

9122

Diag. Cht. No. 8252-2.

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT  
(HYDROGRAPHIC)

Type of Survey ... HYDROGRAPHIC .....  
Field No. .... FA-20-2-70 .....  
Office No. .... H-9122 .....

LOCALITY

State ..... ALASKA .....  
General Locality ..... PERIL STRAIT .....  
Locality ..... PT. BENHAM TO NISMENI COVE .....

1970

CHIEF OF PARTY

John B. Watkins Jr.

LIBRARY & ARCHIVES

DATE ..... 3/29/73 .....

9122

HYDROGRAPHIC TITLE SHEET

H-9122

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

FIELD NO.

FA-20-2-70

State ALASKA

General locality SOUTHEAST ALASKA PERIL STRAIT

Locality Peril Strait PT. BENHAM TO NISMENI COVE

Scale 1:20,000 Date of survey 4/27 - 5/22/70

Instructions dated 2 March 1970 Project No. OPR-488

Vessel USC&GS FAIRWEATHER & Launches 3, 6

Chief of party Capt John B. Watkins, Jr.

Surveyed by Ltjg W. D. Naff, Lt Bruce Keck

Soundings taken by echo sounder, ~~XXXXX~~ Raytheon DE-723, Ser. Nos. 559, 529, 558

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Personnel

Positions verified

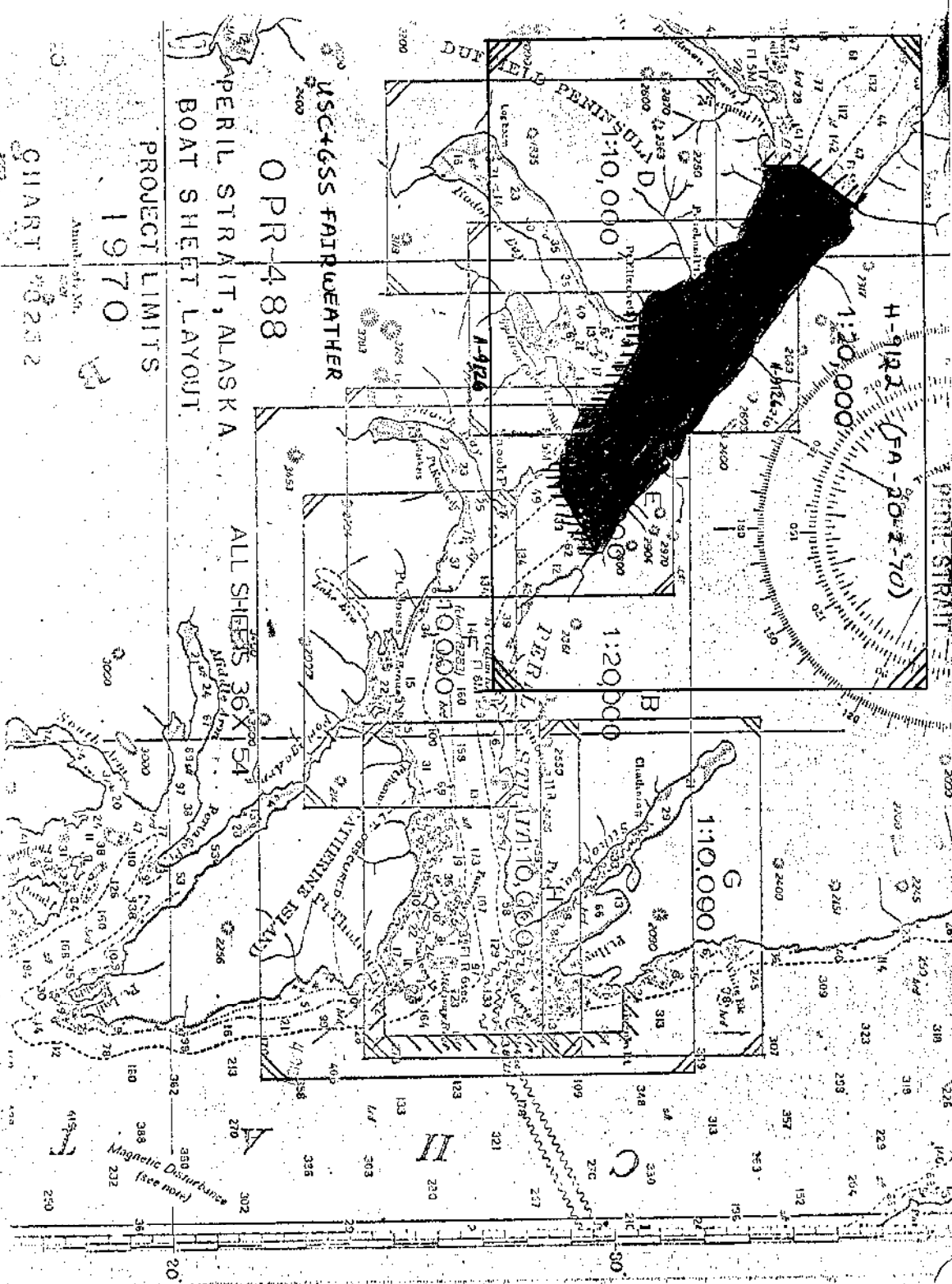
~~XXXXXXXX~~ by Felipe L. Rosario Automated plot by PMC Gerber Plotter  
verified

Soundings ~~provided~~ by Felipe L. Rosario

Soundings in fathoms ~~feet~~ at ~~XXXX~~ MLLW

REMARKS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



H-9121 (FA-30-2-70)  
1:20,000

DURRFIELD PENINSULA  
1:10,000

1:10,000

1:20,000

O PR-488

USCG+GSS FAIRWEATHER  
PERIL STRAIT, ALASKA  
BOAT SHEET LAYOUT

PROJECT LIMITS

1970

CHART 10252

ALL SHEETS 36X 54

Magnetic Disturbance  
(see note)

Descriptive Report  
to Accompany  
Hydrographic Sheet H-9122 (FA-20-2-70)  
Peril Strait, Alaska  
Scale 1:20,000  
USC&GSS FAIRWEATHER (MSS 20)  
CAPT. John B. Watkins, Jr. Comdg.

A. PROJECT

This survey was part of OPR 488, Peril Strait, Alaska. It was accomplished under Project Instructions dated 2 March 1970, Change Number 1 dated 17 March 1970, and in accordance with the Pacific Marine Center OORDER. ✓

B. AREA SURVEYED

The area surveyed was Peril Strait, Alaska, from Nisemi Cove to Pt. Benham. The area is bounded on the north by Chichagof Island and on the south by Baranof Island, with the exception of the entrance to Rodman Bay where the boundary is a line drawn from 57° 31.0'N, 135° 18.0'W to 57° 31.0'N, 135° 16.0'W, thence to 57° 29.75'N, 135° 13.50'W, thence to 57° 29.35'N, 135° 13.50'W. ✓

Control was established from 8 April to 17 April, 1970, and hydrography was accomplished from 27 April to 22 May 1970.

Junction was made with prior surveys H-7985 (1952, 1:5,000), H-7988 (1952, 1:10,000), and H-9054 (1969, 1:10,000).

Junction was also made with contemporary surveys H-9121 (FA-20-1-70) and H-9126 (FA-10-4-70). ✓

C. SOUNDING VESSELS

The ship and two launches were used to accomplish the hydrography. The applicable color codes and position numbers <sup>on each sheet</sup> follow: ✓

FAIRWEATHER	Violet	0001 - 0139
Launch FA-3	Green	2001 - 2354
Launch FA-6	Brown	8001 - 8185

D. SOUNDING EQUIPMENT

Raytheon Model DE-723 fathometers were used both on the ship and in the two launches; Serial No. 558 was used aboard FAIRWEATHER, Serial No. 559 on Launch 3, and Serial No. 529 on Launch 6. Depths ranged to 140<sup>6</sup>fms. in the area surveyed. ✓

The echo sounder velocity corrections were determined by serial temperature and salinity observations. Corrections to be applied also include the initial corrections and the results of bar checks. An abstract of the cumulative corrections to the soundings is included with this report.

E. SMOOTH SHEET

The position and sounding data were recorded, logged for automated processing, and plotted on boat sheets by ship personnel. The signal list was prepared and a signal overlay plotted by the Gerber Digital Plotter, verified by ship personnel. The final smooth sheet is to be plotted electronically and verified by personnel at Pacific Marine Center. ✓

F. CONTROL

Visual control using triangulation, photo-hydro and hydrographic signals was used throughout the survey. The two hydrographic signals used were located using sextant fixes plotted on a 1:20,000 mylar boat sheet, then transferred to the paper boat sheet. The one photo-hydro signal used was transferred using proportional dividers from the 1:10,000 incomplete map manuscript T-13325. ✓

A list of signals and their locations is included with this report.

G. SHORELINE

Shoreline was transferred directly to the boat sheet from the Incomplete Manuscript T-11940. In areas where 1:20,000 reductions of the incomplete map manuscripts were not made available, the hydrography was accomplished without the use of shoreline and only the approximate low water line was indicated on the boat sheet. Shoreline details were verified using field matte prints. Discrepancies were found in the form ✓

of several rock ledges omitted on the photogrammetric compilation, including a submerged ledge extending approximately 100 meters off the northwest end of False Island, and a shoal (bare in the photographs) just offshore, one-half mile northwest of Pt. Elizabeth. Discrepancies also were noted on "Field Edit Ozalids" and were referenced to appropriate matte prints.

The lower water line could not be defined in many areas due to the steeply sloping shore.

*See Verifier's Report*

H. CROSSLINES

Crosslines consisting of about twelve percent of the total survey mileage were run. Crossings were satisfactory throughout. ✓

I. JUNCTIONS

Good agreement was found at the junctions between this boat sheet and the prior surveys: H-7985, H-7988, and H-9054; and with the contemporary survey, H-9126. There was one discrepancy in junctioning with the only other contemporary survey, H-9121, which was resolved on that sheet and which was determined to be due to steep bottom relief. ✓

J. COMPARISON WITH PRIOR SURVEYS

Comparison was made with prior survey No. 2238, scale 1:40,000, 1895. Agreement of soundings was generally good throughout, although the smaller scale of the prior survey does not allow precise comparison. ✓

Investigation was made of the items listed on the Pre-Survey Review, OPR 488, dated 10 February 1970. These are enumerated in the chart on the next page of this report.

(4)

	<u>Latitude</u> <u>Longitude</u>	<u>Prior</u> <u>Survey</u> <u>Sound-</u> <u>ings</u>	<u>Pre-</u> <u>Survey</u> <u>Review</u>	<u>Findings of this survey with</u> <u>charting recommendations where</u> <u>applicable</u>
(a)	57° 33.5'N 135° 21.4'W	23 fms	23 fms	Verified, 24 fms (using predicted tides). Should be shifted approximately 100 meters to the south. <b>CONCUR</b>
(b)	57° 31.6'N 135° 18.1'W	5 fms	5 fms	Verified, 3 <sup>9</sup> fms (using predicted tides) in general area. 15 4 <sup>2</sup> fms. <i>shoal sdg in this area</i> <i>5 fm sdg also carried forward from Prior survey H-2287 (USNS)</i>
(c)	57° 31.3'N 135° 17.8'W	N.A.	Bare at MLLW	Presurvey review Item 1. Verified, but is located approximately 300 meters south of charted position. Item is approximately 100 meters in diameter and consists of an assortment of boulders awash at MLLW. Item is present on photograph but was not photo-identified during compilation of incomplete map manuscript. <b>CONCUR</b> <i>charted should be rechecked to agree with present survey.</i>
(d)	57° 31.1'N 135° 17.2'W	9 fms	9 fms	4 <sup>2</sup> . Located approximately 150 meters northwest of charted location of 9 fm shoal. Chart as 4 fm shoal. <i>4 fm sdg on chart is 100 m East of this 4 fm sdg on the present survey. See Verifier's Report</i>

K. COMPARISON WITH THE CHART

Comparison of the survey with USC&GS Chart No. 8283, scale 1:40,000, 5th edition, May 12, 1969, indicates that bottom characteristics have remained generally the same. ✓

The rock reported at 57° 31.3'N; 135° 17.8'W is covered under item J. A submerged ledge was discovered extending approximately 100 meters off shore from the northwest end of False Island. No other dangers to navigation were discovered in the course of the survey. ✓

L. ADEQUACY OF THE SURVEY ✓

The survey is considered complete and adequate to supersede the prior survey for charting.

M. AIDS TO NAVIGATION

There are no aids to navigation in the area of the survey. (Point Benham Light is covered in the descriptive report for H-9121).

N. STATISTICS

	<u>FAIRWEATHER</u>	<u>FA-3</u>	<u>FA-6</u>
Positions	139	354	718
Sounding lines (n.m.)	45.3	79.8	157.2
Area surveyed (sq. n.m.)	6.0	3.2	9.3
Bottom samples	08	00	00
Magnetic stations	02	NA	NA
Current stations	02	NA	NA

Total area surveyed: 18.5 square nautical miles

O. MISCELLANEOUS

Draft corrections for the ship were not applied to soundings inked on boat sheet although this was taken into account in drawing depth curves and in examining quality of crossings.

P. RECOMMENDATIONS

None.

Q. REFERENCES TO REPORTS

1. Season's Report, USC&GSS FAIRWEATHER, 1970. (To be forwarded).
2. Magnetism Report, OPR-488, USC&GSS FAIRWEATHER, 1970. (To be forwarded).
3. Field Edit Report, OPR-488, USC&GSS FAIRWEATHER, 1970. (To be forwarded).
4. Fathometer Report, OPR-488, USC&GSS FAIRWEATHER, 1970. (To be forwarded).
5. Coast Pilot Report, OPR-488, USC&GSS FAIRWEATHER, 1970. (To be forwarded).
6. Triangulation Report, OPR-488, USC&GSS FAIRWEATHER, 1970. (Forwarded May, 1970).

Respectfully submitted,

*William D. Neff*

William D. Neff  
LTJG, USESSA



TRANSMITTAL SHEET

H-9122

FA-20-2-70

The field work and examination of records was accomplished under the supervision of this command. The boatsheet was inspected daily for completeness and no additional work is considered necessary. ✓

*John B. Watkins, Jr.*  
John B. Watkins, Jr.  
CAPTAIN, USESSA  
Commanding Officer  
Ship FAIRWEATHER

LIST OF STATIONS ON H-9122 (FA-20-2-70)

<u>Name used in Hydrographic Survey</u>	<u>Latitude (° ' ")</u>	<u>Longitude (° ' ")</u>	<u>Origin of Station</u>
101	57 31 5081	135 12 5907	CROW 1966 ✓
102	57 29 0026	135 11 4525	PT. BENHAM LT. 1970 ✓
104	57 34 0242	135 18 0626	YAM 1970 ✓
105	57 30 3662	135 17 2150	GIN 2, 1970 ✓
106	57 32 1839	135 19 1605	CHOP 2, 1970 ✓
107	57 33 1280	135 15 4967	HYDROGRAPHIC ✓
130	57 27 5676	135 05 1290	FIB 2, 1970 ✓
131	57 28 2108	135 06 0384	DRY 2, 1970 ✓
132	57 30 2505	135 09 2612	HURT 2, 1970 ✓
203	57 36 0986	135 23 4209	T-13190 ✓
204	57 35 4500	135 22 3817	" ✓
205	57 35 2521	135 21 5923	" ✓
206	57 35 1419	135 23 0373	" ✓
207	57 34 5870	135 20 1896	" ✓
208	57 33 4894	135 24 3603	COVE, 1952 ✓
209	57 35 0944	135 23 2877	BROAD, 1952 ✓
220	57 32 5809	135 20 3908	MAY 2, 1966 ✓
221	57 33 2942	135 22 4132	HYDROGRAPHIC ✓
420	57 29 1865	135 13 4316	T-13325 ✓
280	57 27 4603 <sup>2</sup>	135 09 3569 <sup>72</sup>	JOY 2, 1970 ✓

Noted 8/16/71 FLR

## USC&amp;GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

VELOCITY CORRECTIONS  
Peril Strait - 1970

Corrections to be applied to the following sheet numbers:

FA-10-1-70  
FA-10-2-70  
FA-10-3-70  
FA-10-4-70  
FA-10-5-70  
FA-10-6-70  
  
FA-20-1-70  
FA-20-2-70

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Applicable Depths (fms)	Corrections (fms)
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0 - 65	0.0
65 - 100	+0.1
100 - 120	+0.2
120 - 140	+0.4
140 - —	+0.5

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## USC&amp;GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

DRAFT CORRECTIONS  
Peril Strait - 1970

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Ship FAIRWEATHER Sheet Number	Date	Corrections (fms)
FA-20-1-70	4-25	+2.3
	4-26	+2.3
	4-27	+2.3
	5-08	+2.3
	5-09	+2.3
H-9122 → FA-20-2-70	4-27	+2.3
	4-30	+2.3
	5-10	+2.3

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## USC&amp;GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

*SOUNDER*

ECHO CORRECTIONS

Peril Strait - 1970

Launch FA-3 Sheet Number	Date	Correction (fms)
FA-10-1-70	4-15	+0.2
	4-16	+0.2
	4-22	No bar check
FA-10-2-70	5-19	+0.2
	5-25	No bar check
	5-26	+0.2
FA-10-4-70	5-11	+0.0
	5-12	+0.4
FA-10-6-70	5-24	+0.2
FA-20-1-70	5-20	+0.2
	5-21	+0.2
	5-22	+0.3
	5-23	+0.3
H-9122 → FA-20-2-70	5-07	No bar check
	5-08	+0.2
	5-21	+0.2
	5-22	+0.2

## USC&amp;GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

*SOUNDER*

ECHO CORRECTIONS

Peril Strait - 1970

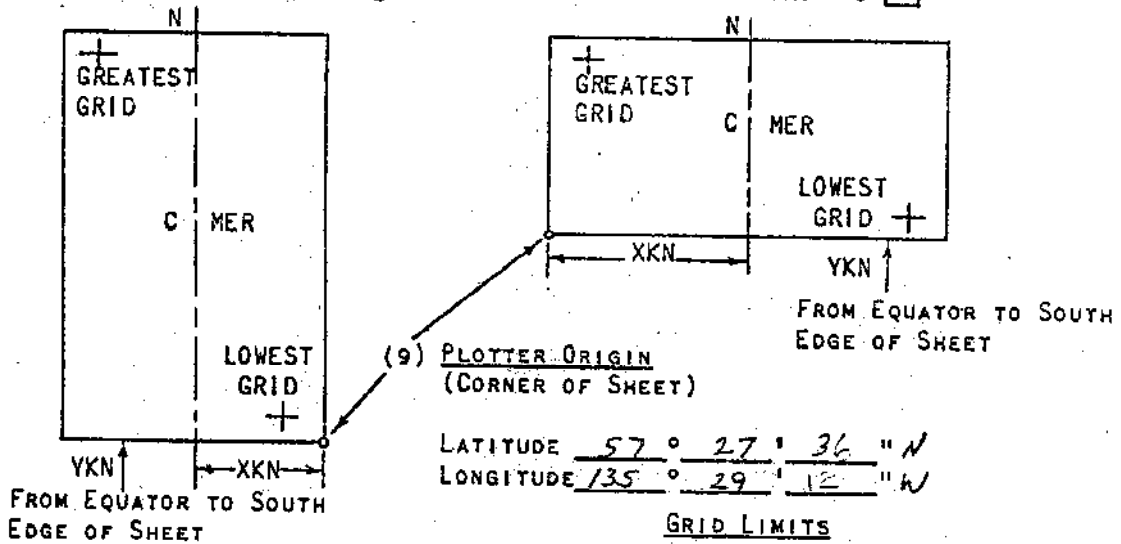
Launch FA-6 Sheet Number	Date	Correction (fms)
FA-10-2-70	4-28	+0.5
	5-20	+0.1
	5-22	+0.2
	5-23	+0.2
	5-24	No bar check
FA-10-4-70	5-21	+0.3
FA-10-5-70	5-13	+0.3
	5-14	No bar check
FA-10-6-70	5-25	No bar check
	5-26	+0.2
FA-20-1-70	4-26	+0.2
	4-29	+0.4
	4-30	No bar check
	5-19	+0.3
H-22 → FA-20-2-70	5-06	No bar check
	5-09	No bar check
	5-10	+0.3
	5-11	No bar check
	5-12	+0.2

INITIAL CHECK CORRECTIONS  
Peril Strait - 1970

Sheet Number	Positions	Corrections (fms)
FA-10-5-70	6001-6014	-0.1
FA-10-6-70	2068-2074	+0.3
	8072-8080	-0.1
	8081-8089	-0.2
FA-20-1-70	0089-0090	-0.1
	0091-0127	-0.2
FA-20-2-70	2183-2206	-0.1

PARAMETERS FOR DIGITAL COMPUTING  
POLYCONIC PROJECTION

- (1) PROJECT No. 488 (4) REQUESTED BY FAIRWEATHER  
 (2) H No. 9/22 (5) SHEET OR OFFICE 20010 FAIRWEATHER  
 (3) FIELD No. A-1 (6) DATE REQUIRED ASAP  
 (7) VISUAL  (8) ELECTRONIC  (FILL OUT FORM #3)  
 (10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1)  
 OR WEST EDGE (NYX = 0). 13,205.016 METERS  
 (11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE  
 OF SHEET. 6,370.9226 METERS  
 (12) CENTRAL MERIDIAN 135° 16' 00"  
 (13) SURVEY SCALE 1:20,000  
 (14) SIZE OF SHEET (CHECK ONE) 36x54  42x60  OTHER   
 (15) NYX, ORIENTATION OF SHEET (CHECK ONE)  
 NYX = 1  NOT CHECKED NYX = 0



GRID LIMITS

LIST G.P. OF ALL STATIONS TO BE PLOTTED ON THIS PROJECTION ON THE BACK OF THIS FORM. (DEG., MIN., SEC.)

- (16) GREATEST LATITUDE 57° 37' 00" (PROJECTION LINE  
 (17) LOWEST LATITUDE 57° 28' 00" INTERVAL, PAGE 4  
 (18) DIFFERENCE 09' 00" HYDRO MANUAL)  
 (19) 01' 00"  
 (20) 09 YSN  
 (21) GREATEST LONGITUDE 135° 29' 00"  
 (22) LOWEST LONGITUDE 135° 02' 00"  
 (23) DIFFERENCE 027' 00"  
 (24) 01' 00"  
 (25) 27 XSN



H  
 Field No. SPR 459 A-1  
 Date 2/6/70

PARAMETER CARDS  
 20010

PARAMETER CARD II

Best major axis of the earth	4,378,204.4	RDA	1	2	3	4	5	6	7	8	9	10
X Constant - Distance from central meridian to origin of plotter SP 5		YVN	11	12	13	14	15	16	17	18	19	20
Y Constant - Distance from equator to origin of plotter SP 2M		YVN	1	3	2	0	5	0	1	6	6	5
Central Meridian of Projection		YVN	6	3	7	0	9	2	7	6	0	7
Plotter Scale/Survey Scale	1:6498.6876	OMR	31	32	33	34	35	36	37	38	39	40
North/south axis of sheet - to correspond to (Y axis - 0)	1 - Feet	SCA	41	42	43	44	45	46	47	48	49	50
	1 - Fathom	NYX	51	52	53	54	55	56	57	58	59	60
Feet/Fathom Indicator		POP										
H Identification No.		JN										
		YR										

PARAMETER CARD III

Lowest Lat. Intersection	57	28	60	00	YST	1	2	3	4	5	6	7	8	9	10
Lowest Long. Intersection	13	5	42	00	YST	11	12	13	14	15	16	17	18	19	20
Difference between Grid					NDXI	21	22	23	24	25	26	27	28	29	30
Interval (Long)					XSN	31	32	33	34	35	36	37	38	39	40
Interval (Lat)					YSN										

Computed  
 Punched  
 Checked  
 Date

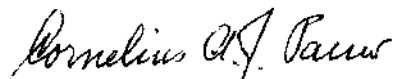
*PR*  
*PM*



APPROVAL SHEET

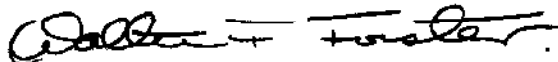
The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,



Cornelius A. J. Pauw  
Supervisory Cartographic Tech.


Approved and forwarded,



Walter F. Forster, LCDR, NOAA  
Chief, Processing Division  
Pacific Marine Center

TIDE NOTE FOR OPR-488, PERIL STRAIT, ALASKA, 1970

Three tide gages were installed and operated during the survey. These were at Chatham, Nismeni Point, and on the north shore of Peril Strait near False Lindenberg Head. Hourly heights were scaled and data-logged by ship's personnel and forwarded to PMC for processing. Marigrams were forwarded to Chief, Tides Section (C3312), Rockville for determination of the datum, time and height relationships, and the recommended zoning. This information is to be furnished the PMC Processing Division by Chief, Tides Section.





FOO

**U.S. DEPARTMENT OF COMMERCE**  
**Environmental Science Services Administration**  
 COAST AND GEODETIC SURVEY  
 Rockville, Md. 20852

Date: July 29, 1970

Reply to  
 Attn of: C331W-202-CSS

Subject: Tide Data, OPR-488, Peril Strait, Alaska

To: Commanding Officer  
 USC&GSS FAIRWEATHER

The information requested in your memorandum follows:

	<u>GHWI</u>	<u>GLWI</u>	<u>Mn</u>	<u>DHQ</u>	<u>DLQ</u>	(Marigram) <u>MLLW</u>
Chatham	9.72	3.52	12.0	0.9	1.6	6.5
Nismemi Point	9.79	3.68	11.8	0.9	1.6	5.6
Peril Strait	9.75	4.01	12.4	1.0	1.6	6.0

Zoning should be applied at your discretion. It is suggested that the Chatham gage could be used in Sitkoh Bay and the entrance to Peril Strait, the Nismemi Point gage over to Povorotni Island, and the Peril Strait gage for the remainder of this area.

*J. M. Symons*

J. M. Symons  
 Chief, Tides & Currents Branch  
 Oceanography Division

H-9122

*Use Peril Strait, augmented with  
 Nismemi tides for April 30, May 6, 7, & 8.  
 (No range or time corrections applied to Nismemi)*

**RECEIVED**

AUG 1 1970

USCGC  
 FAIRWEATHER



U.S. DEPARTMENT OF COMMERCE  
 Environmental Science Services Administration  
 COAST AND GEODETIC SURVEY  
 Rockville, Md. 20852

Date: August 26, 1970

Reply to  
 Attn of: C331W-229-MCFOE

Subject: Tidal Data, Peril Strait, Alaska

To: Chief, Processing Division  
 Pacific Marine Center

There are listed below the tidal data requested in your memorandum of July 7, 1970, File No. CFS3.

<u>Location</u>	<u>MLLW on Marigram</u>	<u>Mn. Range</u>	<u>H.W. Interval</u>	<u>L.W. Interval</u>
Chatham, Sitkoh Bay	6.5 Ft.	12.0 Ft.	9.72	3.52
Lindenberg Head, Peril Strait	6.0 Ft.	12.3 Ft.	9.75	4.01
Nismeni Point, Peril Strait	5.6 Ft.	12.5 Ft.	9.70	3.54

Listed below are the areas to be controlled by each tide gage.

Sitkoh Bay, use the Chatham tide gage.  
 Peril Strait, between Pt. Thatcher or Pt. Craven and  
 Appleton Cove, use the Lindenberg Head tide gage.  
 Peril Strait, between Appleton Cove and Nismeni Point,  
 use Nismeni Point tide gage.

*L. C. Wharton*  
 L. C. Wharton  
 Tides & Currents Branch  
 Oceanography Division

H-9123 = Chatham Gage

H-9121 }  
 H-9124 } = Peril Strait Gage (Lindenberg Head)  
 H-9127 }  
 H-9128 }

H-9122 }  
 H-9125 } = Nismeni Point Gage  
 H-9126 }

Peril Strait Gage inoperative  
 on April 30, May 6, 7, 8  
 Use Nismeni Point Gages.

DAY 120V

~~126~~ }  
 127 } no hydro data  
 128 } days

202 1970 SIGNAL LIST FA-20-2-70 EDAT 20010

101 57 31 1572 ✓ 135 12 0983 ✓ 101 137 ✓  
102 57 29 0008 ✓ 135 11 0754 ✓ 102 137  
104 57 34 0075 ✓ 135 18 0104 ✓ 104 137  
105 57 30 1133 ✓ 135 17 0358 ✓ 105 139  
106 57 32 0569 ✓ 135 19 0267 ✓ 106 139  
107 57 33 0396 ✓ 135 15 0826 ✓ 107 252  
130 57 27 1756 ✓ 135 05 0215 ✓ 130 137  
131 57 28 0652 ✓ 135 06 0064 ✓ 131 139  
132 57 30 0775 ✓ 135 09 0435 ✓ 132 137  
203 57 36 0305 ✓ 135 23 0699 ✓ 203  
204 57 35 1392 ✓ 135 22 0634 ✓ 204  
205 57 35 0780 ✓ 135 21 0984 ✓ 205  
206 57 35 0439 ✓ 135 23 0062 ✓ 206  
207 57 34 1816 ✓ 135 20 0315 ✓ 207  
208 57 33 1514 ✓ 135 24 0599 ✓ 208 139  
209 57 35 0292 ✓ 135 23 0478 ✓ 209 139  
220 57 32 1797 ✓ 135 20 0650 ✓ 220 139  
221 57 33 0910 ✓ 135 22 0687 ✓ 221 252  
420 57 29 0577 ✓ 135 13 0719 ✓ 420

280 57° 27' 46.03" 135° 09' 35.69" 280 139  
@ 280 added 8-5-70

TIDE NOTE FOR HYDROGRAPHIC SHEET



~~XXXXXXXXXXXX~~ Pacific Marine Center

Plane of reference approved  ~~XXXXXXXXXXXX~~ for Tide Tape Printout

HYDROGRAPHIC SHEET 9122; 9125; 9126 *OK*

Locality: Peril Strait, Alaska

~~XXXXXXXXXX~~ Year: 1970

Plane of reference is Mean lower low water

Tide Station Used (Form C&GS-681): Nesmeri Cove, Alaska

Height of Mean High Water above Plane of Reference is as follows: 14.0 feet

Tide reducers have been revised in red and verified as follows:

	<u>DAY</u>	<u>TIMES</u>	<u>DAY</u>	<u>TIMES</u>
4-27	117	1338-2317	5-1	121 0012-0949
4-28	118	0006-2335	"	" 1146-1609
4-29	119	0016	"	" 1753-2050
	"	0222	5-4	124 0154
	"	0341-0716	"	" 1041-1050
Remarks		0932-2350	5-6	126 0612-0619
4-30	120	0009-0230	5-8	128 0134-0227
	"	0500-0833	5-24	144 0122-0209
		1041-1517		
		1725-2131		
		2350		

*Robert A. Cummings*  
Chief, Tides and Currents Branch



GEOGRAPHIC NAMES

Survey No. H-9122

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
Baranof Island											1
Chichagof Island											2
Duffield Peninsula											3
Nismeni Cove											4
Nismeni Point											5
Peril Strait											6
Peschani Pt.											7
Pt. Benham											8
Pt. Elizabeth											9
Rodman Bay											10
False Island GMF											11
Broad Island GMF											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names checked 5-31-73  
 C. E. Harrington  
 CARTOGRAPHER

Names approved 5-31-73  
 Prof. Wright  
 CHIEF GEOGRAPHER

HYDROGRAPHIC SURVEY STATISTICS  
HYDROGRAPHIC SURVEY NO. H-9122

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & PNO		1	BOAT SHEETS		1	
DESCRIPTIVE REPORT		1	OVERLAYS		6	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES			1			
CAHIERS	1					
VOLUMES	5					
BOXES			X	X		
T-SHEET PRINTS (List)						
SPECIAL REPORTS (List)						

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				1211
POSITIONS CHECKED		718	55	
POSITIONS REVISED		7	0	
DEPTH SOUNDINGS REVISED		83	3	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		6	0	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		30	10	
JUNCTIONS		6	4	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		49	20	
SPECIAL ADJUSTMENTS		16		
ALL OTHER WORK		43	18	
TOTALS		144	52	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY <i>F. L. Rosario</i> F. L. Rosario, Cart. Tech.	2-7-72		3-20-73	
REVIEW BY <i>George M. Frank</i>	5-8-75		5-22-75	

*Car. Inspector D. J. Romushny 3-1-76*

376

*Parish 4/5/76 140*

Reg. No. H9122

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE \_\_\_\_\_ TIME REQ'D \_\_\_\_\_ INITIALS \_\_\_\_\_

REMARKS:

Reg. No. H9122

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE \_\_\_\_\_ TIME REQ'D. \_\_\_\_\_ INITIALS \_\_\_\_\_

REMARKS:

H-9122

Items for Future Presurvey Review

The following items should be investigated on future surveys in this area:

1. The log booms and submerged obstructions<sup>charted</sup> in latitude 57°32.0', longitude 135°12.83' and latitude 57°31.7', longitude 135°12.25'.

2. The 4.7-fathom sounding in latitude 57°31.14', longitude 135°17.28'.

3. The 2.3-fathom sounding in latitude 57°31.77', longitude 135°18.2'.

<u>Position</u>	<u>Index</u>	<u>Bottom Change</u>	<u>Use</u>	<u>Resurvey</u>
<u>Lat.</u>	<u>Long.</u>	<u>Index</u>	<u>Index</u>	<u>Cycle (Years)</u>
572	1351	2	1	50
572	1352	2	1	50
573	1352	0	1	50
573	1353	0	1	50

OFFICE OF MARINE SURVEYS AND MAPS  
MARINE SURVEYS DIVISION  
MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9122

FIELD NO. FA-20-2-70

Alaska, Peril Strait, Pt. Benham to Nismeni Cove

SURVEYED: April 27 - May 22, 1970

SCALE: 1:20,000

PROJECT NO.: OPR-488

SOUNDINGS: DE-723 Depth Recorders

CONTROL: Sextant Fixes  
on Shore Signals

Chief of Party ..... J. B. Watkins, Jr.  
Surveyed by ..... W. D. Neff  
..... B. Keck  
Automated Plot by ..... Gerber Digital Plotter  
..... (PMC)  
Verified by ..... F. L. Rosario  
Reviewed by ..... G. M. Frank  
..... Date: May 22, 1975  
Cursory inspection made--survey ..... D. J. Romesburg  
processing considered complete ..... Date: March 1, 1976

1. Control and Shoreline

The source of control is given in paragraph F of the Descriptive Report.

The shoreline originates with the class I reviewed photogrammetric manuscripts T-13190, T-11324, T-11940, and T-11941 of 1967-70. The mean high water line on the present survey is shown for guidance only and, except for revisions in red determined by the hydrographer, the true position is shown on the topographic surveys previously mentioned.

2. Hydrography

A. Sounding-line crossings are in good agreement.

B. The depth curves are adequately delineated, except in certain areas nearshore where the steeply sloping bottom precludes their delineation.

C. The development of bottom configurations and the investigation of least depths are considered adequate except on the

4.7-fathom sounding in latitude  $57^{\circ}31.14'$ , longitude  $135^{\circ}17.28'$  and the 2.3-fathom sounding in latitude  $57^{\circ}31.77'$ , longitude  $135^{\circ}18.2'$  which were not fully developed for least depths.

### 3. Condition of Survey

The field plotting, sounding records, automated printouts, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual and Instruction Manual - Automated Hydrographic Surveys, except as follows:

A. Least depths on shoals were determined by fathometer only on 50-meter line spacing.

B. Methods utilized by the hydrographer for revisions to the shoreline were not described in the survey records.

### 4. Junctions

An adequate junction was effected with H-9121 (1970) on the south, H-9126 (1970) at the entrance of Rodman Bay, and H-9054 (1969), H-7988 (1952), and H-7985 (1952) on the north.

### 5. Comparison with Prior Surveys

H-2238 (1895) 1:40,000

A comparison between the prior and present survey reveals very little change in the bottom configuration. Depth differences vary from 1-7 fathoms with the largest discrepancies found in the greatest depths. These differences can be attributed to the smaller scale and leadline soundings obtained on the prior survey versus soundings recorded by modern fathometer and the larger scale on the present survey.

Except for a 5-fathom sounding brought forward on the shoal in latitude  $57^{\circ}31.65'$ , longitude  $135^{\circ}18.1'$ , the present survey is adequate to supersede the prior survey within the common area.

### 6. Comparison with Chart 8283, 1:40,000, (latest print date, 7th Edition, September 1, 1973)

#### A. Hydrography

Most of the charted hydrography originates with the previously discussed prior survey which requires no further consideration, supplemented by the partial application of depths from the boat sheet and verified smooth sheet of the present survey.

Attention is directed to the following:

(1) The sunken rocks, presurvey review item 3, charted at latitude  $57^{\circ}29.45'$ , longitude  $135^{\circ}07.9'$ , originate with Chart Letter 344 of 1910 and were investigated on junctional survey H-9121 (1970). This PSR item will be discussed in the review of that survey.

(2) The log booms and submerged obstructions charted in the vicinity of latitude  $57^{\circ}32.0'$ , longitude  $135^{\circ}12.83'$  and latitude  $57^{\circ}31.7'$ , longitude  $135^{\circ}12.25'$  originate with Chart Letter 1333 of 1969 and were not investigated on the present survey. These items should be retained on the chart.

(3) The 4-fathom sounding charted in latitude  $57^{\circ}31.1'$ , longitude  $135^{\circ}17.2'$  originates with preliminary survey information listed in Chart Letter 808 of 1970 and H.O. Notice to Mariners No. 30 of 1970. This sounding should be revised to concur with the present survey.

Additional presurvey review information is listed in paragraph J of the Descriptive Report.

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

#### B. Aids to Navigation

The fixed aid to navigation in this area adequately serves the purpose intended.

#### 7. Compliance with Instructions

This survey adequately complies with the Project Instructions.

#### 8. Additional Field Work

This is an adequate basic survey and no additional field work is recommended.

Examined and Approved:

A. J. Patrick  
Chief  
Marine Surveys Division

Robert C. Munson  
Associate Director  
Office of Marine Surveys  
and Maps

