

9125

Diag. Cht. No. 8252-2.

FORM C&GS-504	
U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
OPR-488	
DESCRIPTIVE REPORT USC&GSS FAIRWEATHER (MSS 20)	
Type of Survey	HYDROGRAPHIC
Field No.	FA-10-3-70
Office No.	H-9125
LOCALITY	
State	ALASKA
General locality	PERIL STRAIT SOUTHEAST ALASKA
Locality	RODMAN BAY PERIL STRAIT
19 70	
CHIEF OF PARTY	
CAPT John B. Watkins, Jr. Comdg.	
LIBRARY & ARCHIVES	
DATE	JUL 7 1972

9125

Charts
8252
8283

23
VILE
1/2

HYDROGRAPHIC TITLE SHEET

H-9125

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-10-3-70

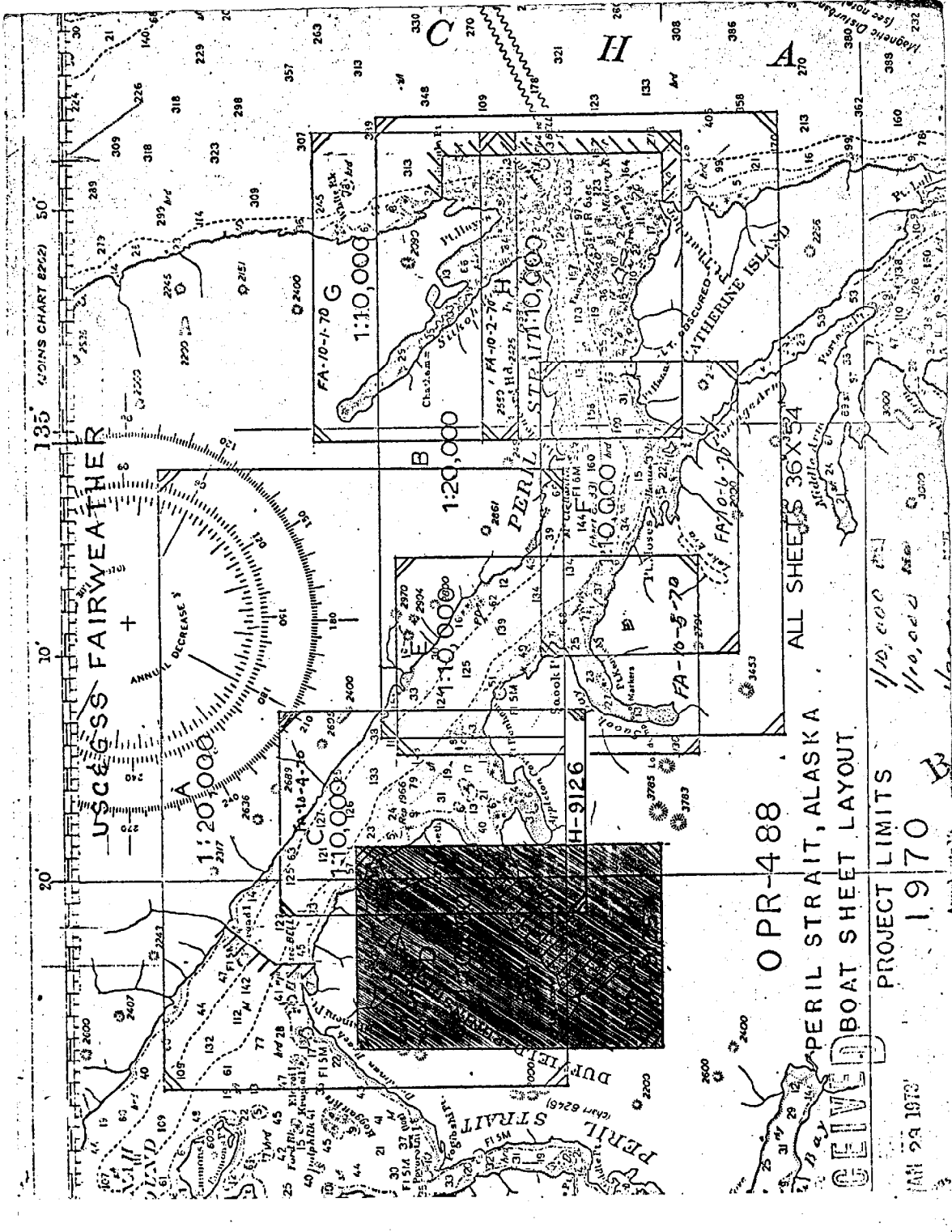
State Alaska
 General locality PERIL STRAIT
Southeast Alaska
 Locality RODMAN BAY
Peril Strait
 Scale 1:10,000 Date of survey 6 May - 21 May 1970
 Instructions dated 2 March 1970 Project No. OPR - 488
 Vessel USC&GSS FAIRWEATHER Launch FA-4
 Chief of party John B. Watkins, Jr., CAPTAIN, USESSA
 Surveyed by LT. B. L. Keck
 Soundings taken by echo sounder, hand lead, ~~and~~ Ross 400A Fineline (prototype)
 Graphic record scaled by FAIRWEATHER personnel
 Graphic record checked by FAIRWEATHER personnel
 Positions verified by XXXXX
~~Plotted~~ by C.A.J. Pauw Automated plot by PMC
Verified
 Soundings ~~checked~~ by .C.A.J. Pauw
 Soundings in fathoms ~~and~~ at ~~and~~ MLLW

REMARKS:

*cht.
8252
8283*

no Hydro. in 8002

*Applied to plate 7/13/70
CAB.*



OPR-488

PERIL STRAIT, ALASKA
BOAT SHEET LAYOUT

PROJECT LIMITS

1970

MAY 29 1970

ALL SHEETS 36X54

1/10,000

1/10,000

B

Descriptive Report
to Accompany
Hydrographic Sheet H-9125 (FA-10-3-70)
Peril Strait, Alaska
Scale 1:10,000
USC&GSS FAIRWEATHER (MSS 20)
CAPT. John B. Watkins, Jr. Commanding

A. PROJECT

Hydrographic Survey H-9125 (FA-10-3-70) was accomplished under OPR-488, according to instructions dated 2 March 1970.

B. AREA SURVEYED

This survey was performed in Rodman Bay and is bounded on the north, south, and west by Baranof Island. The east and west limits of the survey are $135^{\circ} 20.0'W$ and $135^{\circ} 25.5'W$ respectively. The north and south limits are $57^{\circ} 29.3'N$ and $57^{\circ} 26.3'N$ respectively. Survey dates were 6 May through 21 May 1970.

Junction is made with contemporary survey H-9126 (FA-10-4-70) on the east.

C. SOUNDING VESSEL

The boatsheet color code and position number system used throughout OPR-488 during the 1970 Field Season was as follows:

Ship FAIRWEATHER	Violet	0001-2000
Launch FA-3	Green	2001-4000
Launch FA-4	Blue	4001-6000
Launch FA-5	Red	6001-8000
Launch FA-6	Brown	8001-9999

All sounding lines on this sheet were run using FA-4.

D. SOUNDING EQUIPMENT

The Ross 400A Fineline Fathometer (Ross Laboratories, Seattle, Washington) was used for all soundings on this sheet. An operation report on this instrument is being submitted separately.

Velocity corrections were obtained using temperature and salinity data from Nansen casts. Echo corrections were based on daily bar checks. These corrections are tabulated at the end of this report.

Sounding corrections are treated more fully in the Fathometer Report, OPR-488, USC&GSS FAIRWEATHER, 1970.

E. SMOOTH SHEET

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

F. CONTROL

All hydrography was accomplished by visual fix methods. The control signals were established from photo-identified stations on Incomplete Manuscripts, scale 1:10,000, nos. T-13324 and T-13326.

G. SHORELINE

The source of the shoreline detail is from the manuscripts mentioned in Section F.

The shoreline was verified using field photographs. Minor discrepancies including limits of the foul areas around Lauf Islands and some rocks which were not present are noted on the Field Edit Ozalids and referenced to appropriate photographs.

The low water line was defined where possible, but considerable difficulty was encountered due to steeply sloping shores.

H. CROSSLINES

Crosslines consisting of approximately fifteen percent of the sounding lines were in good agreement except in a few cases of steep bottom profile.

I. JUNCTIONS

Good agreement was found between this sheet and the adjoining sheet of this same project, H-9126 (FA-10-4-70).

J. COMPARISON WITH PRIOR SURVEY

The Pre-Survey Review lists a $4\frac{1}{2}$ fathom area at $57^{\circ} 26.8'N$, $135^{\circ} 23.6'W$. Several lines were run through the area and the shoal was not found.

Other than the above, soundings are in good agreement with the prior survey, H-2238, dated 1895, scale 1:40,000.

K. COMPARISON WITH THE CHART

A comparison was made with C&GS Chart No. 8283, 5th edition, May 12, 1969, scale 1:40,000. Soundings are generally in good agreement.

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys for charting purposes.

M. AIDS TO NAVIGATION

There were no aids to navigation within the area covered by this survey.

N. STATISTICS

Launch FA-4

Positions	587
Sounding lines (n.m.)	74.8
Area surveyed (sq. n.m.)	2.8
Bottom samples	07
Oceanographic stations	00

O. MISCELLANEOUS

As logging operations are currently being carried on at the head of Rodman Bay, the number and locations of the logbooms are variable. The positions plotted on the boatsheet are based on the sextant fixes taken May 6, 1970.

In general, the bay has a nearly flat bottom with steep rocky shores and tidal flats at the head. Such a configuration suggests glacial action at some time in the area. Extensive sunken ledges lie along the shores and around Lauf Islands.

P. RECOMMENDATIONS

No additional field work is recommended in the area covered by this report.

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,

Bruce L. Keck

Bruce L. Keck
LT, USESSA

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.

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

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

LIST OF STATIONS ON H-9125 (FA-10-3-70)

<u>Name used in Hydrographic Survey</u>	<u>Latitude (° ' ")</u>	<u>Longitude (° ' ")</u>	<u>Origin of Station</u>
240	57 29 3249	135 18 2773	T-13325
241	57 29 2589	135 18 5865	"
242	57 29 1603	135 19 5702	"
243	57 28 3514	135 19 5526	"
244	57 28 5515	135 18 3601	"
260	57 27 3924	135 21 4564	T-13326
261	57 27 2114	135 22 4816	"
262	57 27 2499	135 23 0282	Hydrographic
263	57 27 2861	135 23 1002	T-13326
264	57 27 1144	135 23 1991	"
265	57 26 2945	135 23 3267	"
266	57 26 3265	135 24 2428	"
267	57 27 1713	135 25 0426	"
268	57 27 4092	135 24 1991	"
269	57 28 1338	135 23 0048	"
270	57 28 4335	135 22 0252	"
271	57 28 5088	135 21 4477	"
272	57 29 0142	135 20 5281	"
273	57 28 2767	135 20 4908	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	
09125	240	70 57293249	135182773	00040	08268	240
09125	241	70 57292589	135185865	00580	08053	241
09125	242	70 57291603	135195702	01601	07732	242
09125	243	70 57283514	135195526	01569	06403	243
09125	244	70 57285515	135183601	00183	07056	244
09125	260	70 57273924	135214564	03500	04588	260
09125	261	70 57272114	135224816	04594	04000	261
09125	262	70 57272499	135230282	04851	04124	262
09125	263	70 57272861	135231002	04977	04242	263
09125	264	70 57271144	135231991	05150	03685	264
09125	265	70 57262945	135233267	05374	02320	265
09125	266	70 57263265	135242428	06277	02425	266
09125	267	70 57271713	135250426	06977	03870	267
09125	268	70 57274092	135241991	06200	04642	268
09125	269	70 57281338	135230048	04810	05696	269
09125	270	70 57284335	135220252	03796	06669	270
09125	271	70 57285088	135214477	03485	06914	271
09125	272	70 57290142	135205281	02576	07257	272
09125	273	70 57282767	135204908	02511	06161	273

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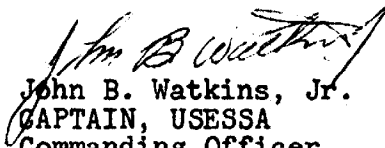
x = 39.685
 y = 82.68, 2

TRANSMITTAL SHEET

H-9125

FA-10-3-70

The field work and examination of records were accomplished under the supervision of this command. The boat sheet was inspected daily for completeness and accuracy. The survey is considered complete and adequate and no additional field work is considered necessary.


John B. Watkins, Jr.
CAPTAIN, USESSA
Commanding Officer
USC&GSS FAIRWEATHER



FOO

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

to: 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-9125

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

RECEIVED

AUG 1 1970

USC&GSS
FAIRWEATHER OPR-488-20

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~XXXXXXXXXXXX~~ Pacific Marine Center

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

HYDROGRAPHIC SHEET 9122; 9125; ^{OK}9126 ^{OK}

Locality: Peril Strait, Alaska

~~XXXXXX~~ Year: 1970

Plane of reference is Mean lower low water

Tide Station Used (Form C&GS-681): Nesmeni 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>
117	1338-2317	121	0012-0949
118	0006-2335	"	1146-1609
119	0016	"	1753-2050
"	0222	124	0154
"	0341-0716	"	1041-1050
Remarks	0932-2350	126	0612-0619
120	0009-0230	128	0134-0227
"	0500-0833	144	0122-0209
	1041-1517		
	1725-2131		
	2350		

Richard R. Cummings
Chief, Tides and Currents Branch

GEOGRAPHIC NAMES
H-9125

BARANOF ISLAND

DUFFIELD PENINSULA

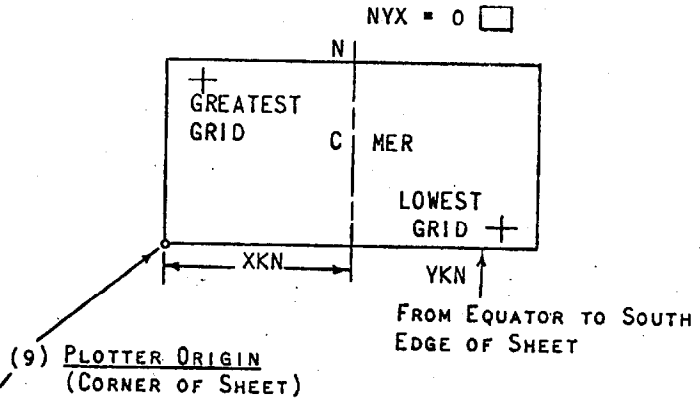
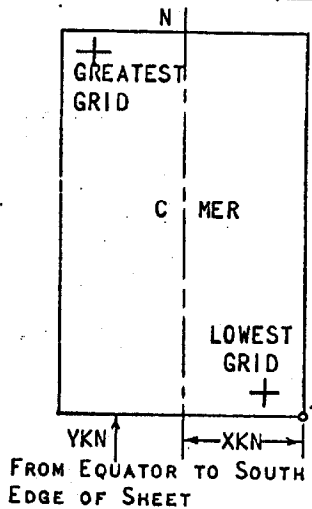
LAUF ISLANDS

RODMAN BAY

RODMAN CREEK

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

- (1) PROJECT No. 488 (4) REQUESTED BY FAIRWEATHER
 (2) H No. 9/25 **20040** SHIP OR OFFICE FAIRWEATHER
 (3) FIELD No. D-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). 4573.334 METERS
 (11) YKN (SP 241) DISTANCE FROM EQUATOR TO SOUTH EDGE
 OF SHEET. 6366.4134 METERS
 (12) CENTRAL MERIDIAN 135° 23' 00" "
 (13) SURVEY SCALE 1:10,000
 (14) SIZE OF SHEET (CHECK ONE) 36X54 42X60 OTHER
 (15) NYX, ORIENTATION OF SHEET (CHECK ONE)
 NYX = 1 NYX = 0



(9) PLOTTER ORIGIN
(CORNER OF SHEET)

LATITUDE 57° 25' 12" "
 LONGITUDE 135° 18' 26" "

GRID LIMITS

- (16) GREATEST LATITUDE 57° 25' 20" " (PROJECTION LINE
 (17) LOWEST LATITUDE 57° 25' 30" " INTERVAL, PAGE 4
 (18) DIFFERENCE 0° 7' 00" " HYDRO MANUAL)
 (19) 0° 30" "
 (20) 14 YSN
 (21) GREATEST LONGITUDE 135° 27' 30" "
 (22) LOWEST LONGITUDE 135° 18' 30" "
 (23) DIFFERENCE 0° 09' 00" "
 (24) 0° 30" "
 (25) 18 XSN

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

GEOGRAPHIC NAMES

Survey No. H-9125

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
Alaska												1
Baranof Island												2
Duffield Peninsula												3
Lauf Islands												4
Rodman Bay												5
Rodman Creek												6
												7
												8
												9
												10
												11
												12
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												25
												26
												27

Names prepared
F.W. Pickett 8-1-72

Names approved
A.J. Wright 8-1-72

VERIFIER'S NOTE
H-9125

0. MISCELLANEOUS

The corners of log booms were located by 3-point-fixes. The fixes for positions 4020 through 4022 are "swingers" and no check angles were obtained.

There are no piles or dolphins to indicate any permanence of the log-boom operations. The depth of water (18-20 fathoms) further indicate that permance of location of these log-booms is highly suspect.

One day's hydrography bisects boom area, indicating the log-booms were not continually in place. Therefore, log-booms have not been delineated on the smooth sheet.

Respectfully submitted,

Cornelius A. J. Pauw
Cornelius A. J. Pauw
Carto. Tech.

VERIFIER'S REPORT

HYDROGRAPHIC SURVEY, H. 9125 (FA -10-3-70)

INSTRUCTIONS - This form serves to identify items of a checklist 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>	✓		<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>	✓			
<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>	None		<p>Part IV - VOLUMES</p> <p>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>	✓			
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>	✓			<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</p> <p>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>	photo		<p>Part V - PROTRACTING</p> <p>13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>				
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>	✓				<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>	✓	
<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>	✓					<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>	✓
<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>	None						
<p>Part III - JUNCTIONS</p> <p>Note: Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None</p>	✓						
<p>9. The notation in slanted lettering "JOINS H---- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. <u>Those not verified are shown in pencil.</u> Remarks Required: -- None</p>	✓						

H-9125 (FA-10-3-70)

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.	AUTO Plot		26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	None	
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.	??		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. Remarks Required: -- None	None	
Part VI - SOUNDINGS			Part IX - BOAT SHEET		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None	??		28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	✓	
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.	Satisfactory		29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	✓	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	✓		Part X - GENERAL		
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	✓		30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None	✓	
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.	OK Auto Plot		31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	✓	
Part VII - CURVES					
23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected. <i>A.E. Eichelberger</i>	✓		32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	✓	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: 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 Remarks Required: -- None	Not defined except South End of Bay				
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). 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.	Satisfactory		33. The bottom characteristics are adequately shown. Remarks Required: -- None	✓	
Part XI - NOTES TO THE REVIEWER					
			34. Unresolved discrepancies and questionable soundings.	None	
			35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.	None	
			36. Supplemental information.	None	

Verified by

Cornelius A. J. Pauw


Date

June 20, 1972

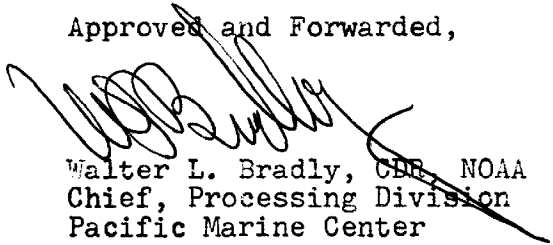
APPROVAL SHEET

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,


William M. Martin
Supervisory Carto. Tech.
6/28/72

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