

9121

Diag. Cht. No. 8252-2.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. FA-20-1-70 Office No. H-9121

LOCALITY

State Alaska

General locality Peril Strait
~~Southeast Alaska~~

Locality Pt. Thatcher to Pt. Veniam
Peril Strait

1970

CHIEF OF PARTY

J. B. Watkins, Jr.

LIBRARY & ARCHIVES

DATE 3/27/73

USCOMM-DC 87022-P66

9121

HYDROGRAPHIC TITLE SHEET

H-9121

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-20-1-70

State Alaska

General locality Peril Strait
Southeast Alaska

Locality Pt. Thatcher to Pt. Benham
Peril Strait

Scale 1:20,000 Date of survey 25 April - 25 May 1970

Instructions dated 2 March 1970 Project No. OPR-488

Vessel USC&GSS FAIRWEATHER, and Launches FA-3, FA-4, FA-6.

Chief of party CAPT. John B. Watkins, Jr.

Surveyed by LTJG W. D. Neff, LTJG A. F. Divis, LT B. L. Keck

Soundings taken by echo sounder, hand lead, ~~and~~ Raytheon DE-723 (Serial Nos. 559, 529, 558)
Ross Fineline 400A (Prototype)

Graphic record scaled by FAIRWEATHER personnel

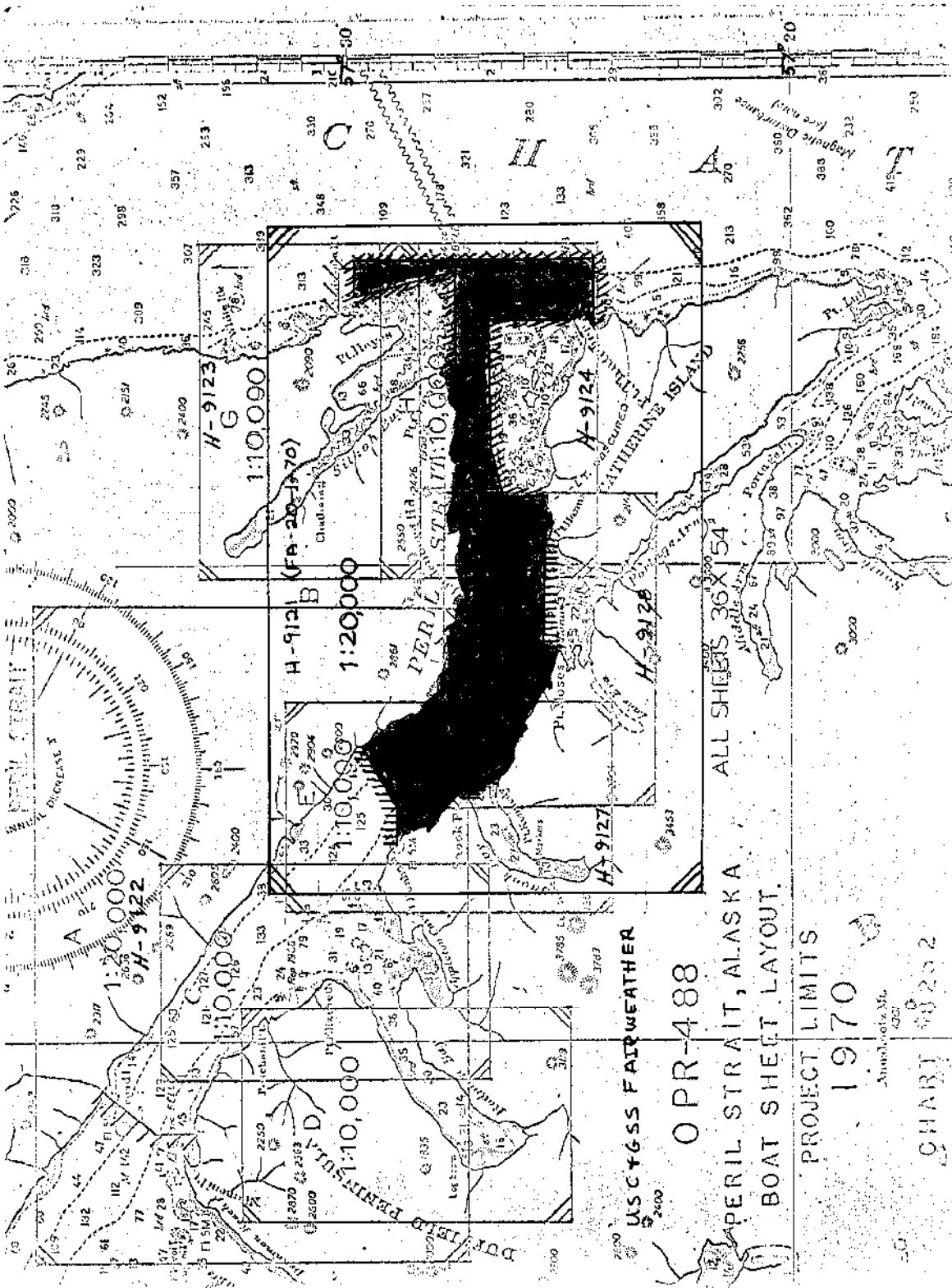
Graphic record checked by FAIRWEATHER personnel

Positions verified ~~checked~~ by A.E. Eichelberger Automated plot by PMC

Soundings ~~checked~~ ^{Verified} by A.E. Eichelberger

Soundings in fathoms ~~and~~ at ~~and~~ MLLW

REMARKS:



U.S.C.G.S. FAIRWEATHER

OPR-488

PERIL STRAIT, ALASKA
BOAT SHEET LAYOUT.

ALL SHEETS 36X54

PROJECT LIMITS

1970

Amundson, M.
4251

CHART 8202

135° 20'

Descriptive Report
to Accompany
Hydrographic Sheet H-9121 (FA-20-1-70)
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 the entrance of Peril Strait to Pt. Benham; bounded on the north by Chichagof Island and on the south by Baranof Island, with the exception of areas surveyed on other sheets of the project as indicated by the sheet layout on the index of sheets.

Control was established from 8 April to 17 April, 1970, and hydrography was accomplished from 25 April to 25 May, 1970.

Junction was made with contemporary surveys H-9122 (FA-20-2-70), H-9123 (FA-10-1-70), H-9124 (FA-10-2-70), H-9127 (FA-10-5-70), and H-9128 (FA-10-6-70).

C. SOUNDING VESSELS

The ship and three launches were used to accomplish the hydrography. Following are the color codes and position numbers applicable to each vessel:

FAIRWEATHER	Violet	0001-0267
Launch FA-3	Green	2001-2408
Launch FA-4	Blue	4001-4522
Launch FA-6	Brown	8001-8503

D. SOUNDING EQUIPMENT

Raytheon Model DE-723 fathometers were used on the ship and in two of the launches; Serial No. 558 aboard the FAIRWEATHER, Serial No. 559 on Launch FA-3, and Serial No. 529 on Launch FA-6. Depths ranged to 180 fathoms in the surveyed area.

A Ross 400A Fineline fathometer was used in Launch FA-4. Depths ranged to 330 fathoms in the surveyed area.

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 boat sheet (mylar) and then transferred to the paper boat sheet. The photo-hydro signals were transferred using proportional dividers from 1:10,000 incomplete map manuscripts T-13327, T-13329, and T-13331.

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 Manuscripts T-11941 and T-11940, T-11942. In areas where 1:20,000 reductions of the incomplete map manuscripts were not made available or where the manuscripts were not available at the time of hydrography, 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. The discrepancies were noted on "Field Edit Ozalids" and were referenced to appropriate matte prints.

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

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 contemporary surveys H-9123, H-9127, and H-9128. There was one discrepancy in junctioning with the only other contemporary survey, H-9122, which was resolved on the sheet and 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 on the chart of the next page in this report.

(4)

<u>Latitude</u> <u>Longitude</u>	<u>Prior</u> <u>Survey</u> <u>Soundings</u>	<u>Pre-</u> <u>Survey</u> <u>Review</u>	<u>Findings of this Survey</u> <u>with Charting Recommenda-</u> <u>tions where Applicable</u>
57° 27.4' 134° 57.5'	N.A. <i>checks 1971 Ed. of Chart</i> 8283	16 fms	Pre-survey Review Item 7. Verified, but is located about 100 meters south of charted position.
57° 27.7' 134° 57.9'	16 fms	16 fms	16 fathom sounding is incorrect. Depth is 34 fms (using predicted tides). ✓
57° 27.4' 134° 57.9'	Submerged rock	Submerged rock	Verified, ^{1.1} 0.2 fms (H.L.) (using predicted tides) . Location is about 380 meters east of charted location. ✓
57° 27.7' 135° 02.7'	N.A.	2½ fms	Pre-survey Review Item 5. Verified, 2.2 fms HL (using predicted tides) . Location is about 60 meters east of charted position. ✓
57° 27.6' 135° 03.2'	17 fms	17 fms	Verified. Note rock awash 200 meters northwest of charted 17 fms. depth. ✓
57° 29.5' 135° 07.8'	N.A.	Submerged	Pre-survey review Item 3. Sunken rocks verified as part of submerged reef extending outward from shore; least depth 2.3 fms by HL (using predicted tides). Location is about 120 meters northeast of charted submerged rocks. Note existence of previously uncharted rock awash at Lat. 57° 29.17', Long. 135° 07.20'. ✓
57° 26.8' 135° 08.4'	7.5 fms	7.5 fms	Verified. Note least depth of 2.6 fms HL (using predicted tides) about 200 meters southeast of charted depth of 7.5 fms. ✓

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.

Special notice should be made of the following items as dangers to navigation:

<u>Feature</u>	<u>Position</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Depth</u>
Submerged rock	2180	57° 29.17'	135° 07.20'	.2 fms
Rock awash	Photo- identified	57° 27.7'	135° 03.4'	Bare
Submerged rock	2289	57° 25.9'	135° 05.6'	.6 fms

The 16 fathom sounding reported on the Chart 8283 was verified at Latitude 57° 27.4' and Longitude 134° 57.5', position 4055. (See Item J.: Comparison With Prior Surveys - Pre-survey Review Item 7.)

L. ADEQUACY OF THE SURVEY

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

M. AIDS TO NAVIGATION

There were four fixed aids to navigation and one floating aid to navigation in the area of the survey. Point Craven Light, Fairway Island Light, and Morris Reef Buoy are covered in the descriptive report for H-9124 (FA-10-2-70). The positions of McClellan Rock Light and Point Benham Light (as located by travers) were found to be adequate in comparison with existing charted positions. Refer to C & GS Form 567, "Nonfloating Aids or Landmarks for Charts" (contained in this report).

N. STATISTICS

	<u>FAIRWEATHER</u>	<u>FA-3</u>	<u>FA-4</u>	<u>FA-6</u>
Positions	267	408	521	503
Sounding lines (n.m.)	87.9	92.5	101.6	95.7
Bottom samples	10	00	00	00
Area surveyed (sq.n.m.)	10.0	6.0	6.6	6.2
Magnetic stations	04	NA	NA	NA
Current stations	03	NA	NA	NA

Total area surveyed: 28.8 square nautical miles.

O. MISCELLANEOUS

Draft corrections for the ship were not applied to soundings inked on the 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. Magnetics 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).
7. Evaluation of Ross Fathometer, USC&GSS FAIRWEATHER, 1970. (To be forwarded).

Respectfully submitted,

Wayne A. Hoyle
ENS, USESSA

GEOGRAPHIC NAMES LIST

BARANOF IS.

CATHERINE IS

CHATHAM STRAIT

CHICHAGOF IS

FALSE LINDENBERG HEAD

LINDENBERG HARBOR

LINDENBERG HEAD

PERIL STRAIT

PT BENHAM

PT CRAVEN

PT HANUS

PT KENNEDY

PT TEATCHER

SBOOK PT

TODD

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.

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~National Oceanic and Atmospheric Administration~~ Pacific Marine Center

Plane of reference approved ~~XX~~
~~XXXXXXXXXXXXXXXXXXXX~~ for Tide Tape Printout

HYDROGRAPHIC SHEET H-9121, 9124, 9127 and 9128

Locality: Peril Strait, Alaska

~~Observed~~ Year 1970

Plane of reference is Mean Lower Low Water

Tide Station Used (Form C&GS-681): Lindenberg Head

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

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

Day	Time
103	1804-1824
143	2031-2126
144	0643


Chief, Tides ~~and Currents~~ Branch



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-9121

*Use Peril Strait gage.
 May have to augment with Nismemi
 records for April 30 and May 8.
 (No range or time corrections)*

RECEIVED

AUG 1 1970

USC&GSS
 FAIRWEATHER 202-20



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

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

DAY 120V

~~125~~ }
 127 } No hydro data
 128 } data

000900	00	1012	0000	115	0	000000	000000
115800	00	1001					
121100	00	1002					
122400	00	1003					
123600	00	1004					
124800	00	1005					
130000	00	1006					
131100	00	1007					
132300	00	1008					
133400	00	1009					
134600	00	1010					
135800	00	1011					
141100	00	1012					
142300	00	1013					
143600	00	1014					
145100	00	1015					
150500	00	1016					
152300	00	1017					
000300	00	1009	0000	116	0	000000	000000
084100	00	1006					
085300	00	1005					
090500	00	1004					
091900	00	1003					
093400	00	1002					
095000	00	1001					
101000	00	1000					
104100	00	0001					
113500	00	0002					
120700	00	0001					
122700	00	1000					
124400	00	1001					
130000	00	1002					
131500	00	1003					
133000	00	1004					
134400	00	1005					
135800	00	1006					
141100	00	1007					
142400	00	1008					
143600	00	1009					
144900	00	1010					
150200	00	1011					
151700	00	1012					
153200	00	1013					
154900	00	1014					
160700	00	1015					
162900	00	1016					
170000	00	1017					
182300	00	1018					
190200	00	1017					
192800	00	1016					
195100	00	1015					
201200	00	1014					
203200	00	1013					
205200	00	1012					
211300	00	1011					
213600	00	1010					
220200	00	1009					
223600	00	1008					
235500	00	1007					

002700 00 1008 0000 117 0 000000 000000

084300 00 1011

085500 00 1010

090700 00 1009

091800 00 1008

093100 00 1007

094300 00 1006

095700 00 1005

101200 00 1004

102900 00 1003

104800 00 1002

111300 00 1001

120000 00 1000

120200 00 0001

130000 00 1000

132700 00 1001

134800 00 1002

140600 00 1003

142200 00 1004

143700 00 1005

145100 00 1006

150600 00 1007

152100 00 1008

153600 00 1009

155200 00 1010

160700 00 1011

012100 00 1009 0000 118 0 000000 000000

084900 00 1016

090400 00 1015

091800 00 1014

093200 00 1013

094600 00 1012

100000 00 1011

101300 00 1010

102800 00 1009

104200 00 1008

105700 00 1007

111100 00 1006

112600 00 1005

114300 00 1004

120200 00 1003

123400 00 1002

135500 00 1001

143200 00 1002

145700 00 1003

151600 00 1004

153400 00 1005

155000 00 1006

160600 00 1007

162200 00 1008

163800 00 1009

165500 00 1010

171100 00 1011

172900 00 1012

174800 00 1013

180800 00 1014

000200 00 1011 0000 119 0 000000 000000
120100 00 1007
121700 00 1006
123300 00 1005
125200 00 1004
131300 00 1003
134000 00 1002
153200 00 1001
160000 00 1002

slaney

000400 00 1014 0000 120 0 000000 000000
092800 00 1020
101500 00 1019
103900 00 1018
110000 00 1017
111800 00 1016
113600 00 1015
115200 00 1014
120700 00 1013
123000 00 1012
123200 00 1011
124600 00 1010
130000 00 1009
131300 00 1008
132700 00 1007
134100 00 1006
135600 00 1005
141400 00 1004
143500 00 1003
150400 00 1002
162200 00 1001

121400 00 1000 0000 128 0 120000 000000
122700 00 1001
123900 00 1002
125000 00 1003
130200 00 1004
131400 00 1005
132500 00 1006
133600 00 1007
134700 00 1008
135800 00 1009
140900 00 1010
141900 00 1011
142900 00 1012
144000 00 1013
145000 00 1014
150200 00 1015

000000 00 1009 0000 129 0 000000 000000

101400 00 1002
103100 00 1001
105200 00 1000
112700 00 0001
120500 00 0002
123800 00 0001
130000 00 1000
131800 00 1001
133400 00 1002
134900 00 1003
140200 00 1004
141400 00 1005
142600 00 1006

001400 00 1013 0000 133 0 000000 000000

072800 00 1016

092500 00 1017

100000 00 1016

102700 00 1015

105100 00 1014

111200 00 1013

113200 00 1012

115200 00 1011

121200 00 1010

123300 00 1009

125500 00 1008

131800 00 1007

134400 00 1006

142300 00 1005

155900 00 1004

002400 00 1023 0000 139 0 000000 000000

082700 00 0001

084400 00 1000

090000 00 1001

091800 00 1002

093500 00 1003

095100 00 1004

100400 00 1005

101600 00 1006

102700 00 1007

103700 00 1008

104800 00 1009

105800 00 1010

111000 00 1011

112100 00 1012

113400 00 1013

114600 00 1014

120000 00 1015

121400 00 1016

123000 00 1017

124800 00 1018

131500 00 1019

143800 00 1020

150700 00 1019

152900 00 1018

154800 00 1017

160400 00 1016

161900 00 1015

163300 00 1014

000000 00 1021 0000 140 0 000000 000000

083800 00 0004

090600 00 0003

092600 00 0002

094200 00 0001

095600 00 1000

100800 00 1001

101900 00 1002

102900 00 1003

104000 00 1004

105000 00 1005

110000 00 1006

111000 00 1007

112000 00 1008

113000 00 1009

114100 00 1010

115100	00	1011		
120200	00	1012		
121200	00	1013		
122300	00	1014		
123400	00	1015		
124600	00	1016		
130000	00	1017		
131500	00	1018		
133400	00	1019		
140000	00	1020		
152100	00	1021		
154800	00	1020		
161000	00	1019		
162900	00	1018		
164600	00	1017		
000500	00	1020	0000	141 0 000000 000000
081900	00	0003		
093200	00	0004		
095200	00	0003		
100900	00	0002		
102300	00	0001		
000000	00	1016	0000	142 0 000000 000000
105700	00	0002		
111100	00	0001		
112400	00	1000		
113600	00	1001		
114700	00	1002		
115800	00	1003		
120900	00	1004		
121900	00	1005		
122900	00	1006		
123900	00	1007		
124900	00	1008		
125900	00	1009		
130800	00	1010		
131800	00	1011		
132700	00	1012		
133700	00	1013		
134800	00	1014		
135800	00	1015		
141100	00	1016		
142400	00	1017		
143900	00	1018		
145800	00	1019		
152200	00	1020		
165900	00	1021		
000700	00	1012	0000	143 0 000000 000000
082500	00	1001		
083600	00	1000		
084900	00	0001		
090200	00	0002		
091700	00	0003		
093400	00	0004		
100000	00	0005		
104200	00	0006		
111000	00	0005		
112700	00	0004		
114200	00	0003		
115500	00	0002		
120700	00	0001		

122000	00	1000			
123100	00	1001			
124200	00	1002			
125300	00	1003			
130300	00	1004			
131300	00	1005			
132200	00	1006			
133100	00	1007			
134100	00	1008			
135000	00	1009			
140000	00	1010			
140900	00	1011			
142000	00	1012			
143000	00	1013			
144100	00	1014			
145300	00	1015			
150600	00	1016			
152100	00	1017			
153800	00	1018			
160000	00	1019			
165400	00	1020			
165900	00	1021			
000500	00	1006	0000	145	0 000000 000000
094900	00	1004			
100000	00	1003			
101200	00	1002			
102500	00	1001			
104100	00	1000			
110000	00	0001			
112600	00	0002			
123300	00	0003			
130000	00	0002			
131700	00	0001			
133300	00	1000			
134700	00	1001			
140000	00	1002			
141200	00	1003			
142400	00	1004			
143600	00	1005			
144700	00	1006			
145800	00	1007			
150900	00	1008			
152000	00	1009			
153100	00	1010			
154200	00	1011			
155400	00	1012			
160600	00	1013			
161800	00	1014			
163200	00	1015			
164700	00	1016			
170300	00	1017			

LIST OF STATIONS ON H-9121 (FA-20-1-70)

<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
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
133	57 27 1199	135 01 3172	MCCLELLAN ROCK LIGHT, 1970
160	57 27 3546	134 55 5410	OF 2, 1970
161	57 27 3042	134 58 2657	HYDROGRAPHIC
280	57 27 4603	135 09 3569	JOY 2, 1970
293	57 26 4235	135 09 1972	T-13327
294	57 26 3317	135 08 4400	"
338	57 28 3714	134 49 3714	QUEEN 1894-1925
339	57 27 4946	134 51 5399	PT. CRAVEN LT. 1970
343	57 27 3724	134 53 4073	GO, 1895-1970
346	57 25 3281	134 58 5537	IS 2, 1960
347	57 25 1872	135 03 3715	NAP 2, 1960
371	57 25 0048	134 49 4948	THATCHER 2, RM 2, 1925
372	57 26 3533	134 52 1193	FAIRWAY ISLAND LIGHT, 1970
373	57 26 0314	134 56 0216	KIT 2, 1960
324	57 28 2237	134 52 1800	T-13329
330	57 28 3407	134 50 3150	"
331	57 28 5230	134 49 5785	"
332	57 29 1099	134 50 0168	"
337	57 29 5334	134 49 3999	"
374	57 26 2489	134 52 1055	"
376	57 25 5043	134 52 0000	T-13331
378	57 24 5120	134 51 4127	"
379	57 24 5269	134 50 4451	"
380	57 26 0679	134 50 4309	"
396	57 24 5389	134 49 4996	"
397	57 24 4364	134 49 5445	"
398	57 24 3475	134 49 5990	"
400	57 24 2851	134 49 5977	"
134	57 29 1299	135 06 5138	Hydrographic

T R I A N G U L A T I O N P L O T T E R C A R D S

H-NO.		LATITUDE	LONGITUDE	X	Y	
09121	101	70 57315081	135125907	00143	09443	101
09121	102	70 57290026	135114525	00780	06671	102
09121	130	70 57275676	135051290	04211	05633	130
09121	131	70 57282108	135060384	03766	06028	131
09121	132	70 57302505	135092612	02000	08045	132
09121	133	70 57271199	135013172	06146	04905	133
09121	160	70 57273546	134555410	09101	05286	160
09121	161	70 57273042	134582657	07767	05204	161
09121	280	70 57274603	135093569	01911	05463	280
09121	293	70 57264235	135091972	02048	04429	293
09121	294	70 57263317	135084400	02360	04279	294
09121	338	70 57283714	134493714	12398	06294	338
09121	339	70 57274946	134515399	11202	05517	339
09121	343	70 57273724	134534073	10268	05316	343
09121	346	70 57253281	134585537	07515	03294	346
09121	347	70 57251872	135033715	05046	03066	347
09121	371	70 57250048	134494948	12299	02775	371
09121	372	70 57263533	134521193	11047	04313	372
09121	373	70 57260314	134560216	09032	03787	373
09121	324	70 57282237	134521800	10991	06051	324
09121	330	70 57283407	134503150	11922	06243	330
09121	331	70 57285230	134495785	12216	06540	331
09121	332	70 57291099	134500168	12182	06843	332
09121	337	70 57295334	134493999	12370	07532	337
09121	374	70 57262489	134521055	11060	04143	374
09121	376	70 57255043	134520000	11153	03584	376
09121	378	70 57245120	134514127	11319	02622	378
09121	379	70 57245269	134504451	11817	02647	379
09121	380	70 57260679	134504309	11826	03851	380
09121	396	70 57245389	134494996	12295	02668	396
09121	397	70 57244364	134495445	12256	02502	397
09121	398	70 57243475	134495990	12208	02357	398
09121	400	70 57242851	134495977	12210	02256	400
09121	134	70 57291299	135065138	03351	06872	134

000

USC&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

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

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

DRAFT CORRECTIONS
Peril Strait - 1970

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
FA-20-2-70	4-27	+2.3
	4-30	+2.3
	5-10	+2.3

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

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
FA-20-2-70	5-07	No bar check
	5-08	+0.2
	5-21	+0.2
	5-22	+0.2

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

ECHO CORRECTIONS
Peril Strait - 1970

Launch FA-4 Sheet Number	Date	Correction (fms)
FA-10-1-70	4-12	+0.4
	4-13	+0.5
	4-14	+0.5
	4-16	+0.3
	4-17	+0.4
	4-21	No bar check
	4-25	+0.3
FA-10-2-70	5-25	+0.3
	5-26	+0.3
FA-10-3-70	5-06	No bar check
	5-07	+0.3
	5-08	+0.3
	5-09	+0.3
	5-10	+0.3
	5-11	+0.3
	5-21	+0.3
FA-10-5-70	5-12	+0.3
FA-10-6-70	5-22	No bar check
FA-20-1-70	4-27	+0.3
	4-28	+0.3
	5-13	No bar check
	5-20	+0.3
	5-22	No bar check
	5-23	+0.3
	5-25	No bar check

USC&GSS FAIRWEATHER

MSS 20

CAPT. John B. Watkins, Jr. Commanding

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
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

TRANSMITTAL SHEET

H-9121

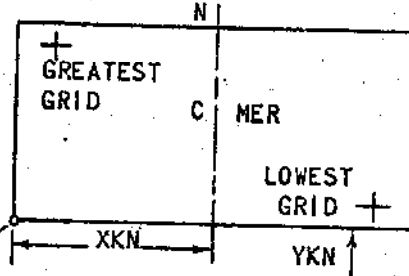
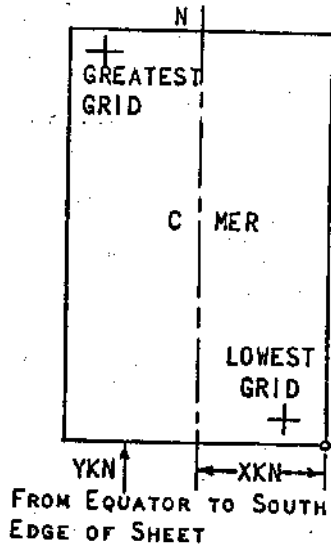
FA-20-1-70

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
USC&GSS FAIRWEATHER

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

- (1) PROJECT No. 42 **20020** REQUESTED BY FAIRWEATHER
 (2) H No. 9121
 (3) FIELD No. B-1 (5) SHIP OR OFFICE FAIRWEATHER
 (6) DATE REQUIRED ASAP
 (7) VISUAL (8) ELECTRONIC (FILL OUT FORM #3)
 (10) XKN (SP 5) DISTANCE FROM CMER TO EAST EDGE (NYX = 1) 488
 OR WEST EDGE (NYX = 0). 13,237.5 METERS /
 (11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE
 OF SHEET. 6,360,844.5 METERS
 (12) CENTRAL MERIDIAN 135° 00' 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



(9) PLOTTER ORIGIN
(CORNER OF SHEET)

LATITUDE 57° 22' 10"
 LONGITUDE 135° 13' 12"

GRID LIMITS

- (16) GREATEST LATITUDE 57° 32' 00" (PROJECTION LINE
 (17) LOWEST LATITUDE 57° 22' 00" INTERVAL, PAGE 4
 (18) DIFFERENCE 0° 10' 00" HYDRO MANUAL)
 (19) 1° 00"
 (20) 7 YSN
 (21) GREATEST LONGITUDE 135° 13' 00"
 (22) LOWEST LONGITUDE 134° 46' 00"
 (23) DIFFERENCE 0° 27' 00"
 (24) 1° 00"
 (25) 27 XSN

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

Top row of Grid ticks fell off sheet.

GEOGRAPHIC NAMES

Survey No. **N-9121**

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
Baranof Island											1
Catherine Island											2
Chatham Strait											3
Chichagof Island											4
False Lindenberg Head											5
Lindenberg Harbor											6
Lindenberg Head											7
Peril Strait											8
Pt. Benham											9
Pt. Craven											10
Pt. Hanus											11
Pt. Kennedy											12
Pt. Moses											13
Pt. Thatcher											14
Saook Pt.											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names checked.

G. E. Harrington, Cartographer
5-25-73

Names approved

A. J. Wraight, Chief Geographer
5-25-73

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9121

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		3	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES			2			
CAHIERS	1					
VOLUMES	7					
BOXES			1			

T-SHEET PRINTS (List)

SPECIAL REPORTS (List)

OPR 488 1970 Fathometer Report

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				1688
POSITIONS CHECKED		1688		
POSITIONS REVISED		88		
DEPTH SOUNDINGS REVISED		395		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		19		
JUNCTIONS		10		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		16		
SPECIAL ADJUSTMENTS		2		
ALL OTHER WORK		442		
TOTALS		489		

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY A.E. Eichelberger	BEGINNING DATE 12/29/70	ENDING DATE 3/6/73
REVIEW BY	BEGINNING DATE	ENDING DATE

VERIFIER'S REPORT
HYDROGRAPHIC SURVEY, H 9121

INSTRUCTIONS - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

CL - Check List Items: should be checked as having been completed during the verification processes.

R - Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R
<p>Note: The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>	X		<p>10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.</p>		X
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>	X		<p>Part IV - VOLUMES 11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes. Remarks Required: -- None</p>	X	
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>	X		<p>12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following: (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done? (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features</p>		
<p>Part II - SHORELINE AND SIGNALS 4. Source of shoreline signals Remarks Required: -- List all surveys a. Give earliest and latest dates of photographs b. Field inspection date c. Field Edit date d. Reviewed-Unreviewed</p>		X		X	
<p>The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>		X		X	
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>	X			X	X
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.</p>		X	<p>Part V - PROTRACTING 13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>	X	
<p>Part III - JUNCTIONS Note: Make a cursory comparison preliminary to inking soundings in area of overlap. 8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None</p>	X		<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>	X	
<p>9. The notation in slanted lettering "JOINS H---- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>	X		<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>	X	

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
<p>16. The protracting was satisfactory except as follows:</p> <p>Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.</p>	X		<p>26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey.</p> <p>Remarks Required: -- Conflicts of any nature listed.</p>	X	
<p>17. The protractor has been checked within the last three months.</p> <p>Remarks Required: -- Date of check, type of protractor and number.</p>	X		<p>27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification.</p> <p>Remarks Required: -- None</p>	X	
Part VI - SOUNDINGS			Part IX - BOAT SHEET		
<p>18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings.</p> <p>Remarks Required: -- None</p>	X		<p>28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information.</p> <p>Remarks Required: -- None</p>	X	
<p>19. Sounding line crossings were satisfactory except as follows:</p> <p>Remarks Required: -- Discuss adjustments.</p>	X		<p>29. Heights of rocks awash were correctly reduced and compared with topographic information.</p> <p>Remarks Required: -- Note excessive conflicts with topographic information.</p>		X
<p>20. The spacing of soundings as recorded in the records was closely followed;</p> <p>Remarks Required: -- None</p>	X		Part X - GENERAL		
<p>21. The scanning, reduction, spacing, plotting of questionable soundings have been verified.</p> <p>Remarks Required: -- None</p>	X		<p>30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2).</p> <p>Remarks Required: -- None</p>	X	
<p>22. The smooth plotting of soundings was satisfactory except as follows:</p> <p>Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.</p>	X		<p>31. Unnecessary pencil notes have been removed from the sheet.</p> <p>Remarks Required: -- None</p>	X	
Part VII - CURVES			<p>32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet.</p> <p>Remarks Required: -- None</p>	X	
<p>23. The depth curves have been inspected before inking.</p> <p>Remarks Required: -- By whom was the penciled curves inspected.</p> <p>24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following:</p> <ul style="list-style-type: none"> a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed <p>Remarks Required: -- None</p>	X X	X	<p>33. The bottom characteristics are adequately shown.</p> <p>Remarks Required: -- None</p>	X	
<p>25. Depth curves were satisfactory except as follows:</p> <p>(This statement should not refer to the manner in which the curves were drawn).</p> <p>Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.</p>		X	Part XI - NOTES TO THE REVIEWER		
<p>Verified by</p> <p style="text-align: center;">A.E. Eichelberger</p>			<p>34. Unresolved discrepancies and questionable soundings.</p>		X
			<p>35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.</p>	X	
			<p>36. Supplemental information.</p>	X	
				<p>Date</p> <p style="text-align: center;">3/6/73</p>	

VERIFIER'S REPORT

FA-20-1-70

H-9121

All records have been examined.

All positions have been checked, soundings corrected and plotted.

All data received has been checked.

PART II SHORELINE AND SIGNALS

4. The Shoreline was transferred from advance manuscripts T-11940, T-11941 and T-11942. Field edit was made in May 1970 from photos flown in June 1967. Field edit was applied in August 1970.

5. A small offshore reef shown on manuscript T-11942 at Lat $57^{\circ}24.8'$ Long $134^{\circ}49.7'$ was not verified by hydrography. The least depth obtained by the launch passing over the reef was 2 fms on sndg no 448905. This reef was not inked on the Smooth Sheet. No ink

7. The following signals, 294, 374 and 380, are located outside the high-water line on ledges and offshore reefs.

PART III JUNCTIONS

10. Junctions were made with verified surveys H-9122, H-9123, H-9127 and H-9128 (all 1970, scale 1:10,000) with good agreement. Some difficulty was encountered with H-9124 (1970, scale 1:10,000) in the junction area at the extreme east edge of this survey between Lat $57^{\circ}27'$ and Lat $57^{\circ}29'$. Soundings plotted on this survey in this location were obtained by the Ross Fathometer which was not designed to operate at such depths. (See Part XI item 34, this report) The steep bottom relief also contributed to adjustment of the depth curves between the junction soundings. One shoal area was developed on H-9124 with lesser depths than were obtained on this survey at Lat $57^{\circ}25.5'$ Long $134^{\circ}49.5'$. A least depth of 3.3 fms, with a 3.8 fm sounding nearby were located on H-9124. No effort was made to develop this area on this survey, and the least depths were missed by one line of hydrography, positions 430200-430300. It is suggested that soundings from H-9124 be utilized for more concise depth curves at this location. ✓

PART IV VOLUMES

12. Additional soundings were inserted during verification, where space permitted, to aid in the drawing of depth curves. Peaks and deeps occurring at odd intervals were not added by the scanner for hydrography accomplished by the Ship FAIRWEATHER, positions 000100-026700.

PART VII CURVES

23. The penciled depth curves were inspected and adjusted prior to inking by R. D. Lynn, Carto. Tech.

25. The depth curves are complete except for delineation of the low-water line.

PART IX BOATSHEET

29. The following discrepancy exists in the elevation of a rock transferred from advance manuscript T-11941:

<u>Latitude</u>	<u>Longitude</u>	<u>T-11941</u>	<u>H-9121</u>	<u>Pos.</u>
57°25.9'	135°05.6'	awash	cov. 0.6 fm.	228900

A rock awash symbol and data from the manuscript was inked on the smooth sheet.

PART XI NOTES TO THE REVIEWER

34. The digital readout of the Ross Fathometer used on Launch #4 is from 0.4 fm to 1.0 fm deeper than graphic trace on the analog. This factor was taken into account when adding additional soundings to the original readout. Comparisons were made with adjacent soundings to scale comparable peaks and deeps. This discrepancy increases with the depth. At 150 fms and deeper, the analog is almost impossible to scan manually. The digital readout was erroneous in many of the deeper soundings, and was corrected by the scanner aboard ship. Some of these graphically scaled soundings are doubtful to their accuracy. In common areas, the soundings obtained by the Ross Fathometer are consistently deeper than those scaled from the fathograms of the DE-723 employed by the ship and launch #6.

COMPARISON WITH CHART

Comparison with C&GS Chart 8283 (6th Ed, July 1971) indicates general agreement with the following notable exceptions:

<u>Latitude</u>	<u>Longitude</u>	<u>8283</u>	<u>H-9121</u>
57°28.7'	135°06.7'	4 fm	5.5 fm ✓
57°26.3'	135°07.1'	8 fm	9.4 fm ✓
57°25.8'	135°05.0'	4 fm	2.9 fm ✓
57°25.6'	135°04.4'	1.5 fm	2 fm ✓
57°26.0'	135°06.0'	6 fm	4.4 fm ✓
57°27.5'	134°57.4'	16 fm	404 fm ✓
57°27.4'	134°57.6'	81 fm	30 fm ✓
57°27.5'	134°56.9'	82 fm	66 fm ✓
57°27.5'	134°54.5'	148 fm	88 fm ✓
57°25.7'	134°49.8'	19 fm	14 fm ✓

<u>Latitude</u>	<u>Longitude</u>	<u>8283</u>	<u>H-9121</u>
57°25.1'	134°49.7'	Subm Rk	No indication ^{nk}
57°25.5'	134°49.5'	2.7 (rk)	Developed on H-9124

This survey is considered adequate to supersede prior surveys of the area.

Respectfully submitted,

A. E. Eichelberger

A. E. Eichelberger
Carto. Tech.

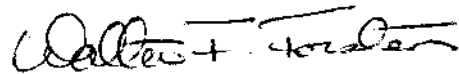
APPROVAL SHEET

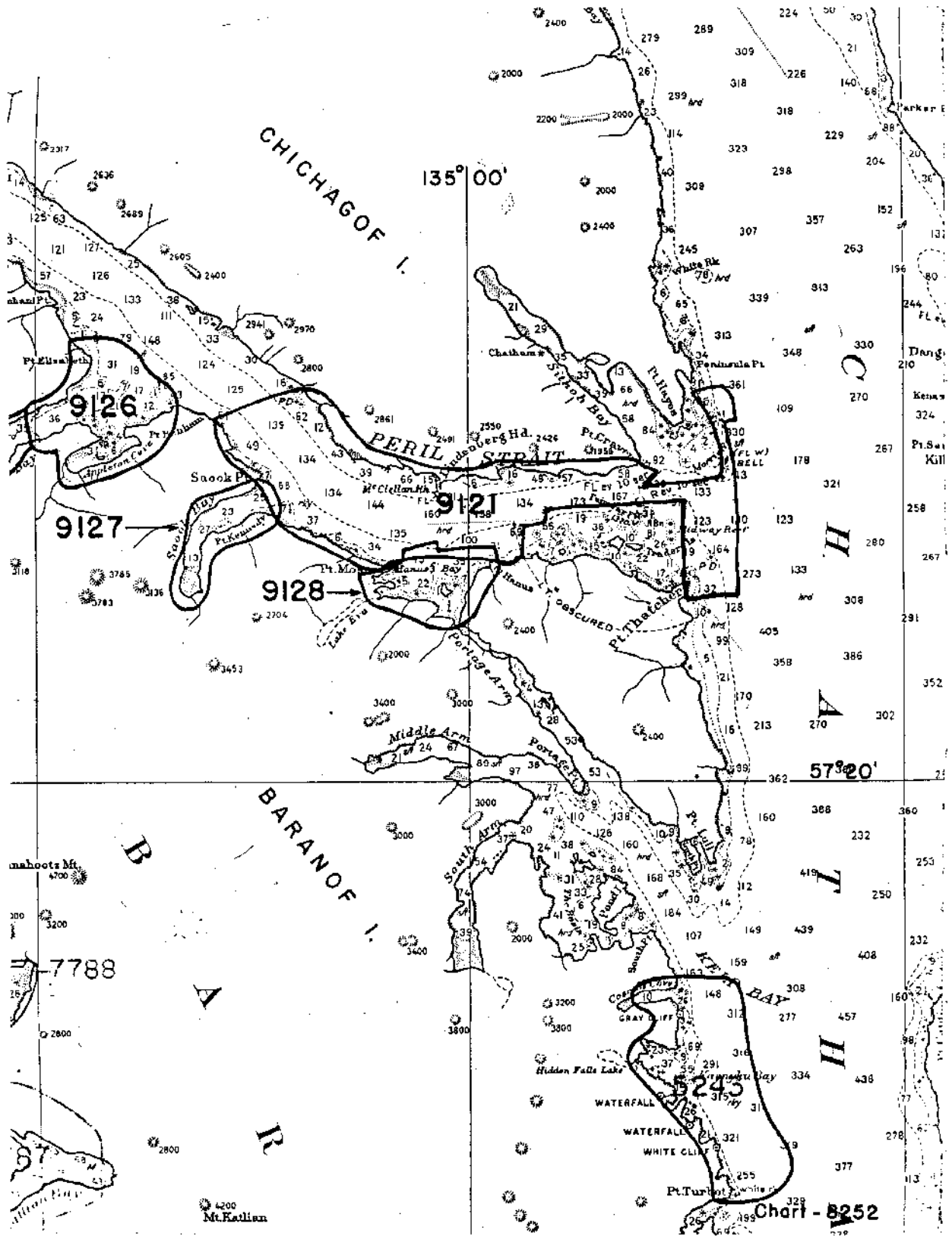
The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,


Cornelius A. J. Pauw
Supervisory Cartographic Tech.

Approved and forwarded,


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



RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. M-9121

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8283	4/20/73	E. Frey	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Partly revised hydro - critical corr's only</i>
8252	4/21/73	E. Frey	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Partly revised hydro via cht 8283</i>
8283	2/16/77	<i>Nator</i>	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Consider fully applied as class 6 survey</i>
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.