

9227

Diag. Cht. No. 8502-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

OPR - 487

**DESCRIPTIVE REPORT**

NOAA Ship FAIRWEATHER (MSS-20)

Type of Survey HYDROGRAPHIC

Field No. FA20-1-71 Office No. H-9227

**LOCALITY**

State Alaska

General locality Gulf of Alaska

Locality Controller Bay

1971

**CHIEF OF PARTY**

Captain R. H. Houlder, Commanding

**LIBRARY & ARCHIVES**

DATE OCT 24 1974  
OCT 24 1974

USCGM-DC 5087

*Charts 8513  
892  
8500*

9227

**HYDROGRAPHIC TITLE SHEET**

H-9227

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-20-1-71

State Alaska

General locality Gulf of Alaska

Locality Controller Bay

Scale 1:20,000 Date of survey 28 July to 6 August, 1971

Instructions dated 1 March 1971 Project No. OPR-487

Vessel NOAA Ship FAIRWEATHER

Chief of party CAPT. R. H. Houlder

Surveyed by LCDR. R. V. O'Connell, LT. L. K. Nelson, LT. M. C. Grunthal,  
LTJG D. B. McLean, ENS. E. G. Wood, ENS. F. B. Arbusto

Soundings taken by echo sounder, ~~and hand, pole~~ Raytheon DE-723, Serial No. 529

Graphic record scaled by FAIRWEATHER personnel

Graphic record checked by FAIRWEATHER personnel

Protracted by \_\_\_\_\_ Automated plot by \_\_\_\_\_

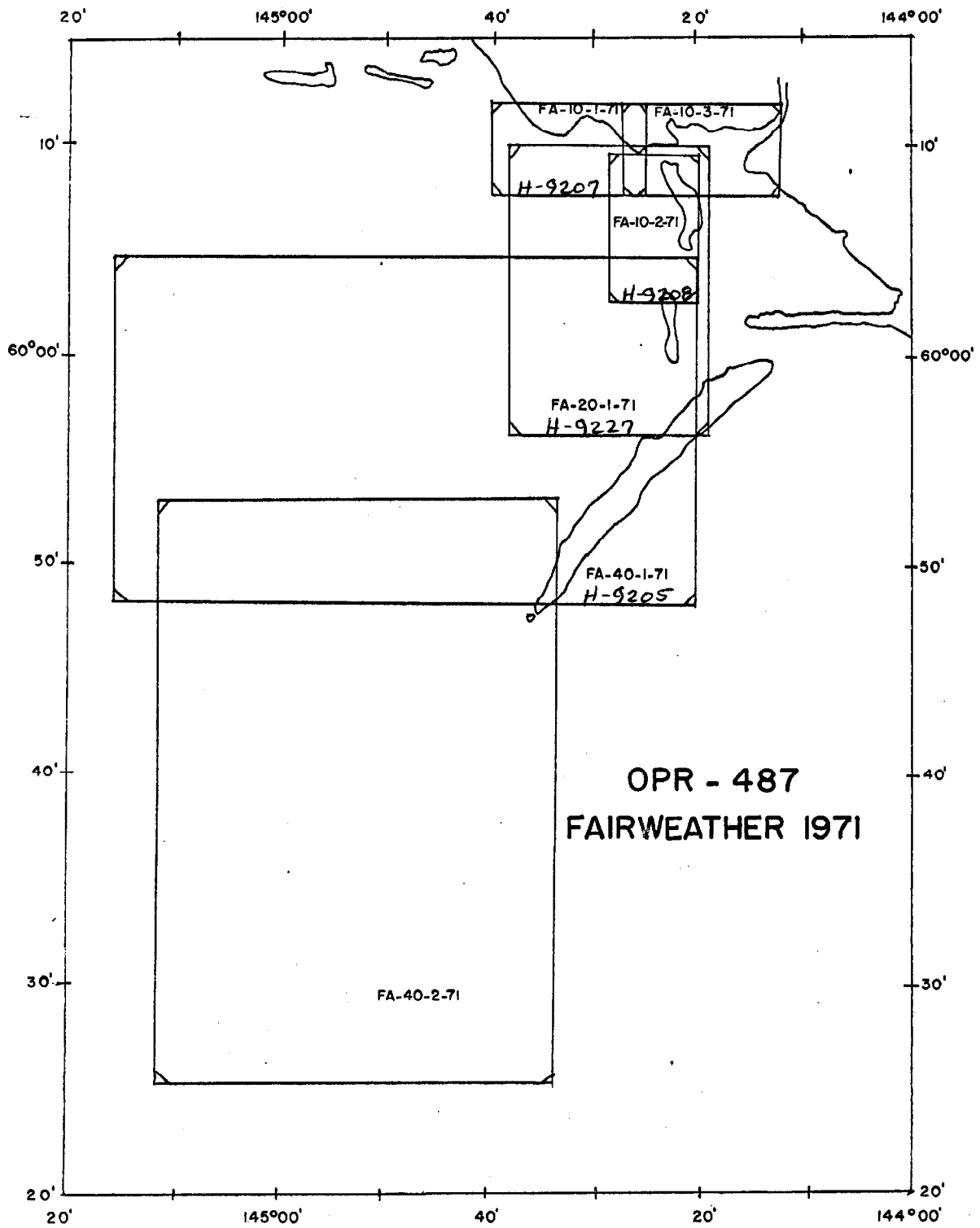
Soundings penciled by \_\_\_\_\_

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

REMARKS: \_\_\_\_\_

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

*Applied to title 12/27/74*  
*[Signature]*



Descriptive Report

to Accompany

Hydrographic Sheet H- 9227 (FA-20-1-71)

Controller Bay, Alaska

Scale 1:20,000

NOAA Ship FAIRWEATHER (MSS-20)

CAPT. R. H. Houlder, Commanding

A. PROJECT

The survey was accomplished under OPR-487 project instructions dated 1 March 1971 and supplement to instructions dated 25 March 1971, amendment to instructions dated 10 May 1971 and amendment to instructions dated 24 May 1971.

B. AREA SURVEYED

The area surveyed was in Controller Bay, Alaska, west of Kanak and Wingham Islands, and south of Fox Island. The area surveyed is bounded on the north by latitude 60°09' N., on the south by latitude 59°59' N., on the west by longitude 144°38' W., and on the east by longitude 144°26' W. The sounding lines form a 1.4 n.m. wide band stretching from the northwest to the southeast corner of the bounded area described above.

Hydrography was accomplished between 28 July and 6 August 1971. This survey junctions with contemporary surveys FA-40-1-71 and FA-10-1-71. Prior surveys applicable to the area covered by this survey are H-2768, 1:20,000, 1905, H-2868a, 1:100,000, 1898 to 1906, and H-3017, 1:20,000, 1909.

C. SOUNDING VESSELS

The ship FAIRWEATHER accomplished the hydrography, using violet colored ink to denote the position numbers.

D. SOUNDING EQUIPMENT

A Raytheon Model DE-723 echo sounding fathometer, serial number 529, was used to take the soundings. Applicable velocity corrections were determined by serial temperature and salinity observations which were made in the area covered by adjoining contemporary survey FA-40-1-71.

E. SMOOTH SHEET

The position and sounding data were recorded, logged for automated processing, and plotted on boat sheets by FAIRWEATHER personnel. The final smooth sheet is to be plotted electronically and verified at PMC.

F. CONTROL

Decca HiFix was used in the range-range mode throughout the survey. Transmitting stations were located on Middleton Island and thirteen miles southeast of Cordova, Alaska near the Cordova City Airport. The antenna on Middleton Island was set over triangulation mark SPIT 2 1967 and the antenna near the Cordova City Airport was located by a 2nd order traverse in April 1971 and adjusted in August 1971. Corrections to be applied to the positions, determined by calibration are included at the end of the report.

G. SHORELINE

Shoreline was scaled from USC&GS Chart No. 8513, 1:100,000, 9th Edition, corrected April 15, 1971.

H. CROSSLINES

Crosslines consisted of about ten percent of the total survey mileage. Agreement was satisfactory throughout.

I. JUNCTIONS

There was good agreement between this survey and contemporary surveys FA-40-1-71 and FA-10-1-71. No other contemporary survey junctions with this sheet. *H-9205, 9207, 9208*

J. COMPARISON WITH PRIOR SURVEYS

H-2768, 1:20,000, 1905. There appears to have been a datum shift since this survey was made as islands and a pre-1905 triangulation station show between a three and four minute increase in longitude and about a 20 second increase in latitude. After taking this into consideration, eight of ten random soundings were shoaler from one to three fathoms, one was unchanged and one was deeper by .3 fathoms. The average change was 1.7 fathoms shoaler on the present survey.

H-2868a, 1:100,000, 1893 to 1906. Very little change was noted from this prior survey and soundings agreed within one fathom.

H-3017, 1:20,000, 1909. Overlays with this prior survey occur only near the present survey's southeastern limits. In all cases, soundings agreed to within one fathom.

K. COMPARISON WITH THE CHART

Comparison with USC&GS Chart No. 8513, 1:100,000, 9th edition, August 9, 1969, corrected April 15, 1971, shows a consistent discrepancy of two to four fathoms throughout the survey area, the charted depths being greater in all cases. This is probably due to the area's having been uplifted during the 1964 earthquake.

L. ADEQUACY OF THE SURVEY

The survey is considered complete and adequate for charting.

M. AIDS TO NAVIGATION

There are no aids to navigation in the area of the survey.

N. STATISTICS

Number of positions	503
Sounding line (n.m.)	175.5
Total area surveyed	35.1 sq. n.m.

O. MISCELLANEOUS

None.

P. RECOMMENDATIONS

None.

Q. REFERENCES TO REPORTS

1. Season's Report, NOAA Ship FAIRWEATHER, 1971. (To be forwarded).
2. Magnetics Report, OPR-487, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).
3. Field Edit Report, OPR-487, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).
4. Fathometer Report, OPR-487, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).
5. Coast Pilot Report, OPR-487, NOAA Ship FAIRWEATHER 1971 (to be forwarded).
6. Triangulation and Triangulation Report, OPR-487, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).
7. Electronic Control Calibration Report, OPR-487, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).
8. Oceanographic Temperature and Salinity Velocity Correction Report, NOAA Ship FAIRWEATHER, 1971.
9. Chart Investigation Report, NOAA Ship FAIRWEATHER, 1971 (to be forwarded).

Respectfully submitted,

*David B. McLean*  
David B. McLean  
LTJG, 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.  $60^{\circ}09.9'$  N., Long.  $144^{\circ}36.1'$  W.; Kanak Island, Lat.  $60^{\circ}06.3'$  N., Long.  $144^{\circ}19.3'$  W.; Cape St. Elias, Latitude  $59^{\circ}47.8'$  N., Long.  $144^{\circ}35.8'$  W.; and Port Etches-Hinchinbrook Island, Lat.  $60^{\circ}19.6'$  N., Long.  $146^{\circ}34.3'$  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.





Initial 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-20-1-71  
FA-40-1-71  
FA-40-2-71

<u>SHEET</u>	<u>DAY</u>	<u>POSITIONS</u>	<u>CORRECTIONS (fms)</u>
FA-20-1-71	209	0001-0142	0.0
	217	0143-0239	0.0
	218	0240-0503	0.0
FA-40-1-71	146	0001-0015	0.0
		0016-0018	-0.1
		0019-0082	-0.2
		0083-0085	+0.3
		0086-0125	0.0
	147	0126-0156	0.0
		0157-0247	-0.2
		0248-0279	0.0
	153	0280-0343	0.0
	154	0344-0357	0.0
		0358-0360	-0.2
		0361-0620	0.0
		0621-0666	+0.2
		0667-0669	0.0
	155	0670-0846	0.0
		0847-0850	-0.1
		0851-0873	-0.2
		0874-0993	0.0
		0994-1019	-0.2
	156	1020-1093	-0.2
	1094-1241	0.0	
	1242-1260	+0.2	
	1261-1365	0.0	
161	1366-1463	0.0	

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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

<u>APPLICABLE DEPTHS</u> (fms)	<u>CORRECTIONS</u> (fms)
0600-0800	+5.2
0800-1000	+6.3
1000-1200	+12.2

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Draft 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-20-1-71  
FA-40-1-71  
FA-40-2-71

<u>SHEET</u>	<u>DATE</u>	<u>POSITIONS</u>	<u>CORRECTIONS</u> (fms)
FA-40-1-71	146-217	0001-2947	+0.3
FA-40-2-71	164-217	0001-2421	+0.3
FA-20-1-71	209-218	0001-0503	+0.3

ABSTRACT OF ELECTRONIC  
CONTROL CORRECTIONS

FA 20-1-71

HI-FIX (Range-Range)

Position		Numbers	Day	Pattern One Green	Pattern Two Red
From	To				
0001	0142	209	-0.07	-0.20	
0143	0445	217	-0.03	+0.20	
0446	0503	218	-0.02	+0.09	

COMPUTER PARAMETERS FOR ELECTRONICALLY CONTROLLED SURVEYS

- (1) Project No. OPR-487 (2) N. No. 9206 (3) Field No. FA-40-2-71  
 (RANGE - RANGE) 9205 FA-20-1-71  
 FA-40-1-71
- (4) Type of Control: SHORAN, RAYDIST,  HI-FIX, RADAR  
 Frequency (for conversion of RAYDIST or HI-FIX lanes to meters) \_\_\_\_\_
- (5) RANGE ONE (R1) Latitude 59° 27' 56.514"  
 Station Name SPIT 2, 1967 Longitude 146° 18' 22.388"
- (6) RANGE TWO (R2) Latitude 60° 28' 46.866"  
 Station Name HI-FIX mast Longitude 145° 24' 55.866"
- (7) Azimuth from R1 to R2 203° 22' 47.849"
- (8) Baseline Length in Meters 123,436.370 M.
- (9) Location of survey with respect to Electronic Baseline: CHECK ONE  
 (To determine: imagine an observer standing at R1 and looking directly at R2 --- if the survey area is to the observer's LEFT then A is negative; if the survey area is to the observer's RIGHT then A is positive.)  
 \_\_\_\_\_ -A (minus)  +A (plus)
- (10) if SHORAN corrections are applied by the equation,  $K(X) + C = D$ , where X is SHORAN distance and D is true distance, enter the Constant Coefficients of the equations here:  
 K(R1) \_\_\_\_\_, C(R1) \_\_\_\_\_, K(R2) \_\_\_\_\_, C(R2) \_\_\_\_\_.
- (11) Number of Velocity Tables to be used:  
 \_\_\_\_\_ None, \_\_\_\_\_ One, \_\_\_\_\_ More than one.
- (12) \_\_\_\_\_ This form is submitted only as an aid in preparing a boat sheet projection.  
 This form applies to all data on this survey.  
 \_\_\_\_\_ This form applies to part of the data on this survey -  
 Time and Date limitations: From \_\_\_\_\_ To \_\_\_\_\_  
 Position Number Limitations: From \_\_\_\_\_ To \_\_\_\_\_  
 This is Form #3 Sheet # 1 of 1 Sheets for this survey.
- (13) Other Remarks: This form applies to all data on surveys  
 FA-40-1-71 (H-9205), FA-40-2-71 (H-9206) and FA-20-1-71

<u>SHEET</u>	<u>DAY</u>	<u>POSITIONS</u>	<u>CORRECTIONS (fms)</u>
FA-40-1-71	162	1464-1574	0.0
		1575-1627	-0.2
		1628-1755	0.0
		1756-1811	-0.1
		1812-1825	0.0
		1826-1832	-0.3
		1833-1840	0.0
	163	1841-2113	0.0
	164	2114-2291	0.0
	166	2292-2351	0.0
	167	2352-2379	0.0
	168	2380-2530	0.0
	194	2431-2443	0.0
	195	2444-2467	0.0
	196	2468-2487	0.0
	209	2488-2642	0.0
	210	2643-2796	+0.3
	211	2797-2835	0.0
	215	2836-2878	0.0
	216	2879-2889	0.0
		2890-2891	-0.3
	2892-2924	0.0	
217	2925-2947	0.0	
FA-40-2-71	164	0001-0036	0.0
		0037-0110	-0.4
		0111-0134	-0.2
	165	0135-0185	-0.2
		0186-0295	-0.5
		0296-0346	-0.2
		0347-0370	-0.3
		0371-0531	0.0
	166	0532-0580	-0.2
		0581-0617	-0.2
		0618-0856	0.0
		0857-0877	+0.2
	167	0878-0934	+0.2
		0935-1013	-0.3
	168	1014-1227	0.0
		1228-1348	0.0
		1349-1354	-0.2
		1355-1367	0.0
		1368-1409	+0.2
		1410-1543	0.0
		210	1544-1741
211	1742-1800	0.0	
	1801-1819	-0.2	
	1820-1943	0.0	
	215	1944-2155	0.0

<u>SHEET</u>	<u>DAY</u>	<u>POSITIONS</u>	<u>CORRECTIONS (fms)</u>
FA-40-2-71	216	2156-2342	0.0
	217	2343-2421	0.0



TRANSMITTAL SHEET

FA-20-1-71

H-9227

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



R. H. Houlder  
CAPT., NOAA  
Commanding Officer  
NOAA Ship FAIRWEATHER

**H-9227**

**GEOGRAPHIC NAMES**

Name on Survey	Source of Name											
	A	B	C	D	E	F	G	H	K			
	ON CHART NO.	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP ATLAS	RAND McNALLY	U.S. LIGHT LIST				
GULF OF ALASKA												1
												2
												3
												4
												5
												6
												7
												8
												9
												10
												11
												12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25

Approved  
*Chas. E. Harrington*  
 Staff Geographer  
 21 March 1975

**HYDROGRAPHIC SURVEY STATISTICS**  
**HYDROGRAPHIC SURVEY NO. H-9227**

**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			1			
CAHIERS	1 & P/O					
VOLUMES						
BOXES						
T-SHEET PRINTS (List)						
SPECIAL REPORTS (List)						

**OFFICE PROCESSING ACTIVITIES**

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				
POSITIONS CHECKED		503		
POSITIONS REVISED		1		
DEPTH SOUNDINGS REVISED		25		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
Verification of Control		01		
Verification of Positions		6		
Verification of Soundings		8		
Smooth Sheet Compilation		11		
ALL OTHER WORK		3		
<b>TOTALS</b>		<b>29</b>		
PRE-VERIFICATION BY		BEGINNING DATE	ENDING DATE	
VERIFICATION BY <i>Karol M. Hoops</i> Karol M. Hoops, Cartographic Technician		BEGINNING DATE 6/11/73	ENDING DATE 8/22/74	
REVIEW BY		BEGINNING DATE	ENDING DATE	

VERIFIER'S REPORT  
HYDROGRAPHIC SURVEY, H-9227

**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><b>Note:</b> 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><b>Part IV - VOLUMES</b></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>	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><b>Part II - SHORELINE AND SIGNALS</b></p> <p>4. Source of shoreline signals Remarks Required: -- List all surveys</p> <p>a. Give earliest and latest dates of photographs</p> <p>b. Field inspection date</p> <p>c. Field Edit date</p> <p>d. Reviewed-Unreviewed</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:</p> <p>(a) rocks</p> <p>(b) line turns</p> <p>(c) position values of beginning and ending of lines</p> <p>(d) bar check or velocity correctors</p> <p>(e) time recording</p> <p>(f) notes or markings on fathograms</p> <p>(g) was reduction of soundings accurately done?</p> <p>(h) was scanning accurate?</p> <p>(i) were peaks at uneven intervals missed?</p> <p>(j) were stamps completed?</p> <p>(k) references to adjacent features</p>	X	
<p>The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>	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				
<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><b>Part V - PROTRACTING</b></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>	N/A	
<p><b>Part III - JUNCTIONS</b></p> <p><b>Note:</b> 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>	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>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>	N/A	
			<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
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.	N/A		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.	X	
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.	N/A		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	X	
<b>Part VI - SOUNDINGS</b>			<b>Part IX - BOAT SHEET</b>		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None	N/A		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	X	
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.	X		29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	X	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	X		<b>Part X - GENERAL</b>		
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	X		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	X	
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.	N/A		31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	X	
<b>Part VII - CURVES</b>			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	X	
23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.		X	33. The bottom characteristics are adequately shown. Remarks Required: -- None		X
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	X		<b>Part XI - NOTES TO THE REVIEWER</b>		
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.	X		34. Unresolved discrepancies and questionable soundings. 35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy. 36. Supplemental information.	X	
Verified by <i>Karol M Hoops</i> Karol M. Hoops, Cartographic Technician			Date 8/22/74		

VERIFIER'S REPORT

FA-20-1-71

H-9227

This sheet was constructed and plotted at Pacific Marine Center, Seattle, Washington. Information relating to this survey will be noted under the heading by the number and letter as on Verifier's Report, C&GS Form 946A.

PART II SHORELINE AND SIGNALS

4. This survey is an off-shore sheet, therefore, no manuscripts were required.

PART III JUNCTIONS

10. This survey junctions H-9205, 1971 (1:40,000) to the Southwest; H-9207, 1971 (1:10,000) to the Northwest; H-9208, 1971 (1:10,000) to the East. The hydrography in this survey does not actually junction with the hydrography from the above surveys. H-9207 and H-9208 are incomplete and although the Descriptive Report of H-9227 indicates that the survey is complete, the failure to junction with the hydrography indicates that additional field work is required. Since there are no plans for completing this hydrography in the near future this data is submitted for chart application and may have to be replotted when the additional field work does occur.

PART VII CURVES

23. The penciled depth curves were inspected by A. E. Eichelberger, Cartographic Technician.

PART X GENERAL

33. There were no bottom samples taken within this survey.

PART XI NOTES TO THE REVIEWER

36. This survey was verified by Karol Hoops under the supervision of A. E. Eichelberger.

Respectfully submitted,

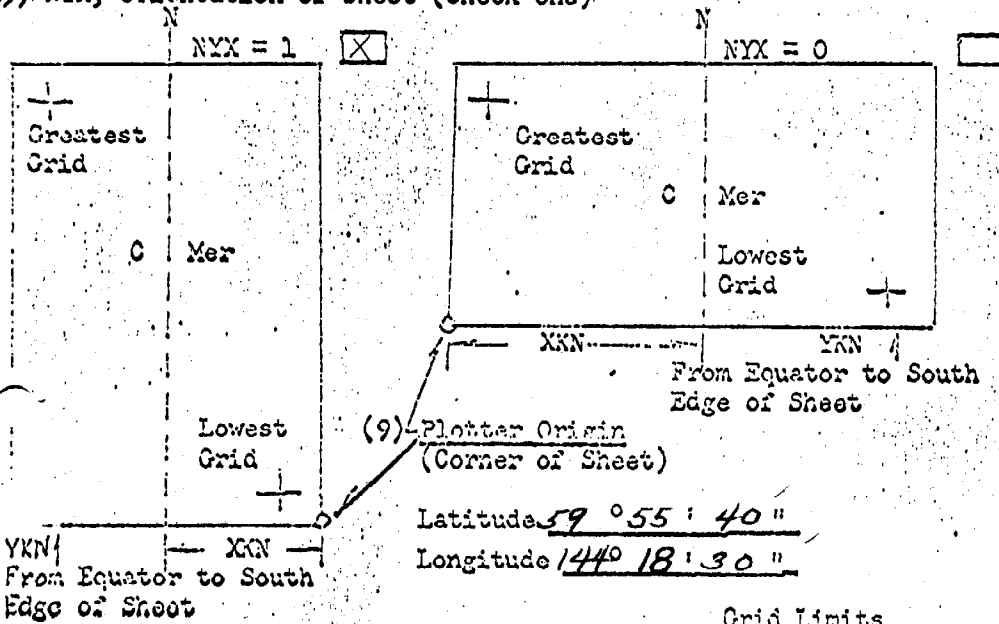
*A. E. Eichelberger*

A. E. Eichelberger  
Cartographic Technician

20101

QUANTITY = 174IN 1 HEAVY

- (1) Project No. DP 200 FA-71 (4) Requested by WPA
- (2) H No. 9227 (5) Ship or Office
- (3) Field No. FA-200-71 (6) Date Required
- (7) Visual  Ft.(0) or Fathoms (1)  (8) Electronic  (fill out form #3)
- (10) XKN (SP 5) Distance from CMER to East Edge (NYX = 1) or West Edge (NYX = 0). 9321.0 Meters
- (11) YKN (SP 241) Distance from Equator to South Edge of Sheet. 6645819.614 Meters
- (12) Central Meridian 144° 28' 30"
- (13) Survey Scale 1:20,000
- (14) Size of Sheet (Check one) <sup>54</sup> 36x60  42x60
- (15) NYX, Orientation of sheet (Check one)



Grid Limits	
(16) Greatest Latitude	<u>60° 10' 00"</u> (Projection Line Interval Page 4 Hydro Manual.)
(17) Lowest Latitude	<u>59° 56' 00"</u>
(18) Difference	<u>0° 14' 00"</u>
(19)	<u>1 0</u>
(20)	<u>14</u> YSN
(21) Greatest Longitude	<u>144° 38' 00"</u>
(22) Lowest Longitude	<u>144° 19' 00"</u>
(23) Difference	<u>0° 19' 00"</u>
(24)	<u>1 0</u>
(25)	<u>19</u> XSN

DET

9227

H  
Field No. 002487  
Date 2-25-71

HYDRO II AND III PARAMETER CARD

20101

PARAMETER CARD II

Semi major axis of the earth	6.378,206.4	RDA	1 2 3 4 5 6 7 8 9 10
X Constant - Distance from central meridian to origin of plotter SP 5	Meters	YKN	11 12 13 14 15 16 17 18 19 20
Y Constant - Distance from equator to origin of plotter SP 2/1	Meters	YKN	21 22 23 24 25 26 27 28 29 30
Central Meridian of Projection	1 4 4 2 8 3 0 0 0	CMR	31 32 33 34 35 36 37 38 39 40
Plotter Scale/Survey Scale	*1:104,986,876 1:20,000	SCA	41 42 43 44 45 46 47 48 49 50
North/south axis of sheet - to correspond to (X axis - 1) of plotter	0 - feet 1 - fathom	FOF	51 52 53 54 55 56 57
Feet/Fathom indicator		JN	58 59
H Identification No.		YR	60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FOF - 1

PARAMETER CARD III

Lowest Lat. Intersection	5 9	5 6	0 0 0 0	YST	1 2 3 4 5 6 7 8 9 10
Lowest Long. Intersection	1 4 4	1 9	0 0 0 0	XST	11 12 13 14 15 16 17 18 19 20
Difference between Grid		0 1	0 0 0 0	DXY	21 22 23 24 25 26 27 28 29 30
Interval (Long)				XSN	31 32 33 34 35 36 37 38 39 40
Interval (Lat)				YSN	41 42 43 44 45 46 47 48 49 50

Computed E.H.T.  
Punched E.H.T.  
Checked E.H.T.  
Date 2-26-71





## COMPUTER PARAMETERS FOR ELECTRONICALLY CONTROLLED SURVEYS

- (1) Project No. OPR-487 (2) N. No. 9205 (3) Field No. FA-20-1-71  
FA-40-1-71  
FA-40-2-71
- (4) Type of Control: SHORAN, RAYDIST,  HI-FIX, RADAR  
 Frequency (for conversion of RAYDIST or HI-FIX lanes to meters) /
- (5) RANGE ONE (R1) Latitude 59° 27' 56.514"  
 Station Name SPIT 2, 1967 Longitude 146° 18' 22.388"
- (6) RANGE TWO (R2) Latitude 60° 28' 46.866"  
 Station Name HI-FIX mast Longitude 145° 24' 55.866"
- (7) Azimuth from R1 to R2 203° 22' 47.819"
- (8) Baseline Length in Meters 123,436.370 M.
- (9) Location of survey with respect to Electronic Baseline: CHECK ONE  
 (To determine: imagine an observer standing at R1 and looking directly at R2 --- if the survey area is to the observer's LEFT then A is negative; if the survey area is to the observer's RIGHT then A is positive.)
- A (minus)       +A (plus)
- (10) if SHORAN corrections are applied by the equation,  $K(X) + C = D$ , where X is SHORAN distance and D is true distance, enter the Constant Coefficients of the equations here:
- K(R1)           , C(R1)           , K(R2)           , C(R2)
- (11) Number of Velocity Tables to be used:  
       None,        One,        More than one.
- (12)            This form is submitted only as an aid in preparing a boat sheet projection.  
 This form applies to all data on this survey.  
           This form applies to part of the data on this survey -
- Time and Date limitations: From            To
- Position Number Limitations: From            To
- This is Form #3 Sheet #   1   of   1   Sheets for this survey.

- (13) Other Remarks: This form applies to all data on surveys  
 FA-40-1-71 (H-9205), FA-40-2-71 (H-9206) and FA-20-1-71 (H-9227)

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

5/23/74

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 Is.  
Kanak Is.

Period: Apr. 30 - Aug. 15, 1971

HYDROGRAPHIC SHEET: H9227

OPR: 487

Locality: Controller Bay

Plane of reference (mean lower low water): Martin Is. - 7.3 ft.  
Kanak Is. - 3.2 ft.

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

Remarks: Zone direct on Martin Is.

During time of gage malfunction, apply range  
ratio of 0.95 to Kanak Is. gage.

*James R. Hubbard*  
for Chief, Tides Division

OPR-487 TIDE REQUIREMENTS SURVEYS H-9227

DAY	ACTUAL	HYDRO.	HOURLY	HEIGHTS REQUIRED FOR C331 VERIFICATION
July 28	173300	222300	1500	0100-210
Aug 5	170900	213700	1500	0000-218
6	050100	174900	0300	2000
218				

000000



1973  
Sales Report

205100	00	1011			
210800	00	1012			
212600	00	1013			
214400	00	1014			
220400	00	1015			
223100	00	1016			
230800	00	1017			
003700	00	1018	0000	218	0 000000 000000
010800	00	1017			
013100	00	1016			
015100	00	1015			
020700	00	1014			
022200	00	1013			
023600	00	1012			
025000	00	1011			
030400	00	1010			
031900	00	1009			
033400	00	1008			
034900	00	1007			
040400	00	1006			
041700	00	1005			
043100	00	1004			
044500	00	1003			
050000	00	1002			
051600	00	1001			
053400	00	1000			
055700	00	0001			
065100	00	0002			
074000	00	0003			
080000	00	0004			
081900	00	0003			
083400	00	0002			
084700	00	0001			
085900	00	1000			
091500	00	1001			
093000	00	1002			
094500	00	1003			
100000	00	1004			
101400	00	1005			
102900	00	1006			
104400	00	1007			
110000	00	1008			
111500	00	1009			
113100	00	1010			
114800	00	1011			
120800	00	1012			
123200	00	1011			

065100 00 0002  
074000 00 0003  
080000 00 0004  
081900 00 0003  
083400 00 0002  
084700 00 0001  
085900 00 1000  
091500 00 1001  
093000 00 1002  
094500 00 1003  
100000 00 1004  
101400 00 1005  
102900 00 1006  
104400 00 1007  
110000 00 1008  
111500 00 1009  
113100 00 1010  
114800 00 1011  
120800 00 1012  
123200 00 1013  
131300 00 1014  
135900 00 1015  
144500 00 1014  
151100 00 1013

153200 00 1012  
155200 00 1011  
161200 00 1010  
163300 00 1009  
165500 00 1008  
171800 00 1007  
174400 00 1006  
182000 00 1005  
194700 00 1004  
202200 00 1005  
204700 00 1006  
210700 00 1007  
212500 00 1008  
214200 00 1009  
215800 00 1010

000000

H-9227 OPR-487 VELOCITY TABLE

000005 0 0000 0002 000 000000 000000  
000010 0 0001  
000025 0 0002  
000045 0 0003  
000085 0 0004  
000100 0 0006  
000160 0 0007  
000180 0 0008  
000200 0 0009  
000400 0 0017  
000600 0 0031  
000800 0 0052  
001000 0 0083  
001200 0 0122





202 209 1971

173300 0 0003 0002 209 000000 000000

170900 0 0003 0002 217 000000 000000

050100 0 0003 0002 218 000000 000000

TC/TI Printout



## Electronic Position Correctors

202 209 1971

173300 7 0310 0001 209 100007 100020 0000 000 000

170900 7 0305 0143 217 100003 000020 0000 000 000

050100 7 0110 0240 218 100003 000020 0000 000 000

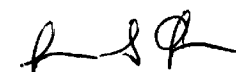
152600 7 0152 0446 218 100002 000009 0000 000 000

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)

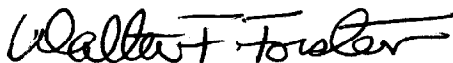
H-9227 was specifically accomplished so that visual launch hydrography from sheets H-9208 and H-9207 could junction with H-9227. Due to weather and survey progress complete survey junctions were not accomplished. This area was a priority survey to consider Katalla as an open roadstead other than Valdez.

Examined and approved,



James S. Green  
Supervisory Cartographic Technician

Approved and forwarded,



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

(1956)

144° 00'

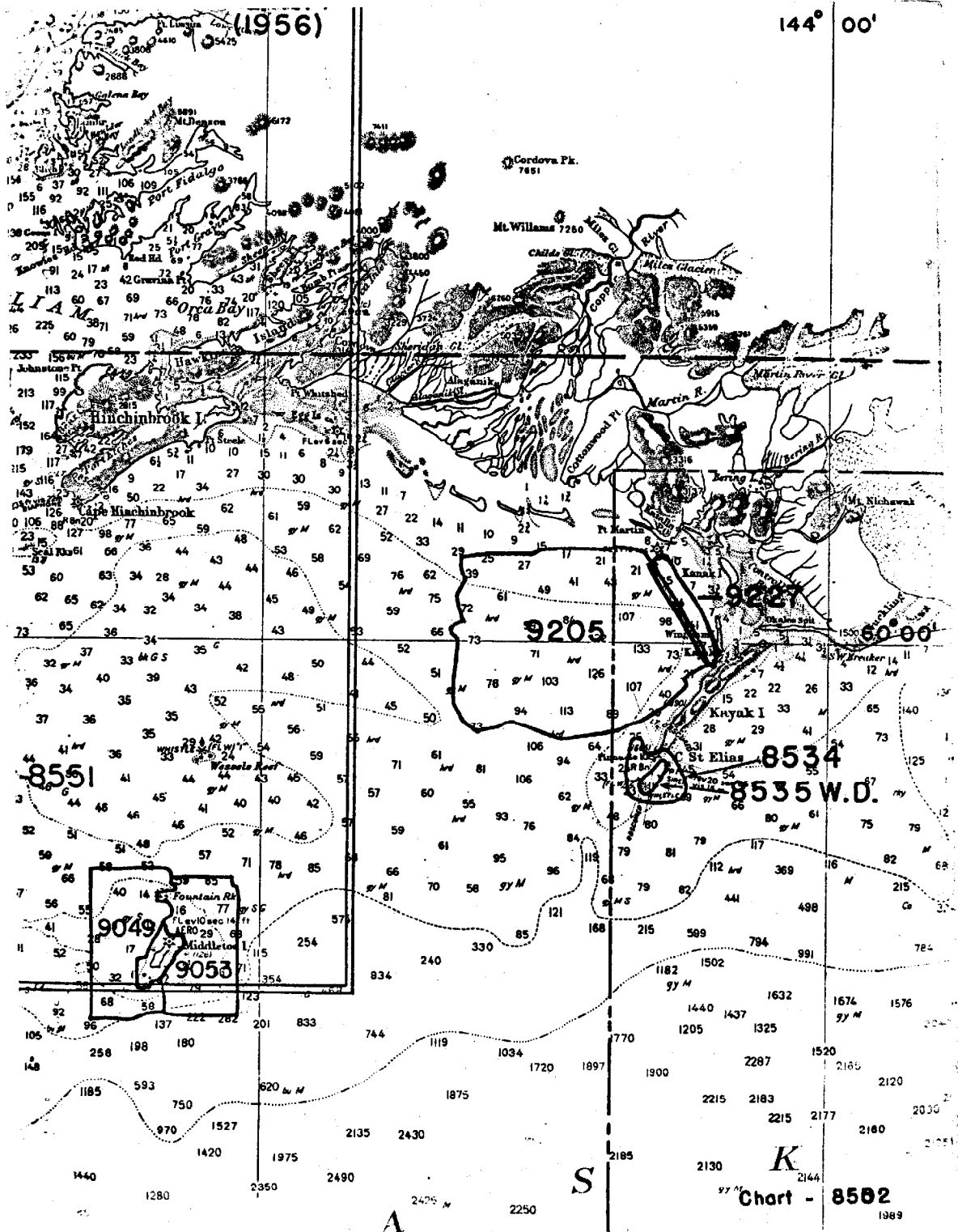


Chart - 8502  
1989

**RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9227

**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
8513	2/11/76	<i>R. D. Lewis</i>	<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No. <i>EXAMINED for CRITICAL</i>
<i>[see back page]</i>			<i>CORRECTIONS - NO CORRECTIONS</i>
531	8/6/79	<i>Owen E. Stambel</i>	<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No. <i>16 (Cat I) Consider fully applied</i>
			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.
			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.
			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.
			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.
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			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.
			<del>Full Part Before After Verification Review Inspection Signed Via</del> Drawing No.

Chart 8502 Exam for crit corr. only - none app'd C.S. Furber - 1/28/75

Chart 8500 Exam for crit. corr Thru 8502 - None app'd H.J. Brandt: 2-28-75

