

TP-01315

TP-01315

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 NOT BE FIELD EDITED

<i>Map No.</i>	<i>Edition No.</i>
TP-01315	1
<i>Job No.</i>	
CM-8405	
<i>Map Classification</i>	
CLASS III (FINAL)	
<i>Type of Survey</i>	
SHORELINE	
<b>LOCALITY</b>	
<i>State</i>	
ALASKA	
<i>General Locality</i>	
POINT AUGUSTA TO CRIST POINT	
<i>Locality</i>	
POINT AUGUSTA	
1985 TO 19	
<b>REGISTERED IN ARCHIVES</b>	
<i>DATE</i>	

NOAA FORM 76-36A (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY	SURVEY TP-01315
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		<input checked="" type="checkbox"/> ORIGINAL	MAP EDITION NO. (1)
		<input type="checkbox"/> RESURVEY	MAP CLASS III (Final)
		<input type="checkbox"/> REVISED	JOB PH- CM-8405
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit Atlantic Marine Center, Norfolk, VA		LAST PRECEDING MAP EDITION	
OFFICER-IN-CHARGE  C. Dale North, Jr., CDR		TYPE OF SURVEY	JOB PH- MAP CLASS SURVEY DATES: 19 TO 19
<b>I. INSTRUCTIONS DATED</b>			
1. OFFICE		2. FIELD	
Aerotriangulation Compilation		November 3, 1986 February 19, 1987	Control Change No. 1
			March 1, 1985 March 25, 1985
<b>II. DATUMS</b>			
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 checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION		4. GRID(S)	
Oblique Mercator Projection		STATE Alaska	ZONE 1
5. SCALE 1:20,000		STATE	ZONE
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic		J. Taylor	Jan. 1987
		N.A.	
2. CONTROL AND BRIDGE POINTS METHOD: Xynetics 1201		F. Mauldin	Jan. 1987
		F. Mauldin	Jan. 1987
3. STEREOSCOPIC INSTRUMENT COMPILEATION INSTRUMENT: Wild B-8 SCALE: 1:20,000		R. Kravitz	Feb. 1987
		J. Byrd	Feb. 1987
		N.A.	
		N.A.	
4. MANUSCRIPT DELINEATION METHOD: Smooth Drafted		R. Kravitz	Feb. 1987
		F. Mauldin	Mar. 1987
		N.A.	
		N.A.	
SCALE: 1:20,000		HYDRO SUPPORT DATA BY	
		CHECKED BY	
5. OFFICE INSPECTION PRIOR TO <del>REMOVED</del> Final Review by		R. Kravitz	Feb. 1987
		F. Mauldin	Mar. 1987
6. APPLICATION OF FIELD EDIT DATA		BY	N.A.

TP-01315

## COMPILED SOURCES

## 1. COMPILED PHOTOGRAPHY

CAMERA(S) R.C. 10 "B" (152.74mm) R.C. 10 "Z" (153.15mm)	TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY	TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED	TIME REFERENCE	
			ZONE	<input checked="" type="checkbox"/> STANDARD
			MERIDIAN	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
85 Z (C) 2948-2951 85 B (I) 5046-5048	6-10-85 5-22-85	08:53 09:22	1:50,000 1:50,000	8.8 feet above MLLW 1.1 feet below MLLW

Mean Tide Range 14.2 ft.

## REMARKS

Stage of tide is based on predicted tide data, using Swanson Harbor gage.

## 2. SOURCE OF MEAN HIGH-WATER LINE:

The Mean High Water Line was compiled from office interpretation of the above listed compilation/bridging color photographs using stereo instrument methods.

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

The Mean Lower Low Water Line was compiled from the above listed tide coordinated infrared 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

## 5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-01312 1:10,000	No Survey	No Survey	TP-01314

## REMARKS

TP-01315

## HISTORY OF FIELD OPERATIONS

I.  FIELD INSPECTION OPERATION PREMARKING  FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Vandermeulen	May 1985
RECOVERED BY	M. McEwen	May 1985
2. HORIZONTAL CONTROL	ESTABLISHED BY	N.A.
PRE-MARKED OR IDENTIFIED BY	M. McEwen	May 1985
RECOVERED BY	N.A.	
3. VERTICAL CONTROL	ESTABLISHED BY	N.A.
PRE-MARKED OR IDENTIFIED BY	N.A.	
RECOVERED (Triangulation Stations) BY	N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	LOCATED (Field Methods) BY	N.A.
	IDENTIFIED BY	N.A.
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	BY
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	N.A.
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.

## II. SOURCE DATA

## 1. HORIZONTAL CONTROL IDENTIFIED

Panelled

## 2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
85Z(C)2951	FIT 2, 1925 (paneled direct)		

## 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)

 1 form 76-53 CSI Card 1 form 76-109 Observations of Horizontal Direction for project..

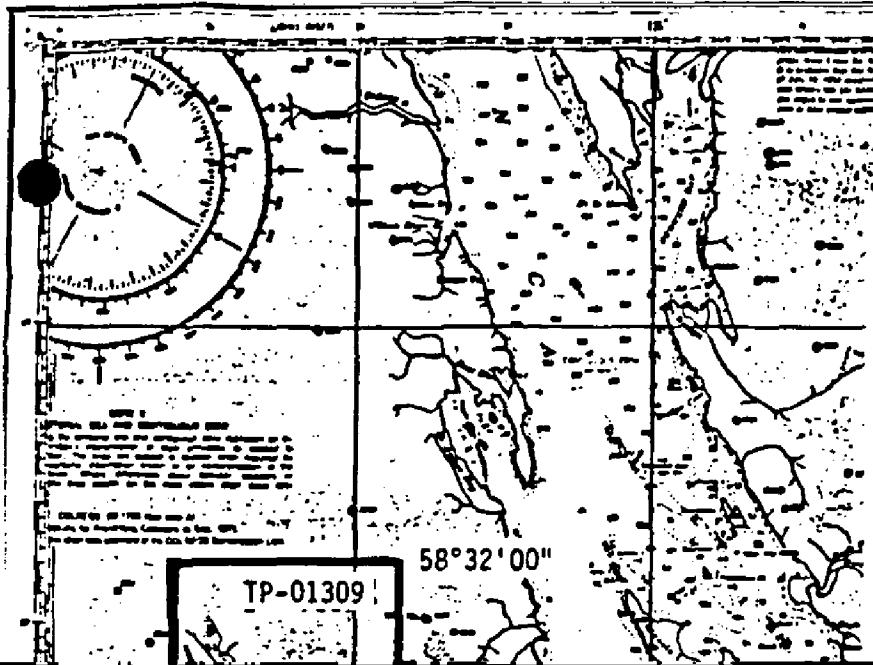
TP-01315  
**RECORD OF SURVEY USE****I. MANUSCRIPT COPIES**

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete	March 1987	Class III Manuscript		
Final Review	March 1987	Final Class III Map	5/20/87	5/20/87

**II. LANDMARKS AND AIDS TO NAVIGATION****1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH**

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. REPORT TO MARINE CHART DIVISION, COAST GUARD BRANCH - DATE FORWARDED



**JOB CM-8405**  
**ICY STRAIT**  
**PT. AUGUSTA TO CRIST PT.**  
**ALASKA**

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-01315

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. This project extends from latitude 58° 00' 00" north to latitude 58° 32' 00", longitude 134° 51' 00" west to 135° 32' 00".

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) both sets of photography are at 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 Branch, a Hydrographic Print, for the Hydrographic Branch, and a copy of the Hydrographic Print for the NOAA ship FAIRWEATHER 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.

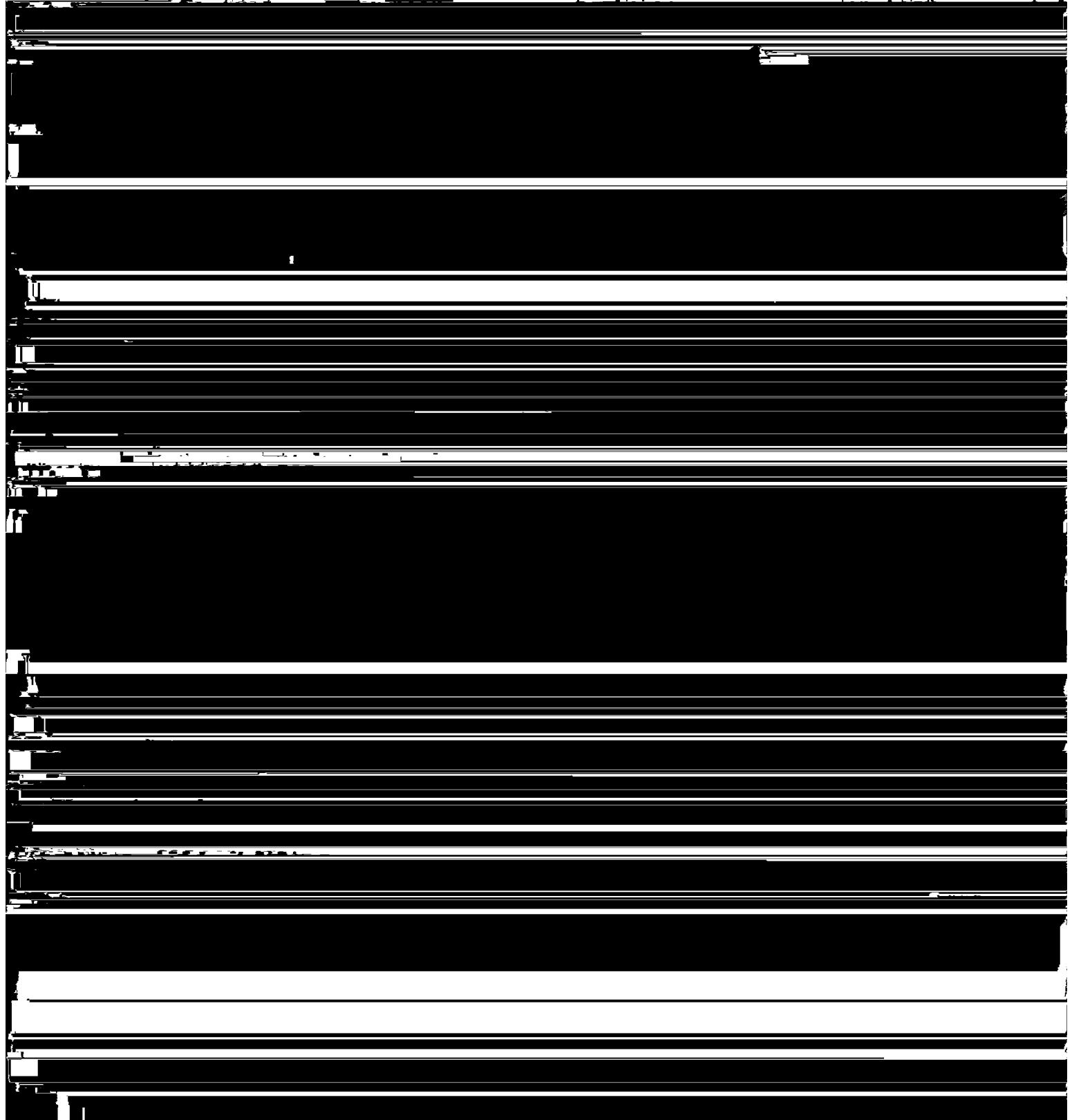
Ratio values were determined for the color bridging photographs and the black-and-white infrared photographs.

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

25. PHOTOGRAPHY

The coverage, overlap, and quality of the photographs proved adequate for this project. Most control station panels were



CM-8405  
FIT TO HORIZONTAL CONTROL  
▲= 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

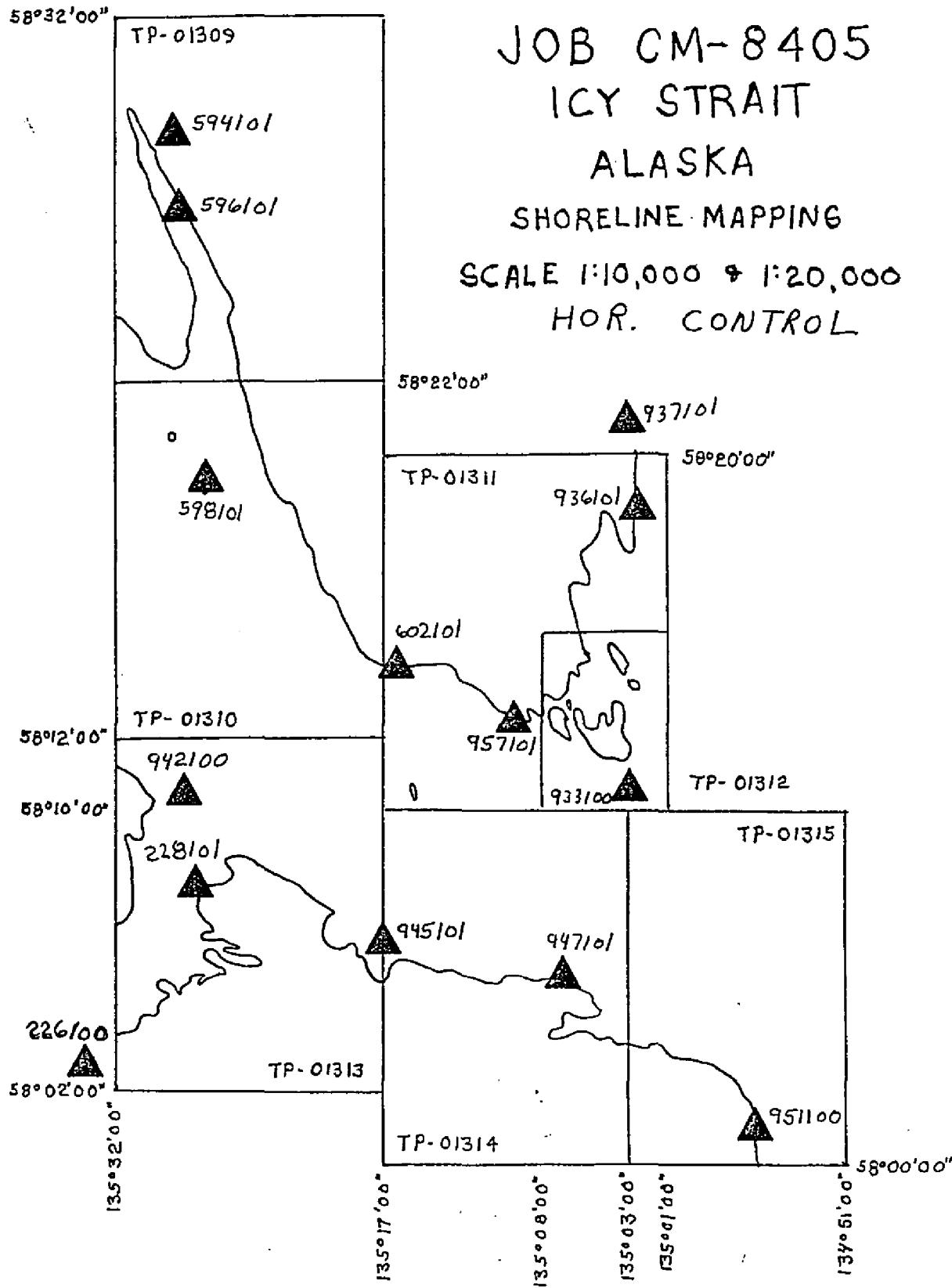
CM-8405  
RATIO VALUES

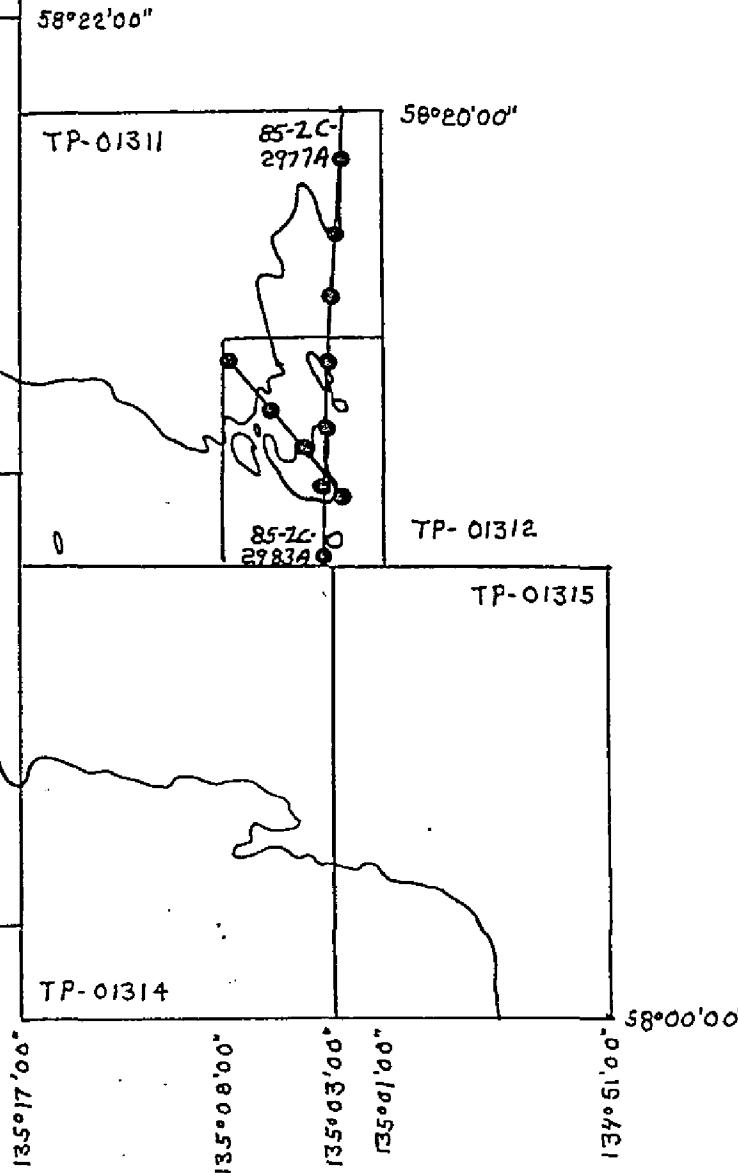
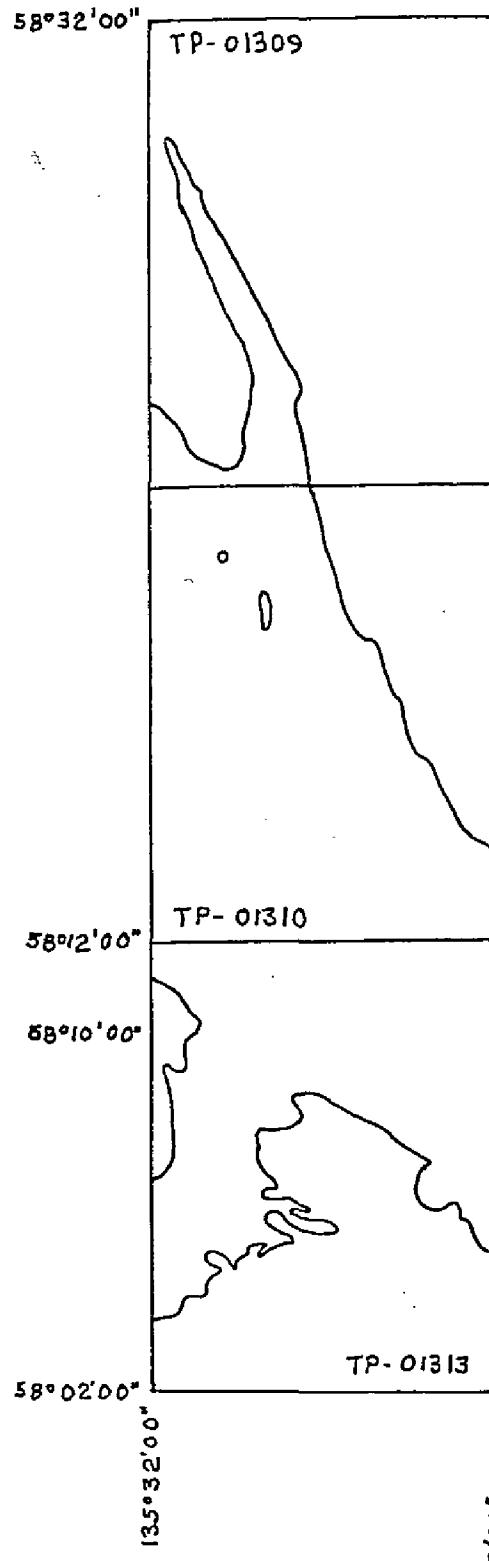
COLOR PHOTOGRAPHS

<u>PHOTOGRAPHS</u>	<u>RATIO</u>
85-ZC-2933A thru 2936A	2.412
85-ZC-2941A thru 2951A	2.412
85-ZC-2955A thru 2958A	2.412
85-ZC-3215 thru 3218	2.468
85-ZC-3224 thru 3229	2.466
85-ZC-3593 thru 3602	2.482
85-ZC-2980A thru 2981A	2.945
85-ZC-2965A thru 2968A	2.946

BLACK-AND-WHITE INFRARED PHOTOGRAPHS

<u>PHOTOGRAPHS</u>	<u>RATIO</u>
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

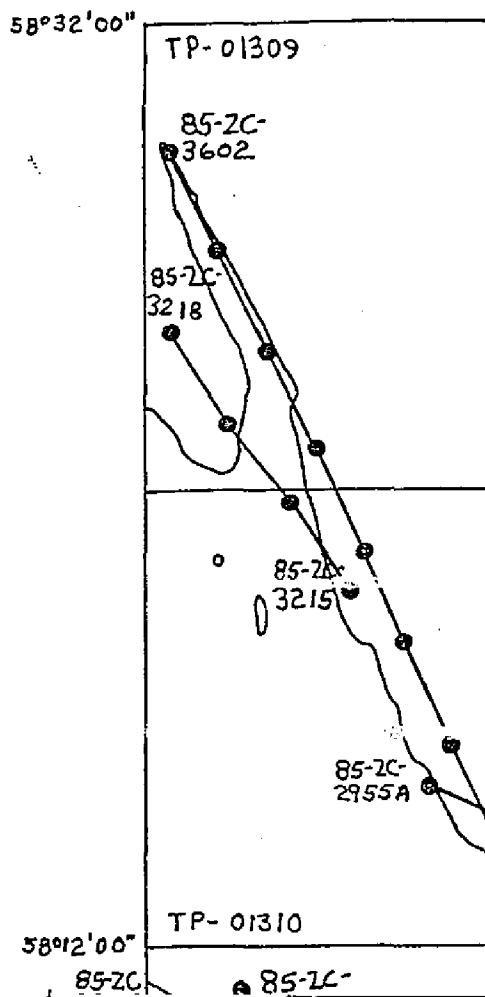




JOB CM-8405  
ICY STRAIT  
ALASKA

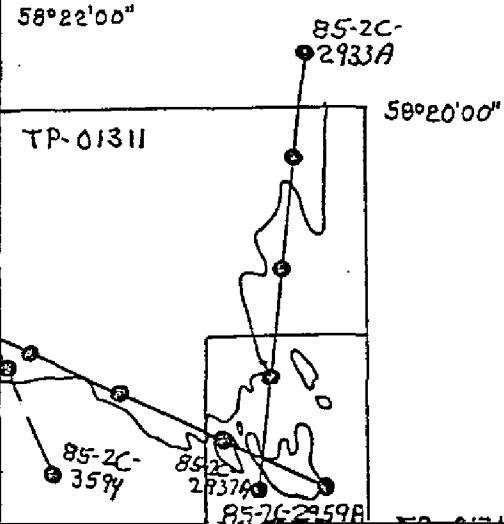
SHORELINE MAPPING

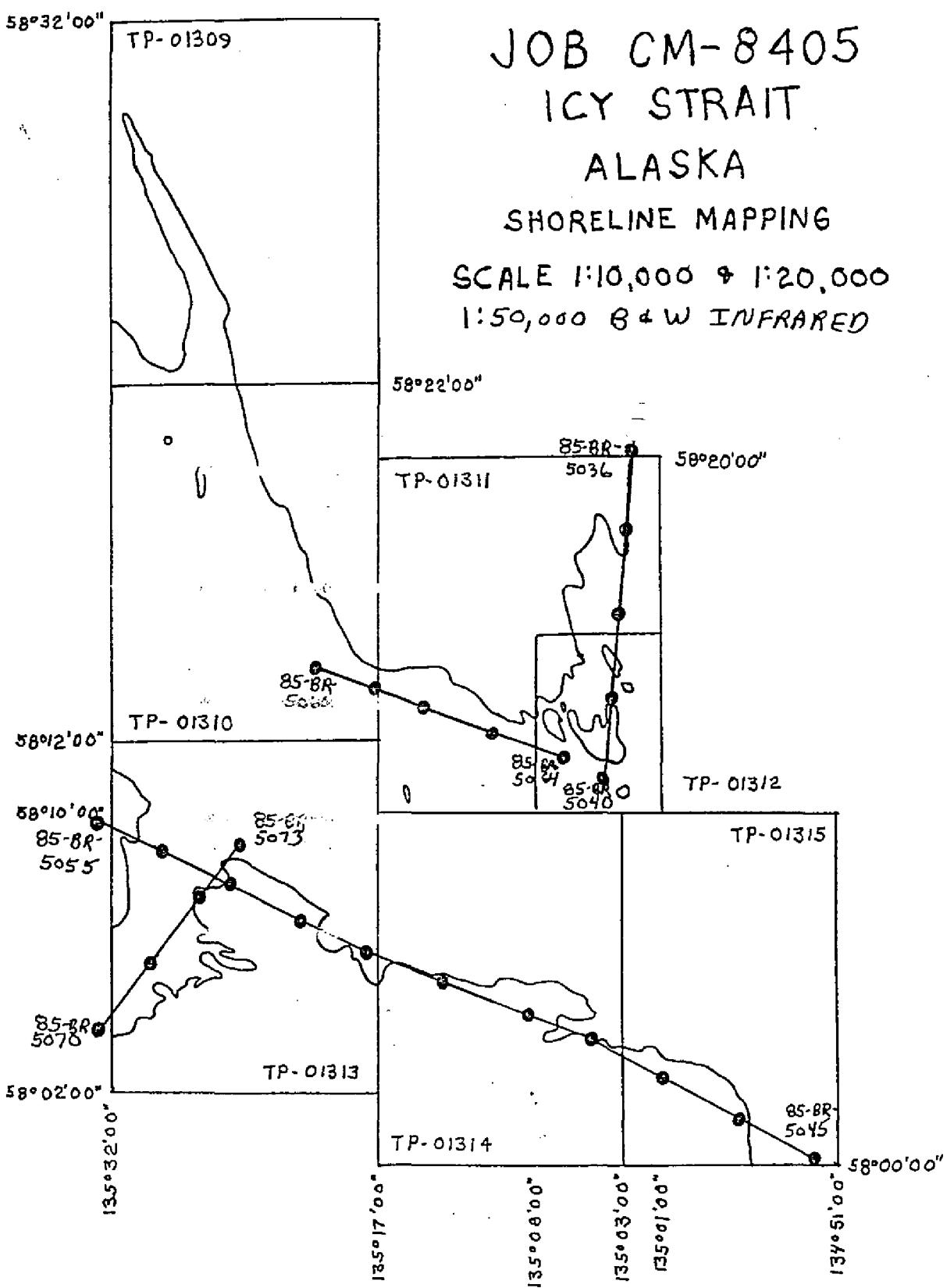
SCALE 1:10,000 & 1:20,000  
1:30,000 COLOR PHOTOGRAPHS



JOB CM-8405  
ICY STRAIT  
ALASKA  
SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000  
1:50,000 COLOR PHOTOGRAPHS





JOB CM-8405  
ICY STRAIT  
ALASKA  
SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000  
1:50,000 B & W INFRARED

58°32'00"

TP-01309



JOB CM-8405

ICY STRAIT

ALASKA

SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000

1:30,000 B & W INFRARED

58°22'00"

TP-01311

58°20'00"

TP-01310

58°12'00"

58°10'00"

58°08'00"

58°06'00"

58°04'00"

58°02'00"

58°00'00"

135°32'00"

135°17'00"

135°08'00"

135°03'00"

135°01'00"

134°56'00"

TP-01313

TP-01314

TP-01315

TP-01312

TP-01311

TP-01310

TP-01309

TP-01313

TP-01314

TP-01315

TP-01312

TP-01311

DESCRIPTIVE REPORT LUNATOL BEIJING

COMPILED REPORT  
TP-01315

31 - DELINEATION

Delineation was accomplished using 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.

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 compilation/bridging photographs.

35 - SHORELINE AND ALONGSHORE DETAILS

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to the Data Record Form 76-36B, 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 Quadrangles:

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

Juneau (A-3), Alaska; dated 1950, minor revisions 1963; 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.

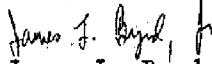
ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

  
Robert R. Kravitz  
Cartographic Technician  
Date: February 1987

Approved:

  
James L. Byrd, Jr.  
Chief, Coastal Mapping Unit

MAR 25 198

GEOGRAPHIC NAMES

FINAL NAME SHEET

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

TP-01315

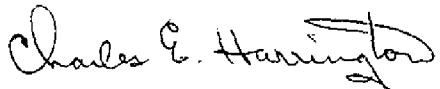
Chatham Strait

Chichagof Island

Icy Strait

Point Augusta

Approved:



Charles E. Harrington  
Chief Geographer  
Nautical Charting Division  
Charting and Geodetic Services

REVIEW REPORT  
SHORELINE  
TP-01315

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. Quadrangles:

Juneau (A-3), Alaska, dated 1950, minor revisions 1963, and  
Juneau (A-4), Alaska, dated 1948, minor revisions 1975;  
both are 1:63,360 scale.

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

[REDACTED]

**RECORD OF APPLICATION TO CHARTS**

## 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.