

TP- 00633

TP-00633

NOAA FORM 76-35 (3-76) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h1>DESCRIPTIVE REPORT</h1>	
Map No. TP-00633	Edition No. 1st *
Job No. CM-7210	
Map Classification CLASS III (FINAL)	
Type of Survey SHORELINE	
LOCALITY	
State Alaska	
General Locality Hinchinbrook Island	
Locality Hawkins Island Cutoff	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1972 TO 19 </div>	
REGISTRY IN ARCHIVES	
DATE	

* U. S. GOVERNMENT PRINTING OFFICE: 1976-669-248

* This map edition will not be field edit

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP. 00633 MAP EDITION NO. (1) MAP CLASS III, FINAL CM-7210 JOB PH	
DESCRIPTIVE REPORT - DATA RECORD				LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED			
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division AMC, Norfolk, VA OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR / R. Matsushige CDR.				JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__			
I. INSTRUCTIONS DATED							
1. OFFICE Aerotriangulation August 18, 1972 Compilation October 30, 1972 Field Edit Cancellation August 19, 1980				2. FIELD Horizontal Control April 17, 1972 (Premarking)			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Polyconic				4. GRID(S) STATE Alaska ZONE 3			
5. SCALE 1:20,000				STATE ZONE			
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY				R. Kelly		Oct 1972	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY				D. Phillips		Oct 1972	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY				L. Neterer, Jr.		Jan 1973	
INSTRUMENT: Wild B-8 SCALE: 1:30,000				R. White		"	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY				S. Kumer		Jan 1973	
METHOD: Smooth Draft SCALE: 1:20,000 HYDRO SUPPORT DATA BY				L. Neterer, Jr.		Feb 1973	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				J. Minton (Partial)		Feb 1978	
6. APPLICATION OF FIELD EDIT DATA CHECKED BY				J. Massey (Partial)		Mar 1978	
7. COMPILATION SECTION REVIEW BY				J. Massey (Partial)		Mar 1978	
8. FINAL REVIEW BY				J. Hancock		June 1981	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				J. Hancock		July 1981	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				R. Kelly		Feb 1982	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				H. D. Wolfe		APR 21 1982	

COMPILATION SOURCES

TP-00633

I. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" and RC-9 "M"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Alaska	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 150th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
72M1250-1254	July 3, 72	10:54	1:60,000	1.1' above MLLW	
72-E(C)-4421-4424	July 3, 72	12:20	1:40,000	2.7' above MLLW	
72-E(C)-4386-4390	July 3, 72	11:41	1:40,000	1.8' above MLLW	
Camera focal length; E=152.71mm, M=88.20mm					

REMARKS

Bridging photos 72M1252-1253 were also used for hydro support.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled from the photographs, 72M1250 thru 1254, dated 3 July 1972. Compilation was by office interpretation of aerotriangulation photographs.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

The mean lower low water line was compiled from the photographs, 72M1250 thru 1254, dated 3 July 1972. Compilation was by office interpretation of aerotriangulation photographs.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
H-9424	1974	Verified smooth sheet			

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No survey	PH-6409 T-12439 and T-12667	TP-00635	TP-00634

REMARKS The shoal and low water line at the east end of Hawkins Island Cut Off does not junction T-12667 (Job PH-6409). Probably because 7 years lapse between photo time differences in tidal stage at time of

HISTORY OF FIELD OPERATIONS TP-00633

1. ☒ FIELD ~~INSPECTION~~ OPERATION (Premarking) ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	June 1972
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby	" "
	ESTABLISHED BY R. Melby	" "
	PRE-MARKED OR IDENTIFIED BY L. Riggers	" "
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY "	
	PRE-MARKED OR IDENTIFIED BY "	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY "	
	IDENTIFIED BY "	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Pre-Marked (Paneled)

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
72M-1251	Makaka 2, 1965		
72M-1250	Jose, 1965		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

2-Forms 152

2-Forms 526

TP-00633

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION (Partial)

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Oswald	July 1974
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	J. Oswald
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

72E(C)4390, 72M(P)1252

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

One signal overlay
One field edit ozalid
One position overlay

One field edit report

RECORD OF SURVEY USE

TP-00633

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	January 73	Class III manuscript	Feb 12, 73	Feb 7, 73
Partial field edit applied	February 78	Class III manuscript	Aug 20, 80	None
FINAL REVIEW, CLASS III	June 1981	Final, Class III Map Field edit canceled	Feb. 1982	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
0			None

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: FEB 26, 1982

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

Sheet No.	Sq. Miles
TP-00633	17
TP-00634	19
TP-00635	11
TP-00636	9
Total 56	

TP-00634

TP-00636

TP-00633

TP-00635

JOB CM-7210
HINCHINBROOK ISLAND, ALASKA
SHORELINE MAPPING
1:20,000 SCALE

LEGEND:

△ HORIZONTAL CONTROL STATION

JOINS JOB PH-6409

JOINS JOB PN-6410

JOINS JOB CM-7210

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS

TP-00633

This 1:20,000 shoreline manuscript is one of four maps, TP-00633 thru TP-00636, that comprise project CM-7210, Hinchinbrook Island, Alaska. Excluding the Boswell Bay area, the project limits incorporate all of Hinchinbrook Island and the western portion of Hawkins Island. This project junctions with the 1977 registered shoreline project PH-6409.

Via correspondence letter dated August 19, 1980, instructions from the Chief, Photogrammetric Division call for the cancellation of future field edit and requested registration for the project. Registration for TP-00633, TP-00635 and TP-00636 will be Final Class III Maps as only partial field edit has been accomplished. Map TP-00634 was completely field edited and will be registered as a Final Map.

The purpose of this project was to provide contemporary shoreline data in the support of hydrographic operations and to furnish data for nautical chart revision.

A contemporary hydrographic survey was performed in the north shore of Hinchinbrook Island by NOAA ship DAVIDSON in 1974. This hydro operation, H-9424 at 1:20,000 scale, covers only the western portion of the shoreline map. Partial field edit was also performed during this period. Final review included a map comparison with a copy of the verified smooth-sheet.

Field work prior to compilation was accomplished in April 1972; this involved the establishment of horizontal control by premarking methods in order to meet aerotriangulation requirements.

Photo coverage was provided in July 1972 for aerotriangulation and compilation using panchromatic film with the "M" camera at 1:60,000 scale. Hydro support photography was taken using natural color film with the "E" camera at 1:40,000 scale.

Analytic aerotriangulation was adequately provided by the Washington Science Center in October 1972.

Compilation was performed at the Atlantic Marine Center in Feb. 1973. Copies of the Class III manuscript were immediately forwarded to the Pacific Marine Center for the hydrographic survey scheduled in Prince William Sound. This hydro project progressed, as initially proposed, for several field seasons.

Partial field edit for this Class III Map was performed by ship personnel in conjunction with the 1974 contemporary hydrographic survey. This edit applies only to the area west of Long. 146° 18' 30."

TP-00633

Partial field edit was applied in March 1978 by the Photogrammetric Branch at the Pacific Marine Center.

Final review was performed at the Atlantic Marine Center in June 1981. Classification for this map will be a Final Class III Map due to the cancellation of completing field edit.

The original base manuscript and all pertinent data was forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00633

Inspection was limited to identification of horizontal control.

PHOTOGRAMMETRIC PLOT REPORT
Job CM-7210
Hitchenbrook Island, Alaska
October 1972

21. Area Covered

This report covers TP sheets, TP-00633 thru TP-00636 of Hitchenbrook Island, Alaska, at 1:20,000 scale.

22. Method

Three strips of 1:60,000 scale photography were bridged by analytic aerotriangulation methods to provide horizontal control and ratio points for 1:40,000 scale photography. The attached sketch of the strips bridged shows the placement of triangulation used in the strip adjustments. A list of closures to control is part of this report. Positions of all pass points, control stations, and ratio prints have been plotted on the manuscripts by the Coradi, on the Alaska Zone 3 plane coordinate system.

23. Adequacy of Control

The horizontal control provided was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:20,000 scale. Tie points were used to augment datum ties between strips 1, 2, and 3.

24. Supplemental Data

USGS quadrangles were used to provide elevations for vertical adjustment of bridges.

25. Photography

RC-9 photography was adequate as to coverage and overlap, but not definition. Strip 1 adjustment showed control station PORPOISE ROCK 1902 substitute station with +11.0 ft. error in the Y direction, and control station HORN 1972 with -9.2 ft. error in the X direction. The reason for these closures is poor imagery.

Respectively submitted:

Approved and Forwarded:

John D. Perrow Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation Section

Robert B. Kelly
Robert B. Kelly
Cartographic Technician

LEGEND

- ▲, ● CONTROL USED IN ADJUSTMENT
 () CLOSURES OF BRIDGE TO CONTROL SHOWN
 IN PARENTHESIS
 △ CONTROL USED AS CHECKS.

STRIP # 1

▲	x PRIME, 1902	(0.0, 0.0)
△	PORPOISE ROCK, 1902 SUB. STA.	(-2.8, 11.0)
△	HORN, 1972	(-9.2, 1.7)
▲	HOCK, 1972	(0.0, 0.0)
△	BEACH, 1899	(3.3, -0.7)
▲	JOSE, 1972	(0.0, 0.0)

STRIP # 2

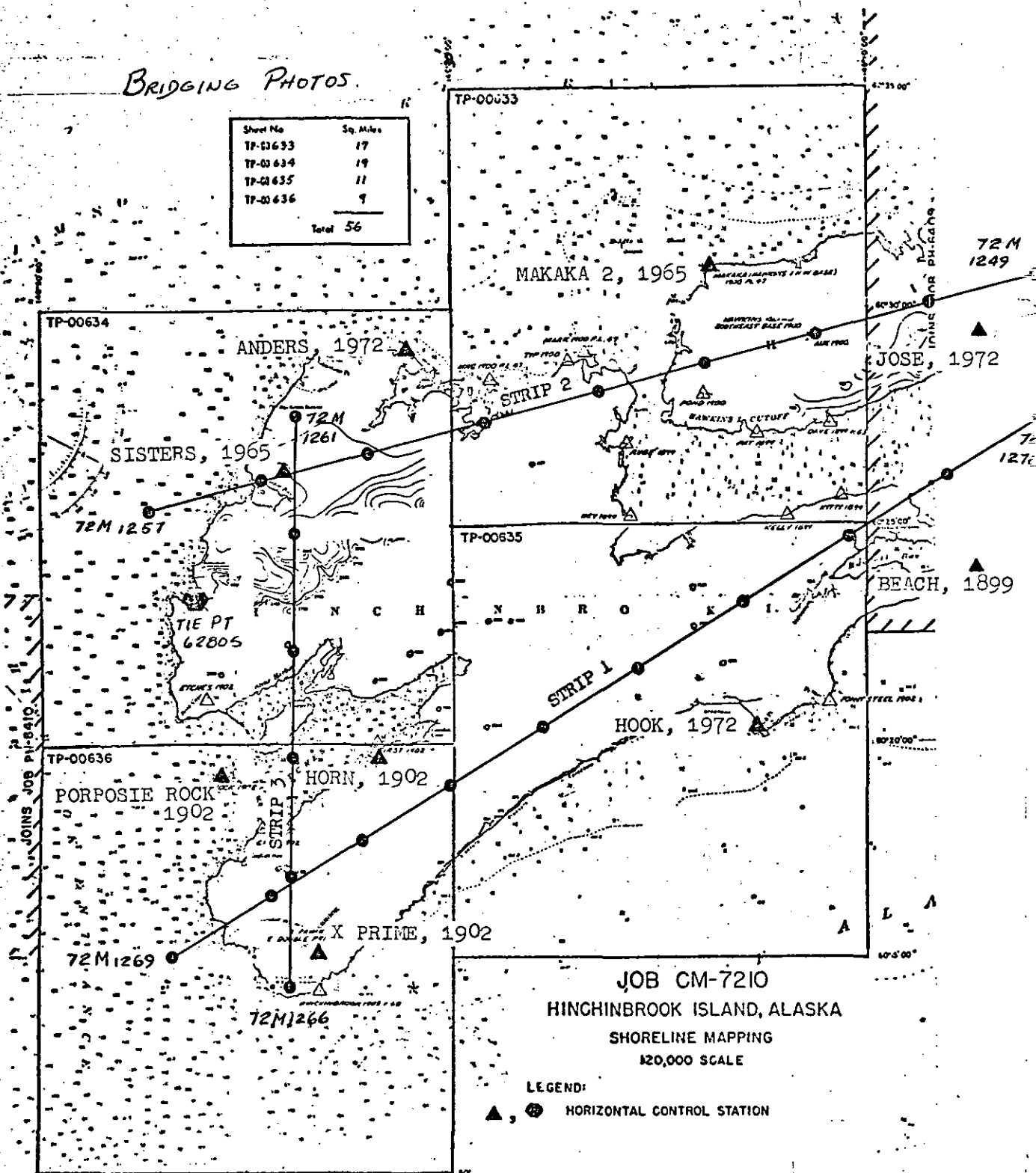
▲	JOSE, 1972	(0.5, 0.4)
▲	MAKAKA2, 1965 SUB. STA.	(-1.5, 0.0)
▲	ANDERS, 1972	(1.2, 0.9)
△	SISTERS, 1965	(2.1, 3.9)
●	TIE POINT 62805	(-0.1, -0.5)

STRIP #3

▲	SISTERS, 1965	(0.0, 0.0)
△	PORPOISE ROCK, 1902	(-4.2, -3.5)
▲	HORN, 1972	(0.0, 0.0)
▲	X PRIME, 1902	(0.0, 0.0)

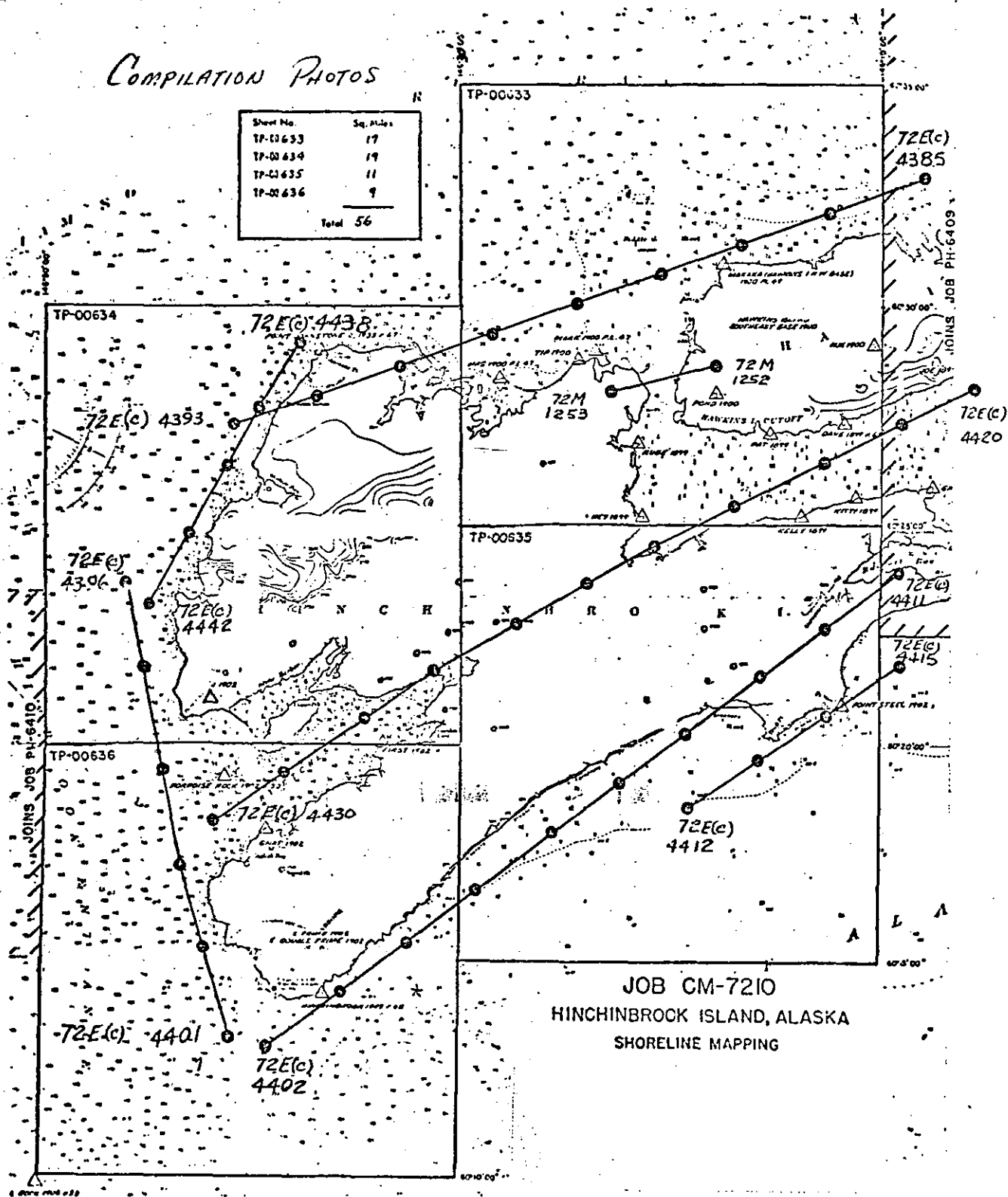
BRIDGING PHOTOS.

Sheet No	Sq. Miles
TP-00633	17
TP-00634	19
TP-00635	11
TP-00636	9
Total 56	



Compilation Photos

Sheet No.	Sq. Miles
TP-00633	17
TP-00634	19
TP-00635	11
TP-00636	9
Total 56	



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODETTIC DATUM		AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION		ORIGINATING ACTIVITY		Departures REMARKS	
			TP - 00633	CM - 7210		STATE	ZONE	ϕ LATITUDE	λ LONGITUDE	Photogrammetric Branch	Pacific Marine Center		Front
	Makaka 2, 1965		G.P. G-74841	unadjusted	N	X=	Y=	ϕ 60°30'57.206"	λ 146°17'25.239"			1770.6 (86.5)	385.1 (530.4)
	Cutoff, 1900		G.P. Vol. VI pg. 131			X=	Y=	ϕ 60°30'01.342"	λ 146°19'17.400"			41.5 (1815.5)	265.6 (650.3)
	Pat, 1899		G.P. Vol. VI pg. 188			X=	Y=	ϕ 60°27'03.123"	λ 146°15'10.337"			96.7 (1760.4)	158.1 (759.3)
	Dave, 1899		G.P. Vol. VI pg. 188			X=	Y=	ϕ 60°27'21.062"	λ 146°11'31.819"			651.9 (1205.2)	486.4 (430.9)
	Kitty, 1899		G.P. Vol. VI pg. 188			X=	Y=	ϕ 60°25'14.803"	λ 146°11'00.449"			1293.8 (563.2)	6.9 (911.4)
	Kelly, 1899		G.P. Vol. VI pg. 188		"	X=	Y=	ϕ 60°25'14.731"	λ 146°15'16.737"			455.9 (1401.1)	256.1 (662.1)
	Hey, 1899		G.P. Vol. VI pg. 188		"	X=	Y=	ϕ 60°25'14.244"	λ 146°21'12.143"			440.9 (1416.1)	185.8 (732.5)
	Rube, 1899		G.P. Vol. VI pg. 188		"	X=	Y=	ϕ 60°26'54.262"	λ 146°21'21.379"			1679.5 (177.6)	326.9 (590.8)
	Mark, 1900		G.P. Vol. VI pg. 228		"	X=	Y=	ϕ 60°28'58.86"	λ 146°23'25.37"			1821.8 (35.3)	387.5 (529.4)
	Tip, 1900		G.P. Vol. VI pg. 229			X=	Y=	ϕ 60°28'45.67"	λ 146°24'33.31"			1413.5 (443.5)	508.8 (407.9)
COMPUTED BY	A.C. Rauck				DATE	COMPUTATION CHECKED BY		G. Parker		DATE			11/08/72
LISTED BY	J. Minton				DATE	LISTING CHECKED BY		J. Massey		DATE			03/78
HAND PLOTTING BY	J. Minton				DATE	HAND PLOTTING CHECKED BY		J. Minton		DATE			03/78

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY		Departures REMARKS
					COORDINATES IN FEET STATE ZONE	N.A. 1927	PHOTOGRAMMETRIC Pacific Marine Center	Geographic Position φ LATITUDE λ LONGITUDE	
TP - 00633	CM - 7210								
Mag, 1900	G.P. Vol. VI pg. 228				X=	φ 60°28'24.77"		766.7	(1090.4)
					Y=	λ 146°28'02.04"		31.2	(885.5)
Jose, 1972	G.P. G-14841 unadjusted				X= <i>East of map limits.</i>	φ 60°29'02.007"		62.1	(1794.9)
					Y=	λ 146°05'00.132"		2.0	(914.4)
					X=	φ			
					Y=	λ			
					X=	φ			
					Y=	λ			
					X=	φ			
					Y=	λ			
					X=	φ			
					Y=	λ			
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					Y=	λ			
					X=	φ			
					Y=	λ			
					X=	φ			
					Y=	λ			
					X=	φ			
					Y=	λ			
COMPUTED BY	A.C. Ranck Jr.				COMPUTATION CHECKED BY	C. Parker		DATE	11/08/72
LISTED BY	J. Minton				LISTING CHECKED BY	J. Massey		DATE	03/78
HAND PLOTTING BY	J. Minton				HAND PLOTTING CHECKED BY	J. Massey		DATE	03/78

COMPILATION REPORT
TP-00633

31 - DELINEATION

Delineation was by the Wild B-8 Stereoplotter, using 1:60,000 scale 1972 photography. Common points were selected and transferred to the 1:40,000 scale 1972 color photographs used for hydro support.

32 - CONTROL

See Photogrammetric Plot Report, dated October 1972. Horizontal control was adequate.

33 - SUPPLEMENTAL DATA

None

34 - CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line and alongshore details were delineated from office interpretation of the photographs.

36 - OFFSHORE DETAILS

Offshore details were compiled from office interpretation of the 1972 photographs.

37 - LANDMARKS AND AIDS

Appropriate copies of Forms 76-40 have been forwarded to the Rockville, MD office.

None

38 - CONTROL FOR FUTURE SURVEYS

None

39 - JUNCTIONS

See form 76-36b, item #5, of the descriptive report.

40 - HORIZONTAL AND VERTICAL ACCURACY

No statement

46 - COMPARISON WITH EXISTING MAPS

A comparison has been made with the following U.S. Geological Survey quadrangle: Cordova (B-6), Alaska, dated 1951, scale 1:63,360; Cordova (B-7), Alaska, dated 1950, scale 1:63,360; Cordova (C-7), Alaska, dated 1950, scale 1:63,360; and Cordova (C-6), Alaska, dated 1950, scale 1:63,360.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the following National Ocean Survey chart - 8520, 14th Edition, October 25, 1969, scale 1:80,000.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Approved

for

Jim Byrd
Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

Submitted by,

for Jim Byrd
Susan Kumer
Cartographer
January 31, 1973

ADDENDUM TO THE COMPILATION REPORT-FIELD EDIT

HINCHINBROOK ALASKA, CM-7210, TP-00633

This report applies to the partial field edit accomplished in 1974 by the NOAA Ship DAVIDSON. Generally, this edit applies to the area of TP-00633 south of $60^{\circ}29'30''$ and west of $146^{\circ}18'30''$. Initially, edit data was transferred directly from the supplied "position sheet"; however, during the final compilation of TP-00634, the accuracy of the position sheet was found to be unsatisfactory. A new position overlay was produced by establishing a dummy hydro survey, H11111, inputting all control points as well as landmarks and aids, and plotting all fixed positions as sounding misses. The projection, control points and fixes were printed on stable base material utilizing a Xynetics Plotter. The fixes were then transferred to the manuscripts, resulting in significant positional changes. These plotting differences are attributed to the use of inaccurately plotted control and inherent inaccuracies in the method used to reconstruct the fixes on the field position sheet. The individual fixes were compared to the original fix data and final abstract included as part of the edit report, as well as to the field annotated photos and field edit ozalid to verify location, description and height information. Additional detail was compiled from the photos as were all ledge configurations and bluffs. No field edit detail was transferred directly from the field edit ozalid or field position sheet except two rocks awash located approximately Lat. $60^{\circ}26'15''$ by Long. $146^{\circ}21'20''$ which are labeled position approximate. Additional rocks at Lat. $60^{\circ}29.5'$ by Long. $146^{\circ}19.5'$ and Lat. $60^{\circ}27.3'$ by Long. $146^{\circ}21.5'$ were labeled position approximate because they were located from a single noncontrolled photo and have no fixed position. Also of note is the editor's use of the term "rock outcrop", which was interpreted as ledge.

Prior to establishing the previously mentioned survey, H11111, all entries on the final field abstract were copy checked against the original field fix observations. Transposition errors were noted in fixes 4, 22, 41, 47, 56, 80, 91 and 128. The original field observations were accepted as correct.

Fix 30 defines ledge from the fix abstract but was not illustrated on the edit ozalid or photographs. The position was plotted and office interpretation of the available photography used to delineate a ledge.

Fix 29 defines ledge from the field abstract but is called a small rock peak on photo 72E4390. Stereo examination of photo's 72E4390 and 4391 and a comparison with the plotted fix position confirm that fix 29 is the ledge limit line on which the peak bares. Also, stereo examination reveals the feature identified in violet ink on 72E4390 is not the rock peak. This error is probably attributed to monoscopic identification. Fix 29 was used to delineate the ledge limit line and the bare peak was detailed by office stereoscopic interpretation.

- 2 -

The plotted position of Fix 31A, carried as position 310 in the office records, does not agree with the photo identified position. Consequently, the plotted position was accepted and office interpretation of photographs 72E4390 and 4391 was used to delineate the ledge. The fix was omitted on the edit ozalid altogether.

Fixes 39 and 40 were listed in the position abstract as rocks, on photo 72E4390 as a shoal, and on the edit ozalid as ledge. Since height data was given, the fixes were plotted as rocks. Stereo examination of photo's 72E4390 and 4391 indicates the intermediate area to be composed of ledge.

Fixes 36, 37 and 38 were listed in the position abstract as rocks, on photo 72E4390 as a shoal, and on the field edit ozalid as ledge. Since height data was given, the fixes were plotted as rocks. Stereo examination of photos 72E4390 and 4391 indicates the adjacent area is composed of ledge.

Fix 26 plotted as an awash rock on a ledge. Photo 72E4390 has the position mislabeled as fix 28 and the edit ozalid has no reference to the rock. The ledge containing the rock was not addressed by the editor and consequently, left as originally compiled.

Fixes 43, 44 and 45 are listed in the abstract as Rk Pt 6m long, Rk outcrop and Rks on beach. The edit ozalid shows these fixes as a ledge. Stereo examination of photos 72E4390 and 72M1252 supports the ledge interpretation as defined by fixes 44 and 45. The photos show nothing at fix 43. Fixes 44 and 45 along with an office interpretation of the available photography were used to delineate a ledge and fix 43 was plotted as a separate rock awash.

Fix 47 fails to confirm the MHWL as the abstract of field fixes indicates it should. However, the edit ozalid illustrates no change to the compiled MHWL. Examination of the original field notes show the original fix data contained no range, or description. The information presented is deemed inadequate to warrant a shoreline change.

Fix 48 is described as 3 rocks; however, only one position is provided and no identification is possible on the ratio photographs. A single rock awash symbol was compiled.

One feature located approx, Lat. 60°27'25" by Long. 146°21'30" was delineated as two rocks awash instead of ledge as symbolized on photo 72M1252 because monoscopic inspection with 10x magnification failed to confirm ledge and the editor's description specified rocks, not rock outcrop elsewhere associated with ledge in this data.

The field editor indicated no changes to the MLLWL, but it is particularly suspect around the point of land near Lat. 60°29' by 146°22'. No changes were made but additional investigation is suggested whenever the remaining edit is accomplished.

FIELD EDIT REPORT

Prince William Sound OPR-999

1974

for

TP-00633

HAWKINS ISLAND CUTOFF, ALASKA

CM-7210
Hinchin brook, AK

by NOAA Ship DAVIDSON

M.H. Fleming, CMDG

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I INTRODUCTION

The area that was field-edited, which is covered in this report, is the shoreline on TP-00633, Hawkins Island Cutoff. Work was completed to the western limit of this sheet but only to a few miles south of Makaka Point to the east. A quick check was made of the north-south extent of Hawkins Island Cutoff, but no great effort was expended in this area.

All of the editing was completed in three days, July 10, 11, and 12, which correspond to Julian Day 191, 192, and 193. Excepting for the day of July 11 the seas were calm. On the 11th, work was terminated due to weather, namely, a choppy sea.

II METHODS

Two methods were used to edit this sheet, the first simply being a visual comparison of shoreline and fore-shore features at lower tides. This manner did not employ any measurements for position determination. The manuscript was quickly compared to the "real" shoreline, and any changes or additions were sketched in, in their respective places. The Double Bay and Hawkins Island area were edited in this manner; as no visual signals were built in these locales.

The second method, which is a new technique, using old routines, made use of a mini-ranger/theodolite positioning system. A mini-ranger would be placed above a Wild T1-A theodolite, and thus a distance and angle could be measured to a moving skiff, which carried two men plus the necessary mini-ranger navigator. When the skiff was positioned, a fix would be called and the distance and angle recorded, plus the time (always in Zulu) and a short description of the feature. Also sketches would be made on the rough paper Ozalid for later transfer and refinement in the evening. This is the manner that was used for shoreline determination for the hydrographic survey H-9423 in the area of Knowles Head. (Refer to the "Shoreline Delineation Report" OPR-999 1974 Prince William Sound for a more detailed description of this method.) The mini-ranger was calibrated by driving the skiff on the known range and shooting predetermined sextant angles to control the position of the skiff on the range. (Refer to the sections on calibration in the appendix of this report for the raw data and correctors for the mini-ranger.)

In the evening all the positions would be plotted on a mylar boat sheet, which was a spare sheet from hydrographic survey H-9424. Fixes were plotted by hand using a metal three-arm and an Odessey protractor. Once the fixes were plotted on the mylar "position" sheet the shoreline and other features could be inked on and all changes applied. This came to be the most important sheet, as all the information could be kept here on a non-shrinkable base. Corrections and final shoreline would then be transferred to the hydrographic boat sheets. As per instructions, a field edit Ozalid and

field ratio prints were also prepared, which duplicates the position overlay. After the work had been completed on the position overlay, a smooth-written abstract of positional data was made, such that in the future someone will be able to plot the fixes, hopefully by an automated system. The advantage of this whole method is the speed with which positional data can be gathered. Only three visual signals were needed for this sheet and those only to calibrate the mini-ranger. Also the mini-ranger is highly mobile such that a station can be set up in about the same time as a regular cross-banner type signal can be built, if the batteries do not have to be carried far.

III ADEQUACY

Field editing should be considered complete in the areas that were investigated. All questions were answered. Although only 35 fixes were compiled (number 22 through 56), a thorough attempt was exerted in the limited time available to cover this sheet. Corrections should be applied to the final product during the verification procedures.

IV RECOMMENDATIONS

1. NOS should seriously consider the use of the mini-ranger as convenient method for future field edit projects. With this in mind, then field edit verification process could easily be computerized such that position plots could be obtained immediately. This no doubt could save much valuable time when the concurrent hydrographic sheets for the same area are being verified at the marine centers.
2. I feel that the field edit sheet (an Ozalid copy) should be eliminated as a requirement to be submitted. In its place a mylar T-sheet could be used. This has the advantage of having a more stable base and better writing surface. If a sheet such as a boat sheet (sizewise) were used, more signals could be plotted (if using the visual method for positions) which would make plotting visual data easier. However, if field edit data could be digitized, a position plot could be made, providing the computer hardware is available.
3. I suggest that if photos are to be used in the field and if signals are to be photo-picked, then the field photos should be printed on the same quality paper as the "office" prints. At present the field prints have very poor resolution, which causes much difficulty in photo interpretation in the field.
4. Another suggestion is that pass points, whenever possible, be picked slightly inshore. As it is now, many of the photo identifiable points are pass points. Once they have been pricked, as a pass point, the emulsion is lost forever. If these points could be located inshore, then the hydrographer-field editor could use these objects, which must be clear on the photos, for his signals. This recommendation is only in regards to performing the field edit in the conventional manner.

5. Are the corrections in purple ink, which are applied to the field ratio prints, necessary? As required, most of the information should be on the Field Edit Ozalid. Is this duplication of work necessary? The following is a list of items that I have prepared to accompany this report; and despite the additional items I have generated, there is still some duplication.

- a. Signal Overlay (a T-sheet having all the control plotted)
- b. Field Edit Ozalid (on paper)
- c. Position Overlay (mylar, spare boat sheet with all changes, corrections, and fix data)
- d. Field Ratio Prints (corrections in purple)
- e. Smooth Data Forms
- f. Raw Data
- g. Calibration Data for Mini-Ranger

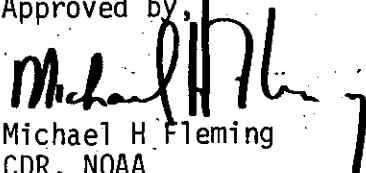
Let's streamline and automate this field edit data!

Respectfully submitted,



John L. Oswald
LTJG, NOAA

Approved by,

A handwritten signature in black ink, appearing to read "Michael H. Fleming", written over the printed name.

Michael H. Fleming
CDR, NOAA
Commanding Officer

STATION LIST

NAME	LAT/LONG (deg-min-sec)		
Makaka 2,1965	60	30	57.167
	146	17	25.267
Anders,1972	60	28	54.103
	146	32	07.126
High (1974)	60	28	23.690
	146	29	21.442
Andry (1974)	60	28	11.212
	146	29	26.121
Eagle (1974)	60	29	11.677
	146	32	10.410

<u>Right Angle</u>	<u>Station</u>	July 10		July 11		July 12	
		<u>Obs.</u>	<u>Corr.</u>	<u>Obs.</u>	<u>Corr.</u>	<u>Obs.</u>	<u>Corr.</u>
80°	Eagle	2853	-2	2847	+4	2849	+2
	High	1493	-6	1494	-7	1494	-7
84°	Eagle	2823	0	2823	0	2823	0
	High	1287	0	1290	-3	1295	-8
88°	Eagle	2808	+2	2808	+2	2815	-5
	High	1107	Reject	1090	0	1087	-3
92°	Eagle			2808	+2	1843	Reject
	High			897	-3	902	-8

Average Corrector Per Day, by Station

	<u>Eagle</u>	<u>High</u>
July 10	0	-1.2
July 11	+2.0	-3.2
July 12	-1.0	-6.5