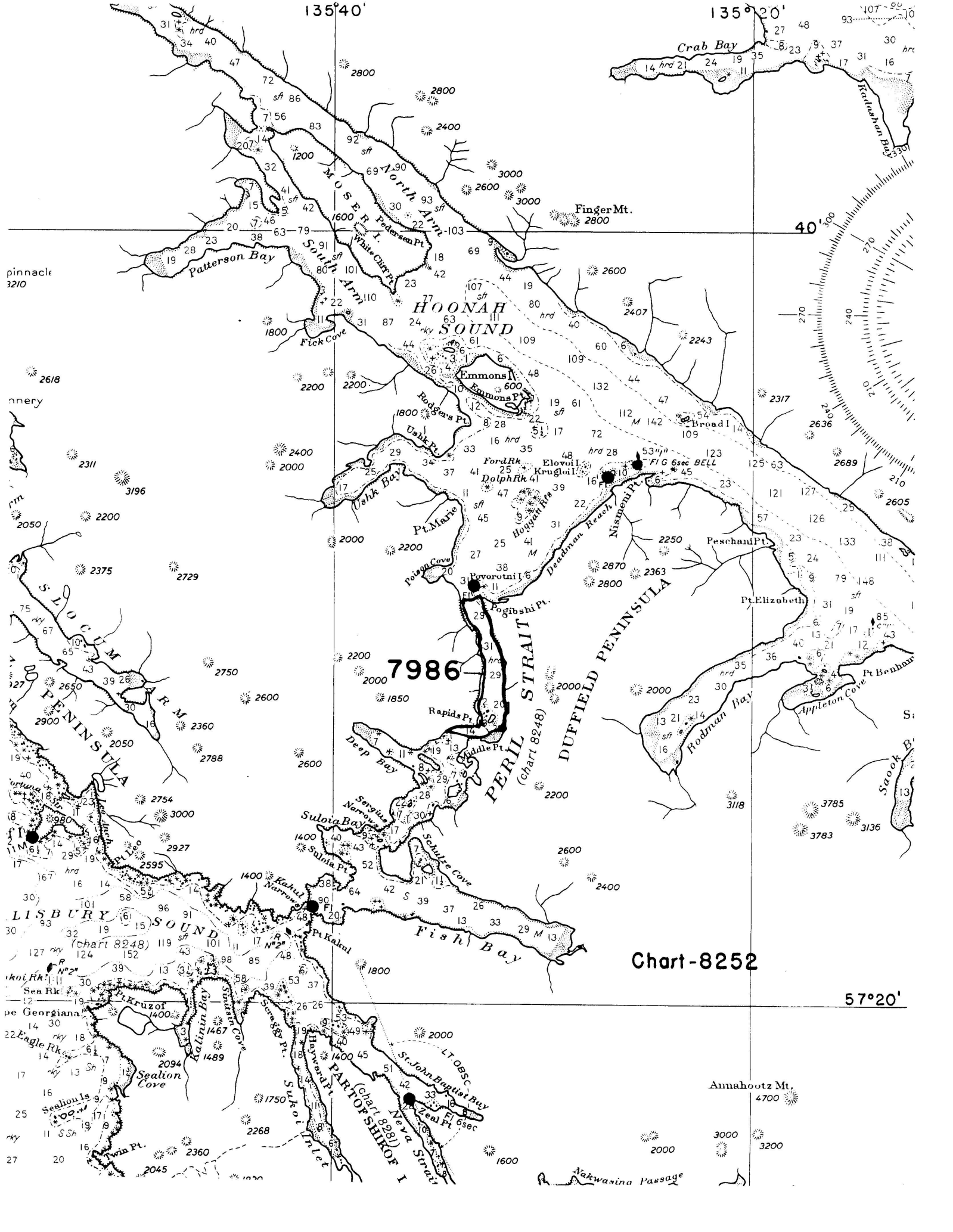


Chart-8252

57°20'

Annahootz Mt.
4700

3000
3200

Nakwasina Passage

7986

PERIL STRAIT
(Chart 8248)

135°40'

135°20'

40°

pinnacle
3210

annery

Fortuna

LISBURY SOUND

Sealion Cove

Sealion Is.

Twin Pt.

2045

Finger Mt.
2800

HOONAH SOUND

Emmons I.
600

Rodgers Pt.

Ushuk Pt.

Pt. Marie

Poison Cove

Povorotni I.

Pogibshi Pt.

Rapids Pt.

Deep Bay

Suloia Bay

Suloia Pt.

Schulze Cove

Pt. Kakul

Pt. Kakul

Fish Bay

St. John Baptist Bay

Zeal Pt.

St. John Baptist Bay

Neva Stra.

St. John Baptist Bay

Zeal Pt.

1600

Finger Mt.
2800

2600

2400

2200

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