

9207

IMPORTANT
PAGE 35 WAS ADDED
IT IS NOT A PAGE IN THE REPORT
IT SHOWS H-2768 (1905) IN RED
AND H-2768a (1911) IN BLUE
FROM THE ORIGINAL DOCUMENT
NOT CLEAR ON SCAN OF PAGE 34

Diag. Cht. No. 8502-2

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-10-1-71
Office No..... H-9207

LOCALITY

State Alaska
General Locality Katalla Bay
Locality Martin Islands to Strawberry Point

19 71

CHIEF OF PARTY
R. H. Houlder

LIBRARY & ARCHIVES

DATE March 6, 1979

9207

HYDROGRAPHIC TITLE SHEET

H-9207

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-10-1-71

State Alaska

General locality Katalla Bay

Locality Martin Islands to Strawberry Point

Scale 1:10,000 Date of survey 25 June to 11 August 1971

Instructions dated 1 March 1971 Project No. OPR-487-FA-71

Vessel NOAA Ship FAIRWEATHER Launches FA-3, FA-4, FA-5, FA-6 & FA-8

Chief of party CAPT R.H. Houlder

Surveyed by LCDR R.V. O'Connell, LT L.K. Nelson, LT M.C. Grunthal
Ross 400A Fineline

Soundings taken by echo sounder, ~~and lead~~ Raytheon DE-723, Serial Nos. 533, 559

Graphic record scaled by FAIRWEATHER Personnel

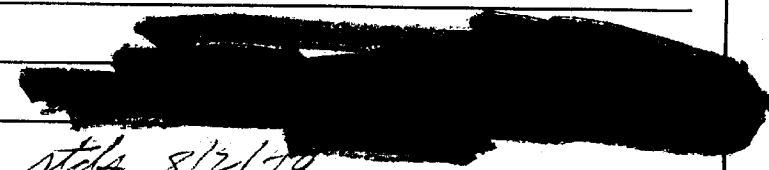
Graphic record checked by FAIRWEATHER Personnel

Positions verified by V.F. Flor Automated plot by PMC Xynetics Plotter

Soundings ~~by~~ Verification by A.E. Eichelberger

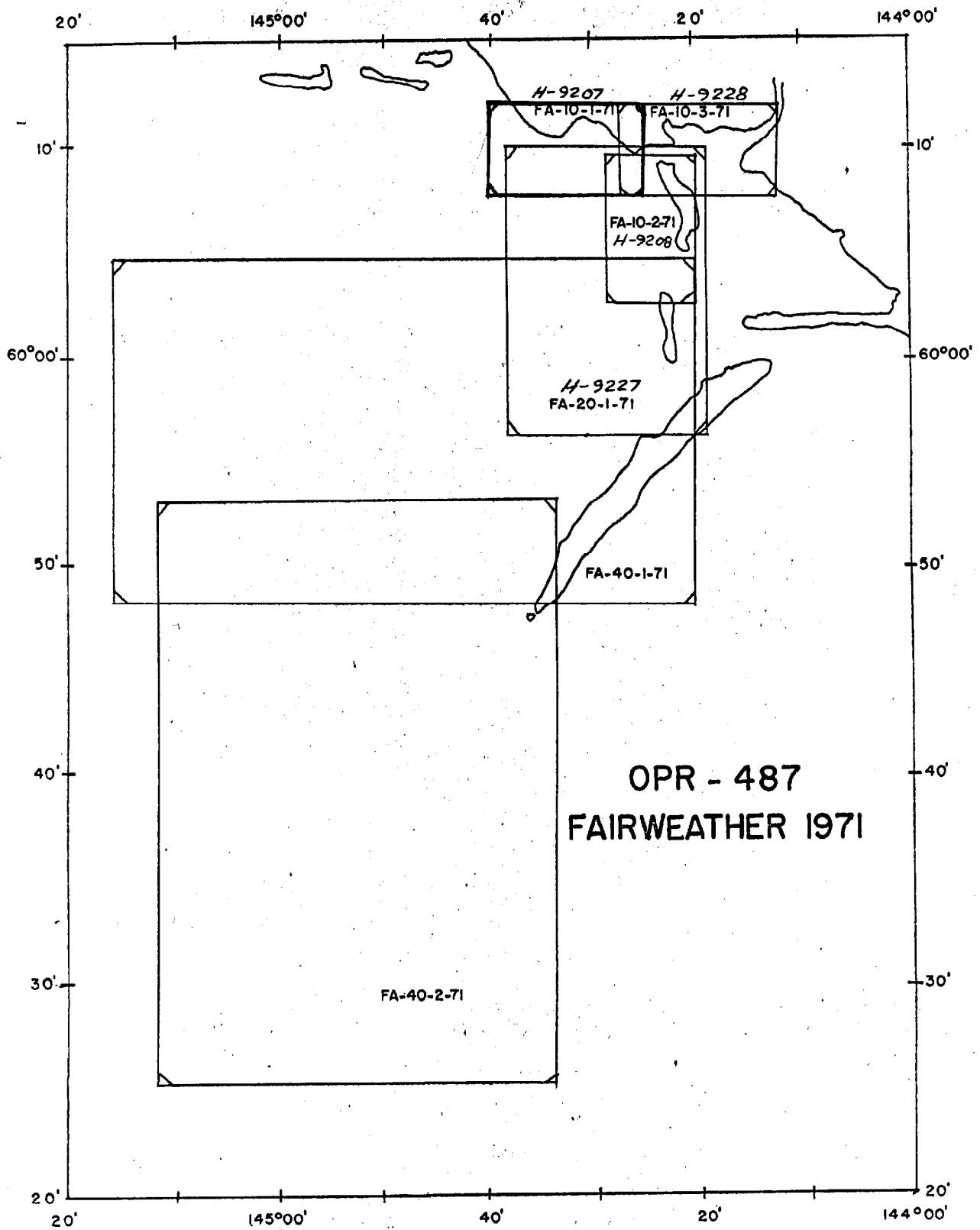
Soundings in fathoms ~~xxx~~ and tenths at ~~xxx~~ MLLW

REMARKS:



Applied to stobs 8/2/79

Pages of miscellaneous data have been removed from this report and filed with the logs.



Descriptive Report
to Accompany
Hydrographic Sheet H-9207 (FA-10-1-71)

Controller Bay, Alaska

Scale 1:10,000

NOAA Ship FAIRWEATHER (MSS-20)

CAPT. R. H. Houlder, Commanding

A. PROJECT

The survey was accomplished under OPR-487, project instructions dated 2 March 1970, and in accordance with the PMC OORDER. There were also three supplements to the project instructions, dated 25 March, 10 May, and 24 May 1971.

B. AREA SURVEYED

This survey includes the area of Katalla Bay from the Martin Islands to Strawberry Point. The sheet is bounded on the north by latitude 60°12'00" N. and on the south by latitude 60°08'00" N. where it joins ^{H-9227}FA-20-1-71. It extends from longitude 144°27'00" W. on the east to longitude 144°39'00" W. on the west.

The control was established from 10 May through 11 June 1971. Hydrography was accomplished from 25 June through 11 August 1971.

The only prior surveys are H-2768, scale 1:20,000, 1905 and H-2768 supplement, scale 1:20,000, 1911.

C. SOUNDING VESSELS

Four FAIRWEATHER launches were used to accomplish the hydrography. The following are color codes and position numbers applicable to each vessel:

FA-3	Green	2001 - 3101
FA-4	Blue	4001 - 5099
FA-5	Red	6001 - 7060
FA-6	Brown	8001 - 8092
FA-8		9000 - 9004

D. SOUNDING EQUIPMENT

Launch 4 used a Ross 400A Fineline fathometer. The remainder of the sounding lines were run by Launches FA-3, -5, and -6 using Raytheon DE-723 fathometers having serial numbers 533, 559, and 561 respectively.

The echo sounding velocity corrections were determined from serial temperature and salinity observations. The corrections for the launches also include bar check results; an abstract of the cumulative corrections to the soundings for the survey is included with this report. ✓

E. SMOOTH SHEET

The position and sounding data were recorded, logged for automated processing, and plotted on the boatsheet by ship's personnel. The signal list was prepared 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 recovered triangulation stations and photo-identified stations on Incomplete Manuscripts, scale 1:10,000 numbers TP-00073, TP-00074, and TP-00076. A list of signals and their locations is included with this report. ✓

G. SHORELINE

Shoreline was transferred directly to the boat sheet from Incomplete Manuscripts TP-00073, TP-00074, and TP-00076, and verified in the field where possible using the field ratio prints and the field edit ozalid copies of the Incomplete Manuscripts. ✓

All discrepancies were noted on "Field Edit Ozalids" and referenced to appropriate matte prints. It was not possible to verify the entire shoreline due to inclement weather.

In many areas the low water line is not defined by soundings due to rocks and foul waters.

H. CROSSLINES

Crosslines, consisting of approximately ten per cent of the regular system of sounding lines, were in good agreement. ✓

I. JUNCTIONS

Junction was made with contemporary survey ^{H-9227} FA-20-1-71 ^{on the southwest} and was complete and adequate. ✓

J. COMPARISON WITH PRIOR SURVEYS

Comparison of soundings with those of prior surveys H-2768, 1:20,000, 1905 and H-2768 supplement, 1:20,000, 1911 showed that the soundings have decreased by 1 - 2 fathoms, probably as a result of the 27 March 1964 Prince William Sound earthquake. However, the scarcity of sounding lines on the prior survey does not allow accurate comparison. ✓

Investigation was made of the applicable items listed on the Pre-Survey Review, OPR-487, dated 26 February 1971, and the following recommendations made:

1. The engine from the wreck of the USS PORTLAND was not located where thought to be (60°11.0' N., 144°31.3' W.), but a boiler was found washed up on the beach in the same vicinity and was used as hydro signal number 23. ✓
2. A determination of quicksand off the mouth of the Katalla River (60°09.8' N., 144°32.2' W.) was not made; however, a bottom sample was taken at the location and will be forwarded for further analysis.
3. The 16 fathom sounding at position 60°09.7' N., 144°36.0' W. was determined to be 10 fathoms.

K. COMPARISON WITH THE CHART

Comparison of the survey with C&GS Chart No. 8513, scale 1:100,000, 9th Edition, August 9, 1969 indicates that the area surveyed is 1 to 2 fathoms shoaler than shown on the chart (probably as a result of the 1964 earthquake). 16723 ✓

Special interest should be given to the following items that do not appear on the chart: ✓

1. A group of submerged rocks extends approximately 1 mile to the SW of Fox Island with several soundings of 1⁸ to 2⁵ fathoms.
2. A ^{0.7} 1 to ³ 2 fathom shoal extends between Fox Island and Whale Island.

L. ADEQUACY OF THE SURVEY

Due to inclement weather the sheet was not completed. The eastern limit of hydrography is 144°28.9' W. and between longitudes 144°32.3' W. and 144°33.5' W. hydrography was extended only to latitude 60°08.0' N. due to poor visibility. ✓

There are approximately 2.7 square n.m. of hydrography left to complete the sheet which is equivalent to approximately 3 days of launch work.

M. AIDS TO NAVIGATION

There is one fixed aid to navigation in the area of the survey. Comparison of the position of this object with the existing charted position was found to be accurate. Refer to the separate report on Nonfloating Aids or Landmarks for Charts enclosed with this report. ✓

N. STATISTICS

	<u>FA-3</u>	<u>FA-4</u>	<u>FA-5</u>	<u>FA-6</u>
Positions	973	994	1049	92
Sounding Lines (n.m.)	137.9	152.5	136.0	1.0
Bottom Samples	0	0	4	41
Area Surveyed	13.6 sq. n.m.			

O. MISCELLANEOUS

Various rocks and foul areas were located by sextant fixes and plotted on the boat sheet. ✓

P. RECOMMENDATIONS

It is recommended that hydrography be completed to the limits of the boat sheet next season and that the shoreline be accurately delineated at that time. ✓

Q. REFERENCES TO REPORTS

1. Field Edit Report, OPR-487, NOAA Ship FAIRWEATHER, 1971. (To be forwarded).
2. Fathometer Report, OPR-487, NOAA Ship FAIRWEATHER, 1971. (To be forwarded).
3. Coast Pilot Report, OPR-487, NOAA Ship FAIRWEATHER, 1971. (To be forwarded). ✓
4. Triangulation Report, OPR-487, NOAA Ship FAIRWEATHER, 1971. (To be forwarded).
5. Magnetism Report, OPR-487, NOAA Ship FAIRWEATHER, 1971. (To be forwarded).

Respectfully submitted,

Emerson G. Wood

Emerson G. Wood
ENS., NOAA

TIDE NOTE

Four portable tide gages were installed and operated in connection with ship and launch hydrography during the survey. These were at Martin Island-Katalla Bay, Lat. 60°09.9' N., Long. 144°36.1' W.; Kanak Island, Lat. 60°06.3' N., Long. 144°19.3' W.; Cape St. Elias, Latitude 59°47.8' N., Long. 144°35.8' W.; and Port Etches-Hinchinbrook Island, Lat. 60°19.6' N., Long. 146°34.3' W. The gages at Martin Island-Katalla Bay and at Cape St. Elias were Bristol bubbler gages. Hourly heights were scanned and checked by ship's personnel and the data was forwarded to Rockville, Maryland (C33). The gages at Kanak Island and Port Etches-Hinchinbrook Island were Fisher-Porter ADR gages. These marigrams were also forwarded to Rockville for analysis.

Tide reducers applied to ship and launch soundings for boat sheet purposes were obtained from the IBM 1620 at Pacific Marine Center, Seattle, Washington, using Sitka as a reference station and Wingham Island as a substation.

Velocity Corrections

Controller Bay, Alaska

OPR-487 1971

NOAA Ship FAIRWEATHER (MSS-20)

Captain R. H. Houlder, Comdg.

Corrections to be applied to the following sheets:

FA-10-1-71
FA-10-2-71
FA-10-3-71
FA-20-1-71
FA-40-1-71
FA-40-2-71

The following table will be used between the dates of May 26 (146) and June 5 (156) 1971.

(Table 01)

<u>APPLICABLE DEPTHS</u> (fms)	<u>CORRECTIONS</u> (fms)
0000-1100	0.0

The following table will be used between the dates of June 10 (161) and August 11 (223) 1971.

(Table 02)

<u>APPLICABLE DEPTHS</u> (fms)	<u>CORRECTIONS</u> (fms)
0000-0005	0.0
0005-0010	+0.1
0010-0025	+0.2
0025-0045	+0.3
0045-0085	+0.4
0085-0100	+0.6
0100-0160	+0.7
0160-0180	+0.8
0180-0200	+0.9
0200-0400	+1.7
0400-0600	+3.1

APPLICABLE DEPTHS (fms) CORRECTIONS (fms)

0600-0800	+5.2
0800-1000	+8.3
1000-1200	+12.2

~~PRD~~ ^{TRA} CORRECTIONS
OPR-487
1971
Controller Bay, Alaska
LAUNCH FA-3

<u>Sheet</u>	<u>Date/Day</u>	
FA-10-1-71	6-27	178 +0.3
	6-28	179 +0.2
	6-29	180 +0.2
	6-30	181 +0.2
	7-07	188 +0.3
	7-08	189 +0.3
	7-09	190 +0.2
	7-12	193 (Position #2744) +0.3
	7-12	193 (Position #2899) +0.2
	7-12	193 (Position #2913) +0.3
	7-12	193 (Position #2933) +0.1
	7-12	193 (Position #2935) +0.3
	8-09	221 +0.3
	8-11	223 +0.4

TRA
ECHO-CORRECTIONS
OPR-487
1971
Controller Bay, Alaska
LAUNCH FA-4

<u>Sheet Number</u>	<u>Date/Day</u>	<u>Correction (fms)</u>
FA-10-1-71	6-25 176	+0.3
	6-26 177	+0.2
	6-27 178	+0.2
	6-28 179 (Position #4392)	+0.3
	6-28 179 (Position #4432)	+0.1
	6-28 179 (Time 1305:45)	+0.2
	6-28 179 (Time 1308:30)	+0.3
	6-29 180	+0.3
	6-30 181	+0.3
	7-07 188 (Position #4647)	+0.5
	7-07 188 (Position #4682)	+0.3
	7-07 188 (Position #4726)	+0.4
	7-07 188 (Position #4756)	+0.3
	7-08 189	+0.3
	7-11 192 (Position #5001)	+0.3
	7-11 192 (Position #5012)	+0.5
	8-10 222 (Position #5026)	+0.3
	8-10 222 (Position #5028)	+0.5
	8-10 222 (Position #5038)	+0.3
	8-10 222 (Position #5047)	+0.5
	8-10 222 (Position #5051)	+0.3
	8-10 222 (Position #5054)	+0.5
	8-10 222 (Time 1341)	+0.6
	8-10 222 (Position #5058)	+0.5
	8-10 222 (Position #5060)	0.0
	8-10 222 (Position #5063)	+0.3
	8-10 222 (Position #5092)	+0.1
	8-10 222 (Position #5095)	+0.3

TRA
ECHO CORRECTIONS
OPR-487
1971
Controller Bay, Alaska

LAUNCH FA-5

<u>Sheet Number</u>	<u>Date/Day</u>	<u>Correction (fms)</u>
FA-10-1-71	7-09 190	+0.3
	7-10 191	+0.2
	7-11 192	+0.3
	7-12 193	+0.2
	7-13 194	+0.2
	8-09 221 (Position #6765)	+0.2
	8-09 221 (Position #6787)	0.0
	8-09 221 [Position #6790)	+0.2
	8-10 222	+0.3
	8-11 223	+0.2

SIGNAL LIST: FA-10-1-71

<u>Signal Number</u>	<u>Latitude</u> (° ' m)	<u>Longitude</u> (° ' m)
001	60° 12' 0467m	144° 38' 0615m
002	60° 12' 0249m	144° 38' 0155m
003	60° 11' 1389m	144° 37' 0215m
004	60° 11' 0946m	144° 36' 0533m
005	60° 11' 0601m	144° 36° 0333m
006	60° 11' 0205m	144° 36' 0108m
007	60° 10' 1809m	144° 35' 0619m
008	60° 10' 0557m	144° 35' 0415m
009	60° 10' 0351m	144° 35' 0800m
010	60° 10' 0220m	144° 36' 0189m
011	60° 09' 1662m	144° 36' 0224m
012	60° ⁰⁹ 10 ' 1798m	144° 35' ¹⁸ 20 m
013	60° 10' 0739m	144° 35' 0136m
014	60° 10' 0986m	144° 35' 0005m
015	60° 10' ³⁹ 13 ' 1343m	144° 35' 0037m
016	60° 11' 0020m	144° 34' 0528m
017	60° 10' 1665m	144° 33' 0683m
018	60° 10' 1371m	144° 33' 0241m
019	60° 10' ⁸⁰ 76 m	144° 33' ⁷ 39 m
020	60° 11' 0144m	144° 32' 0685m
021	60° 11' 0538m	144° 31' 0743m
022	60° 11' 1025m	144° 31' 0244m
023	60° 11' 0788m	144° 30' 0893m
024	60° 10' 1829m	144° 29' 0733m

SIGNAL LIST: FA-10-1-71

<u>Signal Number</u>	<u>Latitude</u> (° ' m)	<u>Longitude</u> (° ' m)
025	60° 10' 1220m	144° 28' 0899m
026	60° 10' 0115m	144° 27' 0862m
027	60° 09' 1101m	144° 27' 0126m
028	60° 10' 0082m	144° 25' 0902m
029	60° 10' 0144m	144° 25' 0694m
030	60° 10' 0134m	144° 25' 0147m
031	60° 10' 0157m	144° 24' 0762m
032	60° 10' 0469m	144° 23' 0754m
033	60° 10' 0420m	144° 23' 0086m
034	60° 10' 0162m	144° 21' 0789m
035	60° 10' 0762m	144° 21' 0737m
036	60°	144°
037	60° 10' 0980m	144° 19' 0320m
038	60° 10' 1133m	144° 18' 0379m
039	60° 10' 1369m	144° 17' 0862m
040	60° 10' 1425m	144° 17' 0464m
041	60° 10' 1482m	144° 17' 0025m
042	60° 10' 1640m	144° 16' 0331m
043	60° 10' 1528m	144° 15' 0844m
044	60° 10' 1556m	144° 15' 0190m
045	60° 10' 1652m	144° 14' 0600m
046	60° 10' 1684m	144° 13' 0749m
047	60° 10' 1746m	144° 13' 0474m
048	60° 11' 0200m	144° 12' 0914m
049	60° 11' 0553m	144° 12' 0607m

SIGNAL LIST: FA-10-1-71

<u>Signal Number</u>	<u>Latitude</u> <u>(° ' m)</u>	<u>Longitude</u> <u>(° ' m)</u>
050	60° 11' 0862m	144° 12' 0294m
951	60° 11' 1204m	144° 12' 0023m
952	60° 11' 1437m	144° 11' 0840m
953	60° 12' 0058m	144° 11' 0722m
051	60° 08' 0801m	144° 23' 0192m
052	60° 08' 0219m	144° 22' 0645m
053	60° 07' 1058m	144° 21' 0885m
054	60° 07' 0285m	144° 21' 0489m
055	60° 06' 1248m	144° 21' 0139m
056	60° 06' 0339m	144° 20' 0904m
057	60° 06' 0324m	144° 20' 0233m
901	60° 09' 1776m	144° 36' 0412m
002	60° 09' 1649m	144° 36' 0279m
903	60° 09' 1558m	144° 36' 0106m
904	60° 09' 1641m	144° 35' 0877m
905	60° 10' 0069m	144° 35' 0916m
906	60° 12' 005 ⁵ ₂ m	144° 37' 067 ³ ₈ m
907	60° 11' 1428m	144° 31' 0162m
908	60° 1 ¹ ₀ ' 1404m	144° 30' 0885m <i>NOT USED ON H-9207</i>
909	60° 12' 0048m	144° 31' 0031m

-END-

INITIAL CORRECTIONS

SHEET	VESSEL	POSITIONS	CORRECTIONS (fms)
FA-40-2-71	Ship FAIRWEATHER	0532-0617	-0.2
		0618-0856	0.0
		0857-0934	+0.2
		0935-1013	-0.3
		1014-1348	0.0
		1349-1354	-0.2
		1355-1367	0.0
		1368-1409	+0.2
		1410-1800	0.0
		1801-1918	-0.2
		1820-2421	0.0
FA-20-1-71	Ship FAIRWEATHER	0001-0503	0.0
FA-10-1-71	FA-3	2001-2898	0.0
		2899-291203	-0.1
		2913-293203	0.0
FA-10-1-71	FA-4	2933-293501	-0.2
		293502 2936-3101	0.0
		4001-4431	0.0
		4432-4515 443503	-0.1
		443504 4516-4646	0.0
		4647-4681	+0.2
		4682-4725	0.0
		4726-4755	+0.1
		4756-5011	0.0
		5012-5025	+0.2
		5026-5027 502801	0.0
		502802 5028-5037	+0.2
		5038-504603	0.0
		5047-505003	+0.2
		5051-505303	0.0
		5054-5059 505501	+0.2
		505502) 5060-5062 505703	-0.3
		505805 5063-5091	0.0
		5092-509403	-0.2
5095-5097	0.0		
FA-10-1-71	FA-5	6001-6786	0.0
		6787-6789	-0.2
		6790-7060	0.0
FA-10-1-71	Hydro Skiff	8037-8040	0.0
		8041-8045	+0.1
		8021-8023	0.0
		8046-8052	0.0
		8053-8057	-0.1
		8058-8059	0.0
		8060	-0.2
		8061	0.0

INITIAL CORRECTIONS

SHEET	VESSEL	POSITIONS	CORRECTIONS (fms)
FA-10-1-71	Hydro Skiff	8079-8080	0.0
		8081-8082	+0.1
		8083-8088	0.0
		8089-8091	+0.1
		8092	
FA-10-2-71	FA-3	2001-2051	0.0
		2052-2053	+0.1
		2054-2240	0.0
			0.0
FA-10-2-71	FA-5	6001-6037	0.0
FA-10-3-61	Hydro Skiff	6020-6051	-0.4
		8052-8070	0.0
		8081-8125	-0.1

4/16/74

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Martin Island
Kanak Island

Period: 30 April - 18 August 1971

HYDROGRAPHIC SHEET: H9207

OPR: 487

Locality: Martin Islands

Plane of reference (mean lower low water): Martin Island 7.3
Kanak Island 3.2

Height of Mean High Water above Plane of Reference is 9.0 ft.

Remarks: Zone Requirements:

1. Zone direct on Martin Island gage
2. During time of gage malfunction, apply range ratio of 0.95 to Kanak Island gage.

James R. Hubbard

for Chief, Tides Branch

APPROVAL SHEET

FOR

SURVEY H- 9207

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position print-out has been made. A new final sounding print-out has been made.
- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic Manual. Exceptions are listed in the verifier's report.

Date: 9 Feb 1979

Signed:

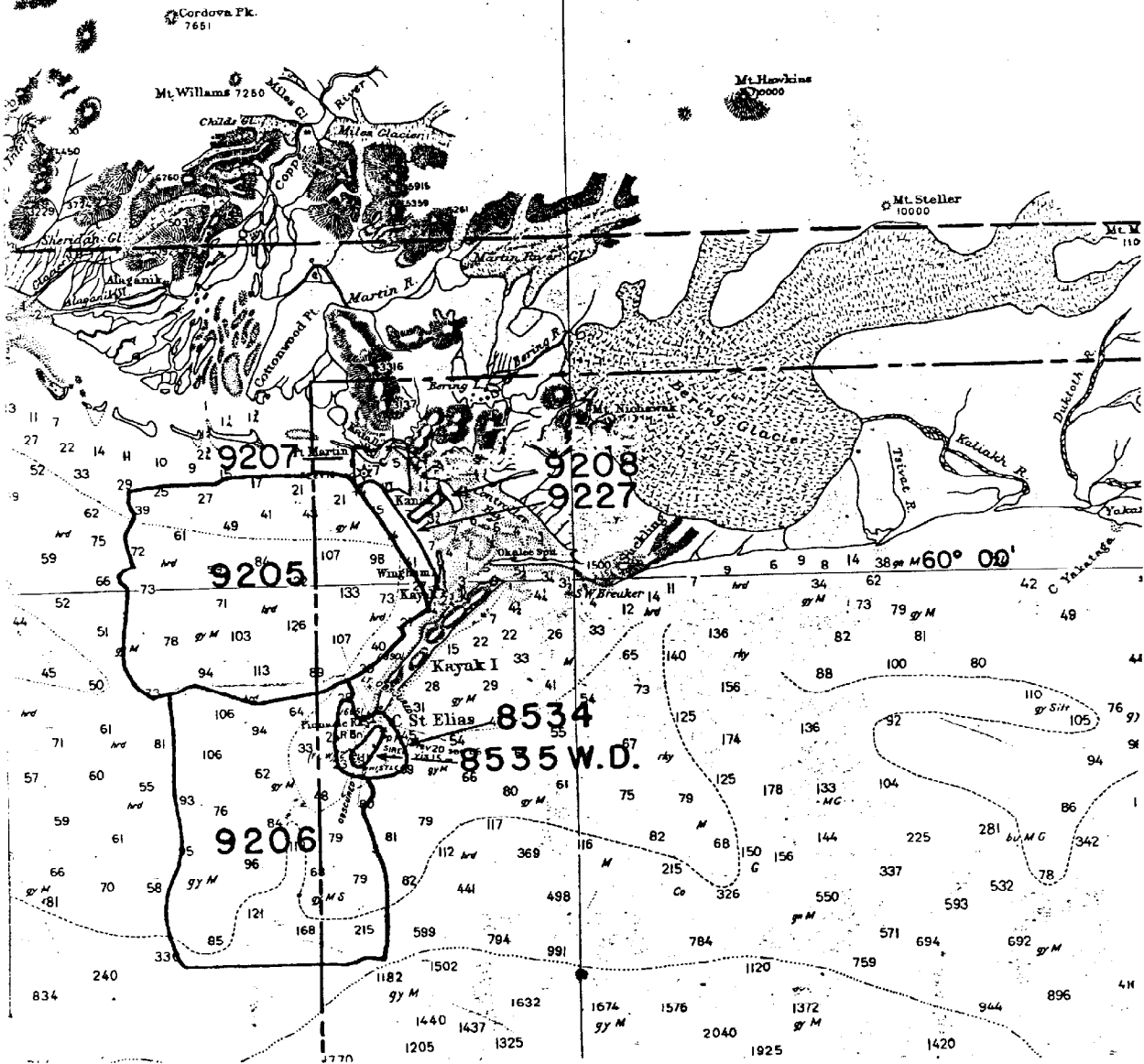


Title:

Chief, Verification Branch

144° 00'

Diag. Cht. 8502-2.



GEOGRAPHIC NAMES

H-9207

Name on Survey	A ON CHART NO. 8513 B ON PREVIOUS SURVEY NO. C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST TP-00073									
FOX ISLAND	✓	X	✓							1
GULF OF ALASKA	✓								X	2
KATALLA	✓	X	✓							3
KATALLA BAY	✓	X								4
KATALLA RIVER	✓	X	✓							5
MARTIN ISLANDS	✓	X	✓							6
PALM POINT	✓	X	✓							7
POINT MARTIN	✓	X	✓							8
SOFTUK BAR	✓	X	✓							9
STRAWBERRY POINT	✓	X	✓							10
WHALE ISLAND	✓		✓						X	11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

Chris L. Harrington

Chief Geographer - C3x5

17 APRIL 1979

HYDROGRAPHIC SURVEY STATISTICS

H-9207

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS & PRELIMINARY OVERLAYS 2-B/S & 5-PRELIMINARY OVERLAYS		7	
DESCRIPTIVE REPORT		1	SMOOTH OVERLAYS: POS. ARC, EXCESS		4	
DESCRIP- TION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	2-with	printouts				
VOLUMES	15					
BOXES						

T-SHEET PRINTS (List) TP-00073, TP-00074 - TP-00076 Class III

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	TOTALS
POSITIONS ON SHEET			3074
POSITIONS CHECKED		3074	
POSITIONS REVISED		64	
SOUNDINGS REVISED		1617	
SOUNDINGS ERRONEOUSLY SPACED		0	
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED		4	
	TIME - HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)	3		
VERIFICATION OF CONTROL		8	
VERIFICATION OF POSITIONS		211	
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TOTALS	3	566	
Pre-Verification by J.S. Green	Beginning Date 2/5/77	Ending Date 2/5/77	
Verification by V.F. Flor, A.E. Eichelberger	Beginning Date 10/2/72	Ending Date 1/24/79	
Verification Check by J.S. Green	Time (Hours) 8	Date 2/5/79	
Marine Center Inspection by	Time (Hours)	Date	
Quality Control Inspection by	Time (Hours)	Date	
Requirements Evaluation by	Time (Hours)	Date	

Inspection - Completed 12 hr 4/20/79

PACIFIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO: H-9207

FIELD NO: FA-10-1-71

Alaska, Katalla Bay, Martin Islands to Strawberry Point

SURVEYED: 25 June to 11 August 1971

SCALE: 1:10,000

PROJECT NO: OPR-487

SOUNDINGS: Ross Finline
Raytheon DE 723

CONTROL: Visual

Chief of Party.....CAPT R.H. Houlder
Surveyed by.....LCDR R.V. O'Connell, LT L.K. Nelson,
LT M.C. Grunthal
Automated plot by.....PMC Xynetics Plotter
Verified by.....V.F. Flor, A.E. Eichelberger
January 24, 1979

I. INTRODUCTION

H-9207 is a basic survey conducted from June 25 to August 11, 1971 by the FAIRWEATHER. The area surveyed is Katalla Bay, from the Martin Islands to Long. 144°28.9' in the vicinity of Strawberry Point.

This survey is considered incomplete as hydrography was not extended easterly to effect a junction with H-9228 (1971), or southerly to junction with H-9208 (1971). It is classified as an H-DEG CAT. 2 survey.

Parameters used by PMC to plot the smooth sheet are appended in the smooth printout. All correctors used to correct soundings on H-9207 can be located in the smooth printout.

Predicted tides from Sitka, corrected to Wingham Island, were used to reduce soundings on the boat sheet. Approved tides from the temporary gage at Martin Islands was utilized to reduce soundings on the smooth sheet.

Launch No. 4, days 176-178, used the Ross Fathometer with digitized depths. Launch No. 4, days 179-222, non-digitized Ross and DE-723 fathograms were scanned manually with initial corrections applied.

Some rock locations were duplicated by D.P.'s between Launches Nos. 4 and 6. Launch No. 4 positioning and elevations were considered more accurate in location and detail and were used to indicate most features.

Photogrammetric location from class III manuscripts and hydrographic elevations of identical rocks were used on the smooth sheet. See Tabulation Section III, Verifier's Report. Launch No. 5, day 193, rejected crossline soundings #666401-666603, averaging 0.5 fm shoaler than main scheme soundings.

II. CONTROL AND SHORELINE

Horizontal Control is adequately described in Section F of the Descriptive Report.

The following class III unreviewed manuscripts were used for this survey with their respective dates of photography. The shoreline and topographic features were left in pencil as the field edit was not completed.

TP-00073	1969, 1970
TP-00074	1969
TP-00076	1969

Photo-identified signal 8 falls outside the high-water line and is not described.

III. HYDROGRAPHY

- A. Crosslines are generally in good agreement, with a maximum difference of 0.3 fm. Launch No. 4 using a Ross Fineline fathometer and Launches Nos. 3, 5 and 6 using DE-723 fathometers introduced non-conformity in observed depths due to differences in transducer cones and bottom coverage. The Ross fathometer recorded depths 0.2 to 0.4 fm. shoaler than the DE-723.
- B. Standard depth curves could be adequately drawn except for the zero curve in the inshore areas due to the foul nature of the shoreline.
- C. Basic hydrography is adequate to delineate bottom configuration and determine least depths. There were no major difficulties encountered in the verification of the main scheme soundings.

There were 45 bottom samples taken during this survey. Nine samples were transferred from prior surveys H-2768 (1905) and H-2768a (1911).

Tabulation of Rocks and Features Verified and Inked on Smooth Sheet

Pos No.	Latitude	Longitude	Source Location	Source Elevation	Elevation
4158(F)	60°10.4'	144°33.9'	hydro	hydro	Cov. 1 ft.
4159(G)	60°10.4'	144°34.0'	hydro	hydro	Cov. 1 ft.
4160	60°10.4'	144°33.9'	Pos. 8070	Pos. 8070	
4161	60°10.3'	144°33.8'	hydro	hydro	(4)
4162	60°10.3'	144°33.7'	hydro	hydro	(0)
4163	60°10.4'	144°33.5'	TP-00073	hydro	(6)
4164	60°10.4'	144°33.4'	TP-00073	hydro	(10)
4344	60°09.8'	144°35.9'	TP-00073	hydro	(8)
4391	60°10.3'	144°35.4'	hydro	hydro	(11)
4516	60°10.3'	144°35.1'	boat sheet	hydro	(7)
4517	60°10.3'	144°35.2'	hydro	hydro	(2)
4518	60°10.5'	144°34.8'	NP	NP	(1)
4519	60°10.5'	144°34.8'	hydro	hydro	(4)
4520	60°10.5'	144°34.9'	hydro	hydro	(7)
4550	60°10.8'	144°34.6'	hydro	hydro	(4)
4551	60°10.8'	144°34.5'	TP-00073	hydro	(7)
4587	60°10.6'	144°35.4'	hydro	hydro	(11)
4588	60°10.6'	144°35.4'	hydro	hydro	(5)
8013	60°09.8'	144°35.8'	TP-00073	Pos. 4344	
8014	60°09.8'	144°36.3'	TP-00073	hydro	(6)
8015	60°09.9'	144°36.6'	hydro	hydro	(4)
8016	60°10.0'	144°36.5'	TP-00073	hydro	(4)
8017	60°10.1'	144°36.3'	hydro	hydro	(5)
8018	60°10.2'	144°35.9'	TP-00073	hydro	(9)
8019	60°10.3'	144°35.5'	Pos. 4391	Pos. 4391	
8020	60°10.3'	144°35.5'	TP-00073	hydro	(1)
8024	60°10.5'	144°35.3'	hydro	foul area	
8025	60°10.6'	144°35.4'	Pos. 4587	Pos. 4587	
8026	60°10.6'	144°35.4'	Pos. 4588	Pos. 4588	
8027	60°10.8'	144°35.7'	TP-00073	foul area	
8028	60°10.0'	144°35.9'	hydro	hydro	(7)
8029	60°10.1'	144°35.8'	hydro	hydro	(5)
8030	60°10.1'	144°35.8'	hydro	hydro	(5)
8031	60°10.3'	144°35.1'	boat sheet	Pos. 4516	
8032	60°10.3'	144°35.1'	TP-00073	hydro	(8)
8033	60°10.5'	144°35.0'	TP-00073	hydro	(5)
8034	60°10.7'	144°34.9'	boat sheet	hydro	(8)
8035	60°10.8'	144°34.6'	boat sheet	hydro	(6)
8036	60°10.8'	144°34.5'	TP-00073	Pos. 4551	
8062	60°11.7'	144°37.7'	TP-00073		
8063	60°11.4'	144°36.9'	TP-00073	hydro	(1)
8064	60°11.1'	144°36.3'	TP-00073	hydro	(5)
8065	60°10.9'	144°35.9'	TP-00073	foul area	
8066	60°10.8'	144°35.7'	TP-00073	foul area	
8067	60°10.6'	144°34.2'	TP-00073	foul area	
8068	60°10.5'	144°34.0'	TP-00073	foul area	
8069	60°10.4'	144°33.9'	TP-00073	foul area	

Pos No.	Latitude	Longitude	Source Location	Source Elevation	Elevation
8070	60°10.4'	144°33.9'	hydro	hydro	(1) (5)
8071	60°10.3'	144°33.5'	TP-00073	foul area	
8072	60°10.5'	144°33.3'	TP-00073	foul area	
8073	60°10.6'	144°32.9'	TP-00073	foul area	
8074	60°10.8'	144°32.7'	TP-00073	foul area	
8075	60°11.0'	144°32.4'	TP-00073	foul area	
8076	60°11.0'	144°32.1'	hydro	hydro	(1)
8077	60°11.0'	144°31.9'	hydro	hydro	(1)
8078	60°11.1'	144°31.5'	TP-00073	foul area	
9000(E)	60°09.7'	144°36.7'	hydro	hydro	Cov. 2 ft.
9001(D)	60°09.7'	144°36.7'	hydro	hydro	Cov. 1 ft.
9002(A)	60°09.9'	144°36.5'	hydro	hydro	Cov. 2 ft.
9003(B)	60°09.9'	144°36.5'	hydro	hydro	Cov. 1 ft.
9004	60°10.3'	144°35.8'	hydro	hydro	(0)
2847(C)	60°09.8'	144°36.4'	hydro	hydro	Cov. 1 ft.
4617	60°11.0'	144°32.2'	boat sheet	boat sheet	(1)

Rocks plotted on class III manuscript TP-00073 and inked on the boat sheet, without supporting data in the hydrographic records, were left in pencil on the smooth sheet.

The rock awash plotted on manuscript TP-00073 at Lat. 60°10.6', Long. 144°32.8' falling in depths of 4.5 fms. is considered to be erroneously identified and was not transferred to the smooth sheet.

IV. CONDITION OF SURVEY

With the following exceptions, the hydrographic records, overlays, smooth sheet, and reports are adequate and conform to the requirements of the Hydrographic Manual.

- A. Triangulation Stations were scaled from the boat sheet for the signal list. Published G.P.'s were substituted for the smooth sheet computations.
- B. Launch No. 3, days 178-180 (Pos. 2001-2278) and Launch No. 4, days 176-179 (Pos. 4001-4130): Soundings taken at 30" intervals. The spacing of soundings was insufficient for a survey of 1:10,000 scale. The verifier added additional soundings at 15" intervals where space permitted.
- C. Launch No. 4, day 176: 100 ft. scale Ross fathometer paper used instead of 50 fm. paper, resulting in loss of uniformity between digitized depths and the analog trace.
- D. No Commanding Officer's approval submitted with the Descriptive Report.

V. JUNCTIONS

This survey junctions to the south between Long. 144°33.5' and 144°37.5' with H-9227 (1971). H-9207 is generally shoaler with a maximum difference of 1 fm. H-9227 soundings were processed with tenths to 11 fms. and depths rounded in deeper water. H-9207 is plotted with tenths to 21 fms. This difference in programming accounts for a portion of the differences.

There are no contemporary surveys to the west, southeast or east of the completed portion of H-9207.

VI. COMPARISON WITH PRIOR SURVEYS

H-2768 (1905) 1:20,000

H-2768a (1911) 1:20,000

H-2768 (1905)

Soundings on H-9207 are considerably shoaler than on H-2768 with numerous isolated least depths southwest of Fox Island. The island on the prior survey at Lat. 60°10.45', Long. 144°35.2' is now a peninsula connected to the mainland. Many individual rocks and groups of rocks on H-2768 are now included within ledge and reef limits on H-9207. A few inshore rocks awash, one submerged rock, south of Fox Island, and four bottom samples have been carried forward from H-2768 in violet on the smooth sheet.

H-2768a (1911)

Soundings on H-9207 are much shoaler in the inshore area, especially offshore of the Katalla River entrance. Individual groups of rocks on H-2768a are now included within ledge and reef limits of H-9207 and were not carried forward. One rock awash and five bottom samples were transferred from H-2768a in brown on the smooth sheet.

With the above additions, H-9207 is adequate to supersede prior surveys in the common areas of hydrography.

VII. COMPARISON WITH CHART

C&GS 8513, 9th Ed., August 9, 1969, 1:100,000

Major shoreline changes have occurred when comparing the chart with the present class III manuscripts.

- A. Whale Island at Lat. 60°10.45', Long. 144°35.2' is now a peninsula connected to the mainland. The railway on the chart extending to the island is not shown on TP-00073.

- B. Extensive ledges and reefs around Palm Point and eastward from the point incorporated groups of rocks now charted.
- C. The point at the eastern side of the entrance to the Katalla River at Lat. $60^{\circ}11.6'$, Long. $144^{\circ}30.4'$ is now extended to $144^{\circ}31.1'$
- D. Strawberry Point at Lat. $60^{\circ}09.5'$, Long. $144^{\circ}25.5'$ on the chart has moved westward to Long. $144^{\circ}27.1'$.

The above changes are due to natural changes over a period of 66 years, substantial uplift occurring due to the 1964 Alaska earthquake, and the use of aerial photography and photogrammetric methods to more accurately delineate the shoreline.

A. Hydrography

The source was determined for most charted features and are designated as follows on the attached chartlet:

Red	H-2768 (1905)
Blue	H-2768a (1911)

Because charted hydrography and offshore features (except for PSR items) were identified as originating with prior surveys, discrepancies have been disposed of in Section VI, "Comparison with Prior Surveys". It is recommended that H-9207 supersede charted hydrography in the common area.

B. Aids to Navigation

Charted aids in the survey area adequately mark the features for which they are intended. NOAA Form 76-40 locating Martin Islands Light is included in the Descriptive Report.

PSR item #1, the engine from a wreck, reported in 1910 was not investigated by a sounding vessel. The location at Lat. $60^{\circ}11.0'$, Long. $144^{\circ}31.3'$ falls on the southerly edge of a small holiday with no sounding lines passing over the designated area. The indicated location of this item is arbitrary and falls inside the 2 fm. curve at this time (1971). Recommend this item not be charted *because of age and bottom changes*

PSR item #2, quicksand, reported in chart letter No. 69 of 1926 was not specifically investigated. Two bottom samples taken in the vicinity at Lat. $60^{\circ}09.8'$, Long. $144^{\circ}32.2'$, indicate grey sand and mud with no definite determination of quicksand. Recommend note continue to be charted.

A 16 fm. depth at Lat. $60^{\circ}09.7'$, Long. $144^{\circ}36.0'$ is apparently an error in chart compilation from H-2768 (1905). Soundings at this location on H-9207 indicate 10.2 fms. Recommend the 16 fm. be deleted.

VIII. COMPLIANCE WITH PROJECT INSTRUCTIONS

The completed portion of this survey adequately complies with Project Instructions dated 1 March 1971, Change No. 1 dated 25 March 1971, Change No. 2 dated 10 May 1971 and Change No. 3 dated 24 May 1971, with the following exceptions:

Line spacing exceeds 100 meters between a few main scheme lines in depths less than 11 fms. As this survey was submitted as incomplete, the field unit could have split wide line spacing upon completion to conform with the project instructions.

IX. ADDITIONAL FIELD WORK

This survey is considered a good basic survey. Additional field work is required to complete unsurveyed areas and to effect junctions with adjacent contemporary surveys.

Respectfully submitted,

A. E. Eichelberger

A.E. Eichelberger
Cartographic Technician
January 24, 1979

Examined and approved,

J. S. Green
James S. Green
Chief, Verification Branch

SUBMISSION STATEMENT
H-9207

Verification has been completed on Survey H-9207 and it is hereby submitted for review.

This survey was placed in Category II, verification to be completed on a time available basis by the Hydrographic Data Evaluation Group (HDEG) in 1975. As a result of its HDEG status, this survey has not been examined by the PMC Hydrographic Survey Inspection Team and has not received administrative approval.

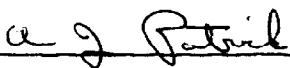
This survey is incomplete to the south and the east and in that field edit has not been completed or applied. It is recommended that this survey be used as a charting source for its area of coverage.


Chief, Processing Division
Pacific Marine Center

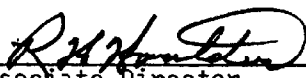
12 Feb 1979

The processing and verification of survey H-9207 were accomplished by the Processing Division, Pacific Marine Center.

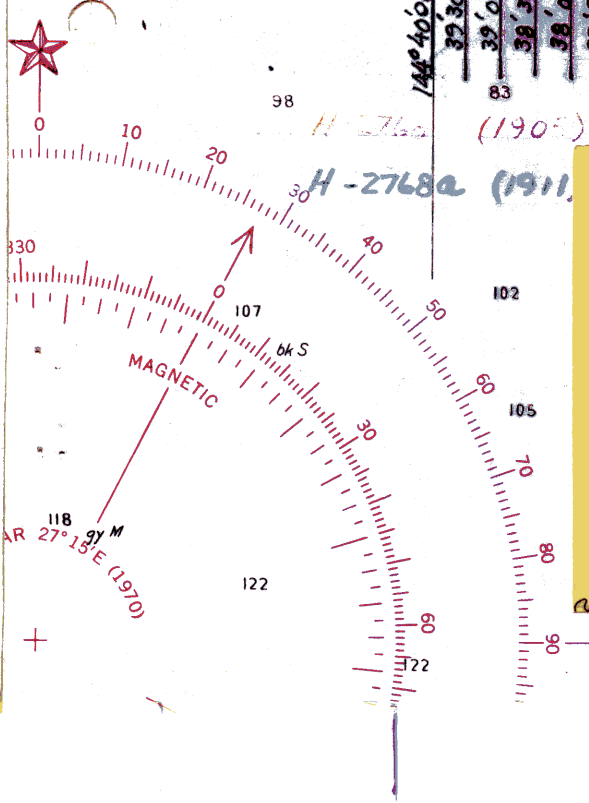
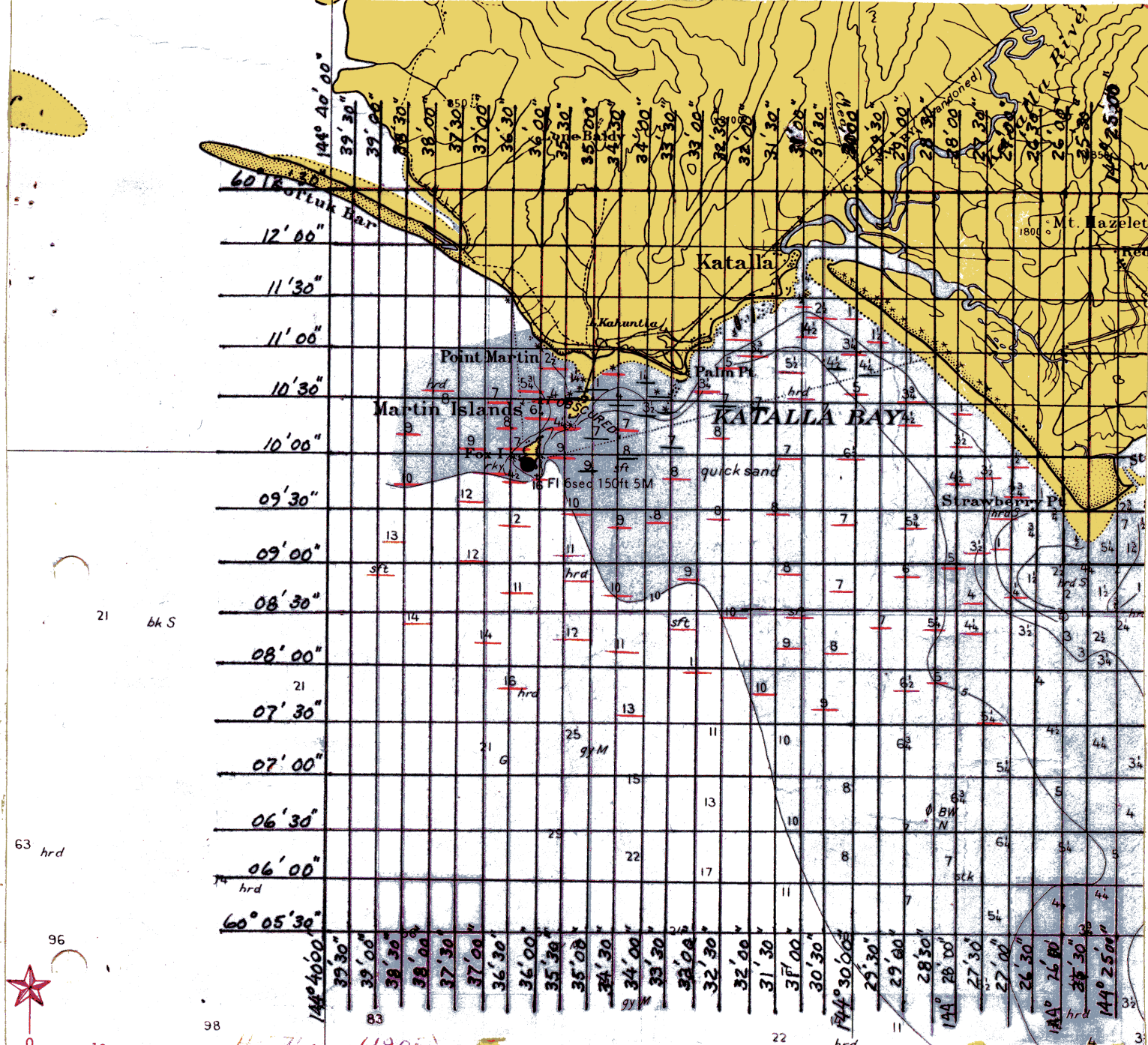
Examined and Approved:



Chief
Hydrographic Surveys Division



Associate Director
Office of Marine Surveys
and Maps



UNITED STATES
ALASKA - SOUTH COAST
CONTROLLER BAY
 Mercator Projection
 Scale 1:100,000 at Lat. 60°
SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

9th Ed., Aug. 9/69 (corr. thru N.M. 32/69)
8513 16723 PRICE \$1.50

60° 05' 30"

144° 40' 00"

39' 30"

39' 00"

38' 30"

38' 00"

37' 30"

37' 00"

36' 30"

36' 00"

35' 30"

35' 00"

34' 30"

34' 00"

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32' 30"

32' 00"

31' 30"

31' 00"

30' 30"

30' 00"

29' 30"

29' 00"

28' 30"

28' 00"

H-2768

(1905)

H-2768a

(1911)

UNITED STATES

ALASKA - SOUTH COAST

Handwritten notes in red ink with arrows pointing to the map grid.

