NOAA FORM 76-35 (6-80)

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

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NO	OT BE FIELD EDITED
Map No.	Edition No.
TP-01314	1
Job No.	
CM-8405	
Map Classification	
CLASS III (FINAL)	
Type of Survey SHORELINE	
LOCALIT	· V
State	
ALASKA	
General Locality	
POINT AUGUSTA TO CRIST P	OINT
Locality	,
WHITESTONE HARBOR	
	!
1985 TO 1	9
REGISTERED IN A	ARCHIVES
DATE	

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	TYPE OF SURVEY	SURVEY TP. 01314
The state of the s	ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS III (Final)
DESCRIPTIVE REPORT - DATA RECORD		CM . 040E
PHOTOGRAMMETRIC OFFICE	REVISED	
•		ING MAP EDITION
Coastal Mapping Unit, Atlantic Marine Center Norfolk, VA	1 _	JOB PH
OFFICER-IN-CHARGE	ORIGINAL RESURVEY	MAP CLASS SURVEY DATES:
	A REVISED	19TO 19
C. Dale North, Jr., CDR	L KEYISED	1910 19
I. INSTRUCTIONS DATED		
1. OFFICE	2.	FIELD
Aerotriangulation November 3, 1986 Compilation February 19, 1987	Control Change No. 1	March 1, 1985 March 25, 1985
II. DATUMS		
	OTHER (Specify)	
1. HORIZONTAL: X 1927 NORTH AMERICAN		
	OTHER (Specify)	
3. MAP PROJECTION	4.	GRID(S)
	STATE	ZONE
Oblique Mercator Projection	Alaska	1
5. SCALE	STATE	ZONE
1:20,000	<u></u>	
OPERATIONS	NAME	DATE
1. AEROTRIANGULATION BY	J. Taylor	Jan. 1987
METHOD: Analytic LANDMARKS AND AIDS BY	N.A.	
2. CONTROL AND BRIDGE POINTS PLOTTED BY	F. Mauldin	Jan. 1987
METHOD: Xynetics 1201 CHECKED BY	F. Mauldin	Jan. 1987
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	P. Evans	Feb. 1987
COMPILATION CHECKED BY	F. Mauldin	Feb. 1987
INSTRUMENT: Wild B-8 CONTOURS BY	N.A.	
SCALE: 1:20,000 CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY	P. Evans	Mar. 1987
CHECKED BY	F. Mauldin	Mar. 1987
METHOD: Smooth Drafted CONTOURS BY	N.A.	
CHECKED BY HYDRO SUPPORT DATA BY	P. Evans	Mar. 1987
SCALE: 1:20,000 CHECKED BY	F. Mauldin	Mar. 1987
5. OFFICE INSPECTION PRIOR TO KNEX BY POOR Final Review BY	F. Mauldin	Mar. 1987
BY	N.A.	
6. APPLICATION OF FIELD EDIT DATA CHECKED BY	N.A.	
7. COMPILATION SECTION REVIEW Class III BY	F. Mauldin	Mar. 1987
8. FINAL REVIEW Class III BY	L. O. Neterer, Jr	. Mar. 1987
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	L. O. Neterer, Jr	10 - (1)
	H. O. Heterer, dr	· //26 / 178 /
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	P. Dempsey E.L. DAUGHERTS	June 1987

NOAA FORM 76-36 (3-72)	c	HſS	TP-013	314	ATIONAL OCEA				RATION
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2. HORIZONTAL	CONTROL		ESTABLISHED I		.A.			ray, 1	<u>. , , , , , , , , , , , , , , , , , , ,</u>
		PRE-MARKED	OR IDENTIFIED I	 	. McEwen	-		May, 1	985
			RECOVERED !	BY N	.A.				
3. VERTICAL CO	NTROL		ESTABLISHED I	BY N	.A.				
		PRE-MARKED	OR IDENTIFIED I		.A.				
	REC	OVERED (Trian)	Quiation Stations)	ິ' ├─	.A				
4. LANDMARKS AL		LOCATES	(Field Methods)		.A				
		TYPE OF I	IDENTIFIED I	BY N	.A				
		COMPL							
S. GEOGRAPHIC I INVESTIGATION			IC NAMES ONLY	вч					
		=	ESTIGATION						
6. PHOTO INSPEC	TION	CLARIFICATI	ON OF DETAILS	er N	.A.	<u> </u>			
7. BOUNDARIES A			OR IDENTIFIED		.A.				
II. SOURCE DATA									
1. HORIZONTAL		TIFIED		2.	VERTICAL CO	NTROL IDEN	TIFIED		
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3. PHOTO NUMBE	RS (Clarification	of details)			·				
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7. SUPPLEMENTA		REPORT	X NONE	6.	BOUNDARY AN	D LIMITS:	REPOR	T NO	DNE
7. SUPPLEMENTA	MAPS AND P	LANS							
None									
8. OTHER FIELD	RECORDS (Sket	ch books, etc. DC	NOT list data sui	bmitted t	o the Geodesy D	ivision)			
	5-53 (CSI (•							
l Form 76	-109 Obse	rvations of	f Horizontal	l Dire	ections fo	r entire	project	t.	

NOAA FORM 76-36B		· · · · · · · · · · · · · · · · · · ·		NATIONAL OCE		EPARTMENT	
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TIDE CONTROLL	ED PHOTOGR	 _	<u> </u>		135		
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85B (I) 5048		5-22-85	09:22	1:50,000		eet belo	
85B (I) 5061-		5-22-85	09:36	1:50,000		eet below	
)	3003			1.50,000		ecc belo	A LIDIM
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The Mean Lowe	er-Low Wa	RORMEAN LOWERL ter Line was o		aphically f	rom the ak	oove liste	ed tide
coordinated i	infrared p	photographs.					
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. CONTEMPORARY	HYDROGRAF	HIC SURVEYS (List	only those surveys	that are sources	for photogramme	tric survey info	rmation.)
SURVEY NUMBER	DATE(S)	SURVEY CO		VEY NUMBER	DATE(S)	-	COPY USED
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. FINAL JUNCTION	<u> </u>				<u> </u>		
ORTH Scale 1:	10,000	EAST	sou	TH	W	ST	·
TP-01311, TE	P=01312	TP-01315	No	one		TP-01313	

REMARKS

(3-72)	RM 76-36D	RECO	NATIONAL OCEANIC TP-01314 RD OF SURVEY USE	U. S. DEPARTME! : AND ATMOSPHERIC	NT OF COMMERCE ADMINISTRATION
. MANUSC	RIPT COPIES				
	DATA COMPILED	DATE	 		PT FORWARDED
	BATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPOR
Compil	ation Complete	Mar. 1987	Class III Manuscript		
Final	Review	Mar. 1987	Final Class III Map	5/20/87	5/20/17
	ARKS AND AIDS TO NAVIG			_ 	
	ORTS TO MARINE CHART D	DATE			
NUMBER	NUMBER ASSIGNED	FORWARDED	RE	MARKS	
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4. DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered) SURVEY NUMBER JOB NUMBER TYPE OF SURVEY REVISED RESURVEY TP -PH - _ SECOND DATE OF PHOTOGRAPHY DATE OF FIELD EDIT MAP CLASS EDITION □111. □1V. □V. $\square n$. FINAL TYPE OF SURVEY SURVEY NUMBER JOB NUMBER REVISED RESURVEY THIRD PH- _ _ (3) DATE OF PHOTOGRAPHY DATE OF FIELD EDIT MAP CLASS EDITION □u. □ııı. □ıv. □v. FINAL SURVEY NUMBER JOB NUMBER TYPE OF SURVEY REVISED RESÜRVÉY TP -PH. FOURTH DATE OF FIELD EDIT DATE OF PHOTOGRAPHY MAP CLASS

Πıι.

EDITION

FINAL

□ iii. □ iv. □ v.

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

TP-01314

This 1:20,000 scale map is one of seven maps, six are 1:20,000 scale and one is 1:10,000 scale, in project CM-8405, Icy Strait, Point Augusta to Crist Point, Alaska. The project extends from latitude 58° 00' 00" north to latitude 58° 32' 00", longitude 134° 51' 00" west to 135° 32' 00". It includes Excursion Inlet.

Field work prior to compilation was accomplished during May 1985. This consisted of premarking triangulation stations to satisfy aerotriangulation requirements.

Photographic coverage was provided in June 1985 with color film using the Wild RC-10 "Z" camera (focal length 153.15 millimeters) and in May 1985 with black and white infrared film using the Wild RC 10 "B" camera (focal length 152.74 millimeters). All photographs are 1:50,000 scale.

Analytic aerotriangulation was performed at the Washington Science Center in January 1987. The manuscripts were ruled at the Atlantic Marine Center from data furnished by the aerotriangulation process.

Compilation was performed at the Atlantic Marine Center from office interpretation of 1:50,000 scale color and infrared photography in March 1987.

Final review was performed at the Atlantic Marine Center in March 1987. A Chart Maintenance Print for Marine Charts and a Hydrographic Print for the Hydrographic Branch were forwarded. This map is to be registered as a Final Class III Map.

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

AEROTRIANGULATION REPORT CM-8405 PT. AUGUSTA TO CRIST PT., ALASKA JANUARY 1987

21. AREA COVERED

The area covered by this report is from Pt. Augusta to Crist Pt. to the west and Excursion Inlet to the north. Icy Strait passes through the center of this area. This area is covered by six 1:20,000-scale and one 1:10,000-scale manuscripts. The 1:20,000-scale manuscripts are TP-01309, TP-01310, TP-01311, TP-01313, TP-01314, and TP-01315. The 1:10,000-scale manuscript is TP-01312.

22. METHOD

Six strips of 1:50,000 and two strips of 1:30,000-scale color photographs were bridged and adjusted to ground with the IDPF system.

A magnetic tape of the bridge points was created for the Atlantic Marine Center. The positions of these bridge points are in plane coordinates using the Alaska State Plane Coordinate System (Zone 1) with the Oblique Mercator Projection. All data will be based on the North American Datum of 1927.

No fixed aids to navigation or landmarks were located during aerotriangulation.

Ratio values were determined for the color bridging photographs and the black-and-white infrared photographs.

23. ADEQUACY OF CONTROL

The horizontal control provided for this project was adequate. Fourteen horizontal control points were used in the adjustment. One station, 594101, would not fit into the adjustment by 458 feet. Nothing wrong could be found with this station. Ties were made between the overlapping strips. This project meets NOS requirements for map manuscripts.

24. SUPPLEMENTAL DATA

Nautical charts were used to try to identify objects on the color bridging photographs. USGS quadrangles were used for vertical control.

25. PHOTOGRAPHY

The coverage, overlap, and quality of the photographs proved adequate for this project. Most control station panels were difficult to identify and measure due to poor image quality. The original color film had to be ordered to help in the identification of targets. Once difficult targets were found, they were drilled on the film duplicates. No MLW, black-and-white infrared photographs were secured for manuscripts TP-01309 and TP-01310.

26. PHOTO HYDRO STATIONS

Eight photo hydro stations were established during field operations. Of the eight stations, only six could be positioned. The horizontal positions of these six stations are believed to be within ± 10 feet of their true ground position. Panel TC-15 could not be identified on the color bridging photographs, and panel TC-21 was too far beyond horizontal control to be included in the adjustment.

Submitted by:

James H. Taylor

Approved and Forwarded:

Don O. Norma

Don O. Norman

Chief, Aerotriangulation Unit

CM-8405 FIT TO HORIZONTAL CONTROL A= CONTROL HELD

	PT. NO.	X		Y
▲GRASS 1981	226100	- 0.1	_	0.1
▲INNER 2, 1981 - SUB 1	228101	- 0.3		0.4
▲SCRAGGY 1901	942100	+ 0.4	_	0.4
▲EGAN NO. 2 RM 2 - SUB 1	945101	- 0.1	+	0.8
▲FIRST 2 - SUB 1	947101	- 0.2	-	2.1
▲ FIT 2, 1925	951100	+ 0.3	+	1.3
▲PEACH 2, 1922	933100	0.0	-	0.8
▲LIST 2, 1922	934100	- 1.1	-	0.1
▲EGAN NO. 2, RM 2 - SUB 1	957101	- 1.3	+	2.3
▲EGAN 1959 - SUB 1	602101	+ 0.8	-	1.8
▲DAY 1922 - SUB 1	598101	- 0.1	+	1.4
▲GENE 1949 - SUB 1	596101	- 0.5	-	0.5
GENE 1949 - SUB 1	594101	+458.5	_	6.6
▲EARTH 2, 1922 - SUB 1	937101	- 0.7		0.2
▲ PULP 2, 1922 - SUB 1	936101	+ 0.3	_	0.4

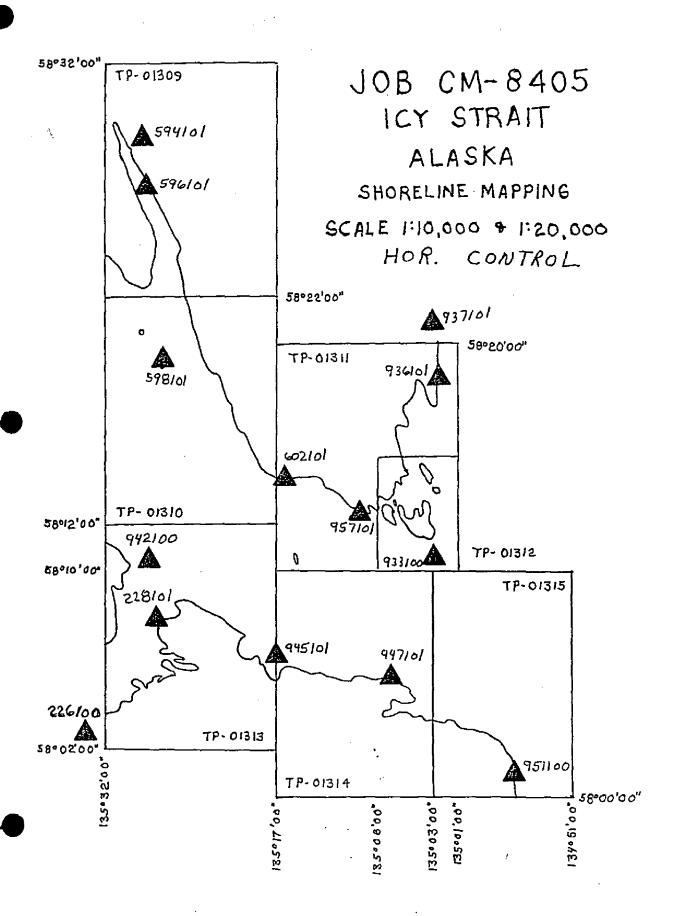
CM-8405 RATIO VALUES

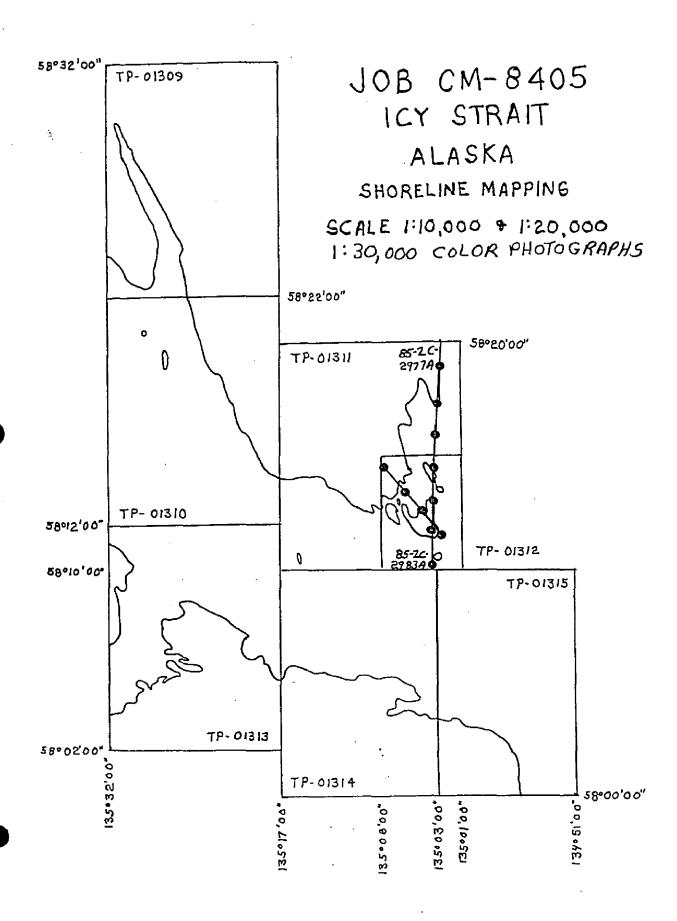
COLOR PHOTOGRAPHS

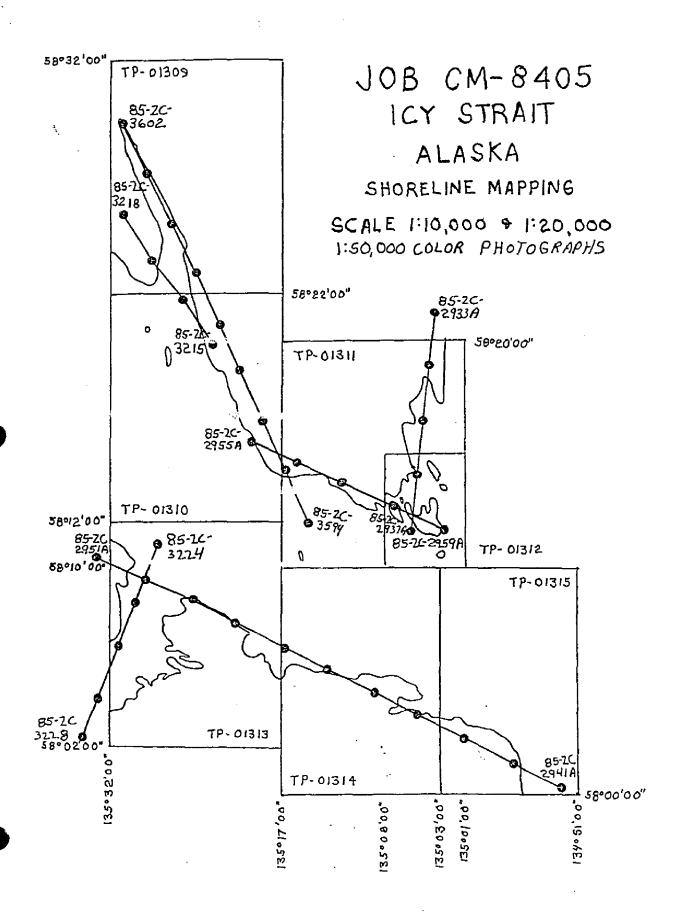
PHOTOGRAPHS			RATIO
85-ZC-2933A 85-ZC-2941A 85-ZC-2955A 85-ZC-3215 85-ZC-3224	thru thru thru	2951A 2958A 3218	2.412 2.412 2.412 2.468 2.466
85-ZC-3593 85-ZC-2980A 85-ZC-2965A	thru	2981A	2.482 2.945 2.946

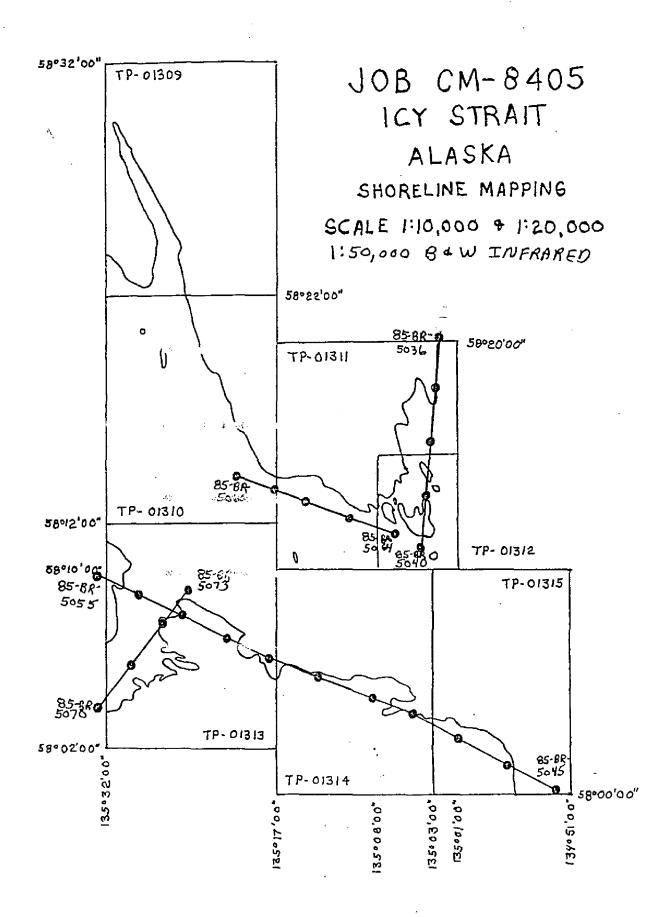
BLACK-AND-WHITE INFRARED PHOTOGRAPHS

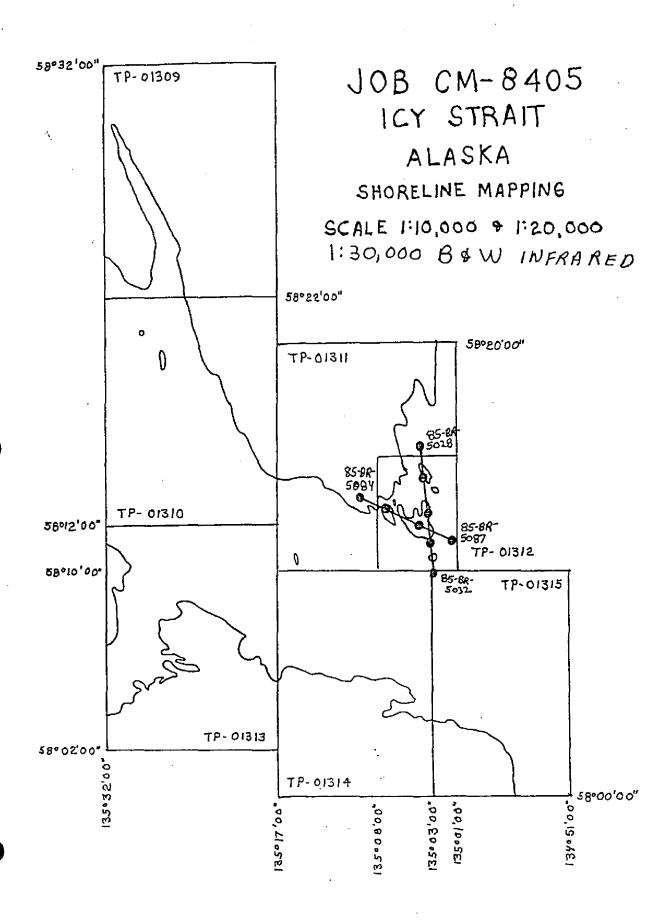
PHOTOGRAPHS	5			RATIO
85-BR-5035	thru	5038		2.444
85-BR-5046	thru	5056		2.457
85-BR-5060	thru	5064		2.455
85-BR-5069	thru	5072		2.445
85~BR-5064	thru	5066		3.000
85-BR-5038	thru	5039		3.000











NOAA FORM 76-41 (6-75)		DESCRIPTIV	CRIPTIVE REPORT CONTROL RECORD	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	DEPARTMENT OF COMMERCE MOSPHERIC ADMINISTRATION
MAP NO.	JOB NO.		GEODETIC DATUM	ORIGINATING ACTIVITY	TY Coactal Manning
TP-01314	CM-8405		N.A. 1927	Unit, AMC, Nor	
		AEROTRI-			
STATION NAME	INFORMATION (Index)	ANGULATION POINT NUMBER	srare Alaska zone 1	φ LATITUDE λ LONGITUDE	REMARKS
	0.00	00.00	χ=	\$ 58° 05' 27.523"	
FIRST 2, 1922	20AD 381332 STA 1016	94/100	y≖	λ 135° 06' 53.300"	
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COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE
LISTED BY P. L. Evans	,	DATE 2-23-87	LISTING CHECKED BY F. Maul		DATE 3-9-87
1		DATE	HAND PLOTTING CHECKED BY		DATE
		SUPERSEDES NO	SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.	H IS OBSOLETE.	

COMPILATION REPORT TP-01314 .

31 - DELINEATION

Delineation was accomplished using Wild B-8 stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:50,000 scale 1985 bridging/compilation color photographs. Tide coordinated mean lower low water infrared ratio photographs were used to graphically compile the approximate mean lower low water line. Control for graphic delineation was provided by the instrument compilation of coastal detail and common image points.

The southern tip of the island, part of two islands named The Sisters, at approximately 58° 09.9' latitude and 135° 15.0' longitude was compiled graphically from infrared ratio photographs using coastal detail for control. This method was used due to insufficient stereo photographic coverage of the area.

All photographs used to compile this map are listed on NOAA form 76-36B. The photography was adequate.

32 - CONTROL

The horizontal control was adequate. Refer to the Aerotriangulation Report, dated January 1987.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours are not applicable to the project. Drainage was compiled from office interpretation of the photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

The mean high water line was compiled from office interpretation of the bridging/compilation photographs as described in item #31.

36 - OFFSHORE DETAILS

Offshore details were compiled by instrument methods as described in item #31.

The mean lower low water infrared photographs were ratioed in order to graphically compile the approximate mean lower low water line as described in item #31.

37 - LANDMARKS AND AIDS

There was one charted aid to navigation and no landmarks within the limits of this map. The aid to navigation could not be located/verified photogrammetrically.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to the Data Record Form 76-37B, item 5, of the Descriptive Report.

40 - HORIZONTAL AND VERTICAL ACCURACY

See item #32.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with the following U. S. Geological Survey Quadrangle:

Juneau (A-4), Alaska; dated 1948, minor revisions 1975; scale 1:63,360

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Service charts:

17300; 24th edition; dated June 15, 1985; scale 1:209,978 17316; 14th edition; dated October 30, 1982; scale 1:80,000

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by

Paul L. Evans

Cartographic Technician Date: March 6, 1987.

Approved:

James J. Bord, Jr

James L. Byrd, Jr.

Chief, Coastal Mapping Unit

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8405 (Point Augusta to Crist Point, Alaska)

TP-01314

Chichagof Island

Icy Strait

Spasski Island

Suntaheen Creek

Whitestone Harbor

Approved:

Charles E. Harrington

Chief Geographer

Nautical Charting Division Charting and Geodetic Services

REVIEW REPORT SHORELINE TP-01314

61 - GENERAL STATEMENT

See Summary included with this descriptive report.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with U.S.G.S. Quadrangle:

Juneau (A-4), Alaska, dated 1948, minor revisions 1975, scale 1:63,360.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Not applicable. This map will be registered as a Class III Final Map.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS charts:

17316, 14th edition, dated October 30, 1982, scale 1:80,000; and 17300, 24th edition, dated June 15, 1985, scale 1:209,978.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with the Project Instructions and meets the requirements for National Standards of Map Accuracy.

Submitted by:

Lowell O. Neterer, Jr.

Final Reviewer March 23, 1987

Approved for forwarding:

Billy H. Barnes

Chief, Quality Assurance Group, AMC

Approved:

July O. Rabon Chief, Photogrammetric Production Sect.

Chief, Photogrammetry Branch

FORM C&GS-8352 (3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

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P	• 11	Ŀ	771	I M	UESLA	IPIIV	ERE	.POR1	U.F	SURVE.	r NU.

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 "Compatison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	RÉMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
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		· ·	Drawing (40.
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