TP-00825

TP-00825

NOAA FORM 76-35
(6-80)

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

DESCRIPTIVE REPORT

Map No.	*Edition No.*
TP-00825	1

Job No.
CM-7412

Map Classification
FINAL MAP - FIELD EDITED

Type of Survey
SHORELINE

LOCALITY

State
ALASKA

General Locality
COOK INLET, EAST SIDE
CAPE KASILOF TO BARREN ISLANDS

Locality
USHAGAT ISLAND

19 75 TO 19 84

REGISTERED IN ARCHIVES

DATE

* U.S. GOVERNMENT PRINTING OFFICE: 1980-665-115

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP. 00825

MAP EDITION NO. (1)

MAP CLASS FINAL MAP

JOB ~~PH-~~ CM-7412

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Division, AMC, Norfolk, VA

OFFICER-IN-CHARGE: Roy K. Matsushige

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-____ MAP CLASS ____ SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE		2. FIELD	
Aerotriangulation - North Sect.	Oct. 6, 1975	Premarking	May 6, 1975
Aerotriangulation - South Sect.	Oct. 4, 1976		
Compilation - North Sect.	May 3, 1976		
Amendment I	Aug. 17,1976		
Amendment II	Jan. 14,1977		
Compilation - South Sect.	Aug. 2, 1979		

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Transverse Mercator

4. GRID(S): STATE: Alaska; ZONE: 4

5. SCALE: 1:20,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	B. Thornton	Jan. 1977
METHOD: Analytic Southhalf	LANDMARKS AND AIDS BY	J. Perrow, Jr.	Jan. 1977
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	B. Thornton	Jan. 1977
METHOD: Coradomat	CHECKED BY	J. Perrow, Jr.	Jan. 1977
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	R. Kravitz	May 1979
	CHECKED BY	F. Mauldin	May 1979
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:20,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	R. Kravitz	Jul. 1979
	CHECKED BY	F. Mauldin	Sept.1979
	CONTOURS BY	N.A.	
METHOD: Smooth drafted and graphic	CHECKED BY	N.A.	
	HYDRO SUPPORT DATA BY	R. Kravitz	Jul. 1979
SCALE: 1:20,000	CHECKED BY	F. Mauldin	Sept. 1979
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	F. Mauldin	Sept. 1979
6. APPLICATION OF FIELD EDIT DATA	BY	C. Blood	Jan. 1985
	CHECKED BY	J. Byrd	Feb. 1985
7. COMPILATION SECTION REVIEW	BY	C. Blood	Feb. 1985
8. FINAL REVIEW	BY	C. Blood/J. Byrd	Mar. 1985
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	J. Byrd	Nov. 1985
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	P. Dempsey	Mar 1986
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	E DAUGHERTY	MAY 86

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

*U.S. GOVERNMENT PRINTING OFFICE-1977-765-092

NOAA FORM 76-36B
(3-72)

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

TP-00825

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 E 152.71 mm
Wild RC 10 C 152.74 mm

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Alaska — [XX] STANDARD
MERIDIAN: 150th — [ ] DAYLIGHT

TIDE STAGE REFERENCE
[ ] PREDICTED TIDES
[XX] REFERENCE STATION RECORDS
[XX] TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75C(C)7177-7179#	Aug.3,1975	10:14	1:60,000	13.1 ft. above MLLW
75E(I)0920-0923*	Jul.9,1975	15:25	1:30,000	15.3 ft. above MLLW
75E(I)0926-0930*	Jul.9,1975	15:34	1:30,000	14.8 ft. above MLLW
76E(I)4340-4343**	Jun.26,1976	08:05	1:30,000	0.37 ft. above MLLW
76E(I)4714-4717**	Jun.27,1976	09:27	1:30,000	1.7 ft. below MLLW
76E(I)4743-4746**	Jun.27,1976	10:33	1:30,000	1.86 ft. above MLLW
				Mean tide range 11.4 ft. (Ushagat Island, Barren Islands)

REMARKS Mean High Water for Ushagat Island, Barren islands is 12.9 ft. above MLLW.
#Bridge/compilation photograph centers not on map.
*Photos not necessary for compilation, and were not processed.

2. SOURCE OF MEAN HIGH-WATER LINE:

#The M.H.W.L. was compiled by use of the Wild B-8 stereoplotter from the above listed color photographs.

*Tide-coordinated infrared MHW photography was not used due to poor quality and heavy shadows.

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

**The M.L.L.W.L. was compiled graphically from the above tide coordinated infrared photography.

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
No survey	TP-00826	No survey	No survey

REMARKS

*U.S. GOVERNMENT PRINTING OFFICE:1977-765-092

NOAA FORM 76-36C
(3-72)

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

TP-00825

HISTORY OF FIELD OPERATIONS

I. [XX] FIELD INSPECTION OPERATION (Premarking) [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	Jun 19,1975
2. HORIZONTAL CONTROL	RECOVERED BY	R. Melby	Jun 19,1975
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	R. Melby and L. Riggers	Jun 19,1975
3. VERTICAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY	N.A.	
	PRE-MARKED OR IDENTIFIED BY	N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (*Triangulation Stations*) BY	None	
	LOCATED (*Field Methods*) BY	None	
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [XX] NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
Paneled

2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75C(C)7178	TABLE MOUNTAIN, 1906		
75C(C)7179	SUD, 1931		

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 [XX] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [XX] 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 1 Form 277 and 1 Form 77-53 (Tides books) cover south section.
1 Form 25G

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36C
(3-72)

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

TP-00825

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		J. Vandermeulen	Aug. 1984
2. HORIZONTAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
3. VERTICAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	None	
	LOCATED *(Field Methods)* BY	None	
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
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)*

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE

6. 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)*

Undated Descriptive Report by Steven Konrad
Master Field Edit Print

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36D
(3-72)

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

TP-00825

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit	Sept. 1979	Class III Manuscript	9/14/79	9/14/79
Field edit applied compilation complete.	Feb. 1985	Class I Map		
Final Review	Mar. 1985	Final Map	mar 1986	mar 1986

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			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 76-40 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

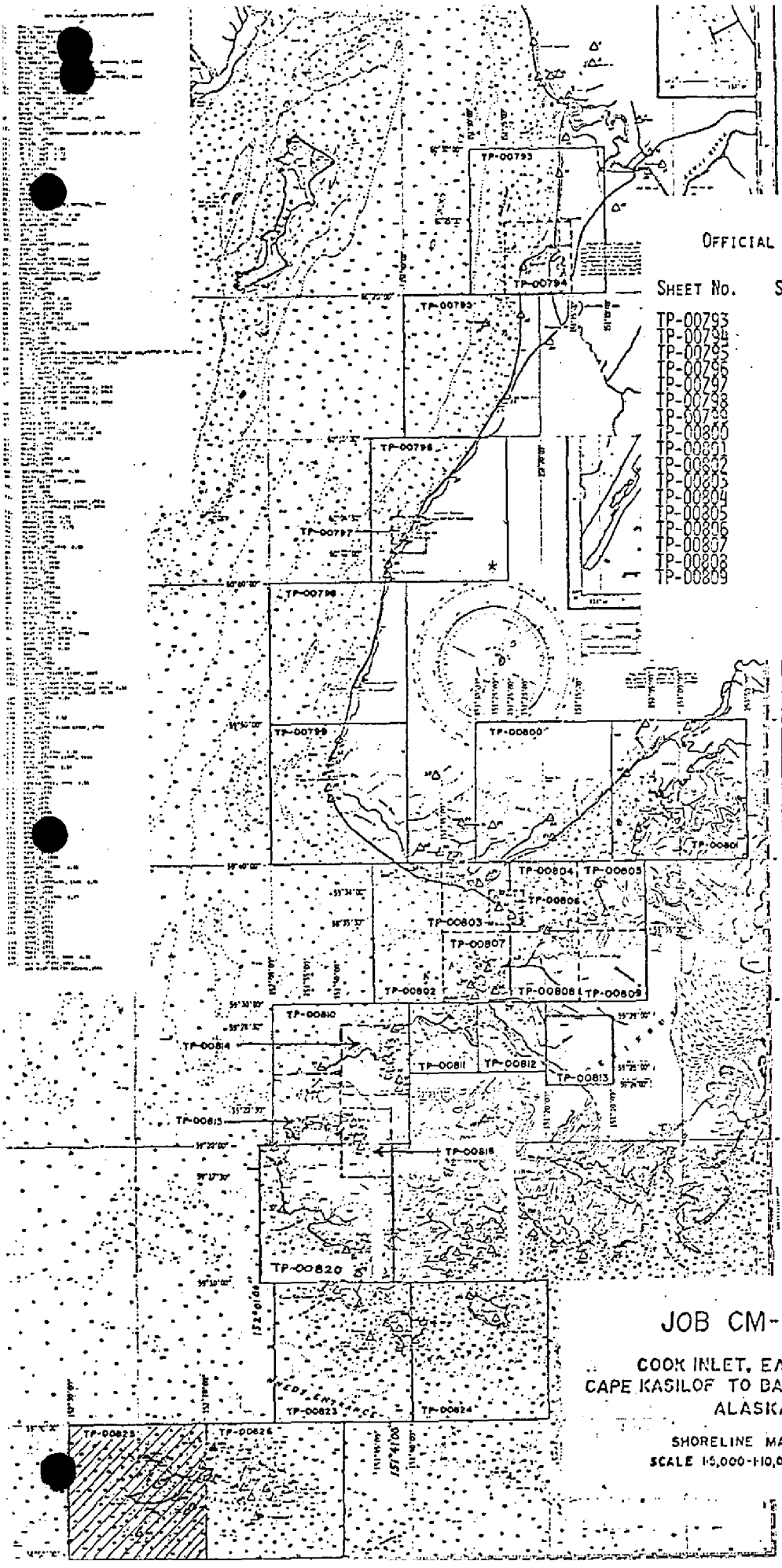
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

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

NOAA FORM 76-36D

*U.S. GOVERNMENT PRINTING OFFICE:1977-765-092



Official Mileage for Cost Accounts

Sheet No.	Sq. Mi.	Sheet No.	Sq. Mi.
TP-00793	7	TP-00810	17
TP-00794	3	TP-00811	2
TP-00795	6	TP-00812	2
TP-00796	9	TP-00813	3
TP-00797	2	TP-00814	3
TP-00798	6	TP-00815	3
TP-00799	2	TP-00816	3
TP-00800	5		
TP-00801	15		
TP-00802	13		
TP-00803	5	TP-00820	14
TP-00804	2		
TP-00805	6		
TP-00806	6	TP-00823	6
TP-00807	8	TP-00824	6
TP-00808	8	TP-00825	2
TP-00809	2	TP-00826	2
		TOTAL	145

REVISED 9/23/76 & 6/13/79 L.F.V

JOB CM-7412

COOK INLET, EAST SIDE
CAPE KASILOF TO BARREN ISLANDS
ALASKA

SHORELINE MAPPING
SCALE 1:5,000-1:10,000-1:20,000

MARCH 1974

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00825

This 1:20,000 Final shoreline map is one of twenty-nine maps designated as project CM-7412, Cook Inlet, East Side, Cape Kasilof to Barren Islands, Alaska.

The purpose of this project was to provide current charting information for nautical chart maintenance and to furnish support data for hydrographic operations. This Final Map portrays the Chugach Islands east of longitude 151°40'00" and south of latitude 59°10'00". This includes shoreline of Kenai Peninsula.

Field work prior to compilation consisted of the recovery and identification of the horizontal control necessary for the aerotriangulation of the project and establishing and monitoring tide gages while the photography was being taken for the tide coordinated infrared photographs. This activity was completed in June 1976.

Photographic coverage was adequately provided by natural color and infrared tide coordinated photographs. The RC-10 (C) camera was used to expose the natural color film required for the 1:60,000 scale aerotriangulation, compilation photographs taken August 1975. The RC-8 (E) camera was used for the infrared black and white 1:30,000 scale photographs taken June 1976. The infrared photographs were used to supplement the color compilation photography.

Analytic aerotriangulation was adequately provided by the Washington Science Center for the south part of the project January 1977. Aerotriangulation operations included ruling the base manuscript and determining ratio values for the infrared photographs.

Compilation, based upon photo interpretation, was performed by the Coastal Mapping Unit at the Atlantic Marine Center, September 1979. Refer to the compialtion report, Item #31 and NOAA Form 76-36B for specific usage of the photography.

Field edit was conducted in August 1984 by hydrographic personnel assigned to the NOAA ship RAINIER. Field edit for this manuscript is complete and was applied to the manuscript by the Coastal Mapping Unit, Atlantic Marine Center in February 1985.

Final review was performed at the Atlantic Marine Center in March 1985. A Chart Maintenance Print was prepared and forwarded to the Marine Charts Branch.

This Descriptive Report contains all pertinent information used to compile this Final Map. The original base manuscript and all related data were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00825

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification (premarking) of the horizontal control necessary for the aerotriangulation of the project and the monitoring of tide gages for the tide coordinated infrared photographs.

Photogrammetric Plot Report
Cape Kasilof to Barren Islands
Job CM-7412
South Part
January 1977

Job index was revised June 13, 1979
Number of sheets compiled, revised
March 7, 1984 C.E.B.

Area Covered

The area covered by this report is the south central coastal area of Cook Inlet, Alaska, from ~~Cape Kasilof~~ Kachemak Bay to Barren Island. This area is covered by ~~Seven~~ Six 1:20,000 scale sheets, ~~Eight~~ Ten 1:10,000 scale sheets, ~~and seven 1:5,000 scale sheets.~~ Canceled

Method

Nine strips (four 1:60,000 scale, five 1:30,000 scale) of bridging photography were measured by analytic aerotriangulation methods. The nine strips of bridging photography were controlled by field identified control including some additional points drilled and tied from the 1:60,000 scale photography to the 1:30,000 scale photography where field identified control was inadequate for a satisfactory strip adjustment.

Common points were located on the bridging photography and the tide controlled IR for ratio purposes. Tie points were used in all strips to insure an adequate junction of all strips during the strip adjustments. Ties to the compilation photography were made also.

The manuscripts are being plotted on the coradomat and will be sent upon completion.

Ratios have been ordered for the MHW and MLLW (1-6-77). A copy of this order will be included in this report.

Adequacy of Control

Several stations (Tutka-000158, Halibut Cove Light, Panel - 12101, Table Mtn., Panel-178101) were bad due to snow coverage or other reasons which made it difficult to obtain an adjustment adequate to N.M.A.S.

Strip #1, 76-C(C) 4975 thru 4987 was terminated early when flown, (planned originally to extend from sheet 801 thru 823) which gave us weak and poorly distributed control to properly check and strengthen overlapping strips.

There was a problem with the "C" camera, which was used for several of the bridging strips, that introduced a random error into the strip adjustments. This problem was bypassed by removing the correction values for film distortion in the strip adjustments.

In conclusion, with all the problems incountered and their respective errors introduced into the job, the adequacy of control overall is fair.

Supplemental Data

USGS quadrangles were used to provide vertical control for the strip adjustments.

Photography

The coverage, overlap and quality of the photography was adequate for the job with the exception of the above mentioned "C" camera.

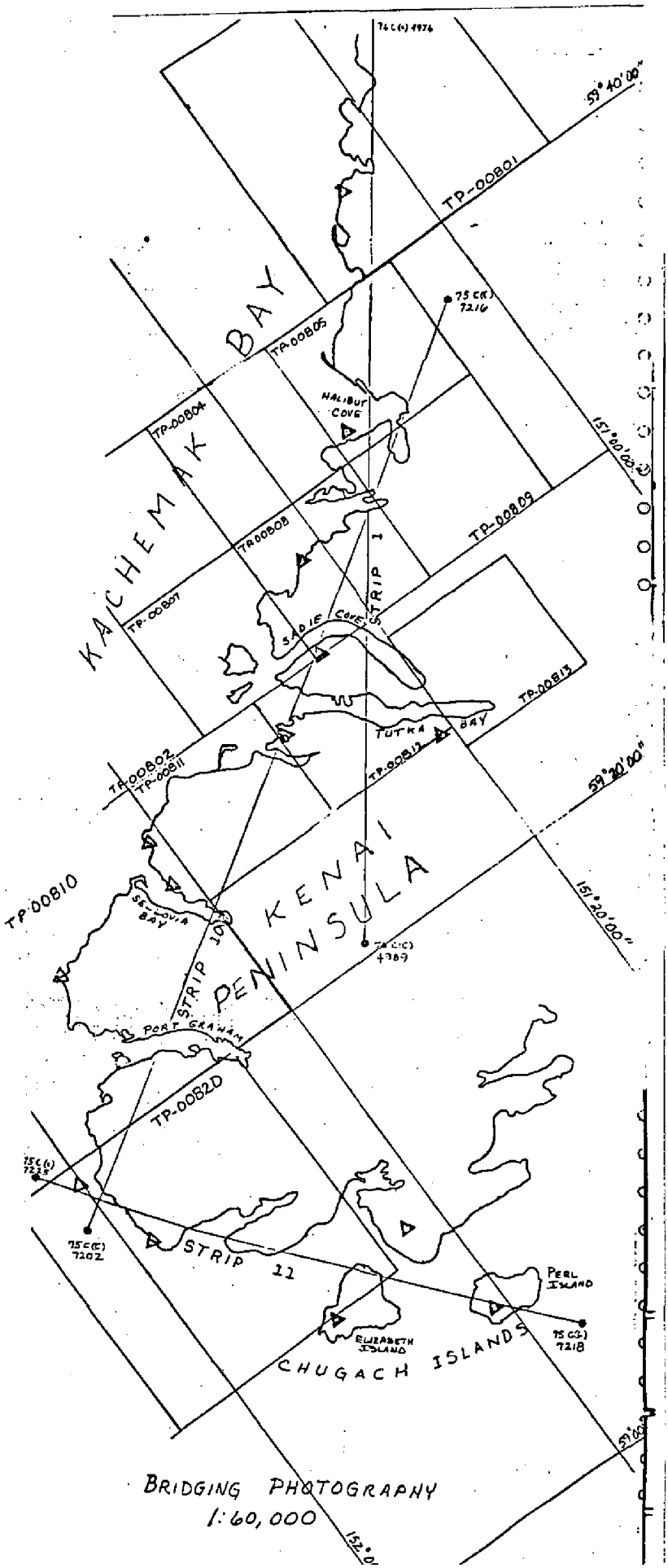
Submitted by:

Brian Thornton

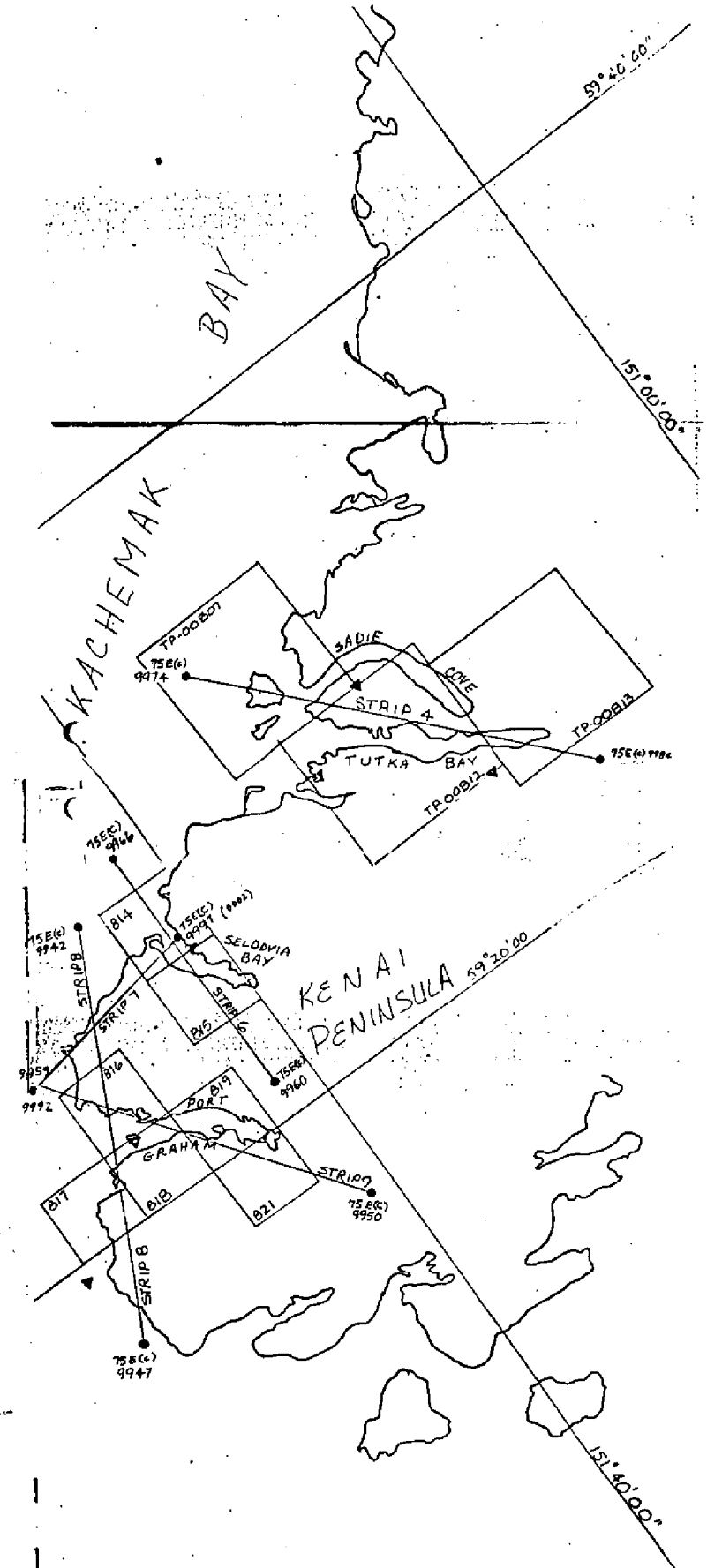
Approved and Forwarded:

John D Barrow Jr

Chief, Aerotriangulation Section



BRIDGING PHOTOGRAPHY
1:60,000



BRIDGING PHOTOGRAPHY
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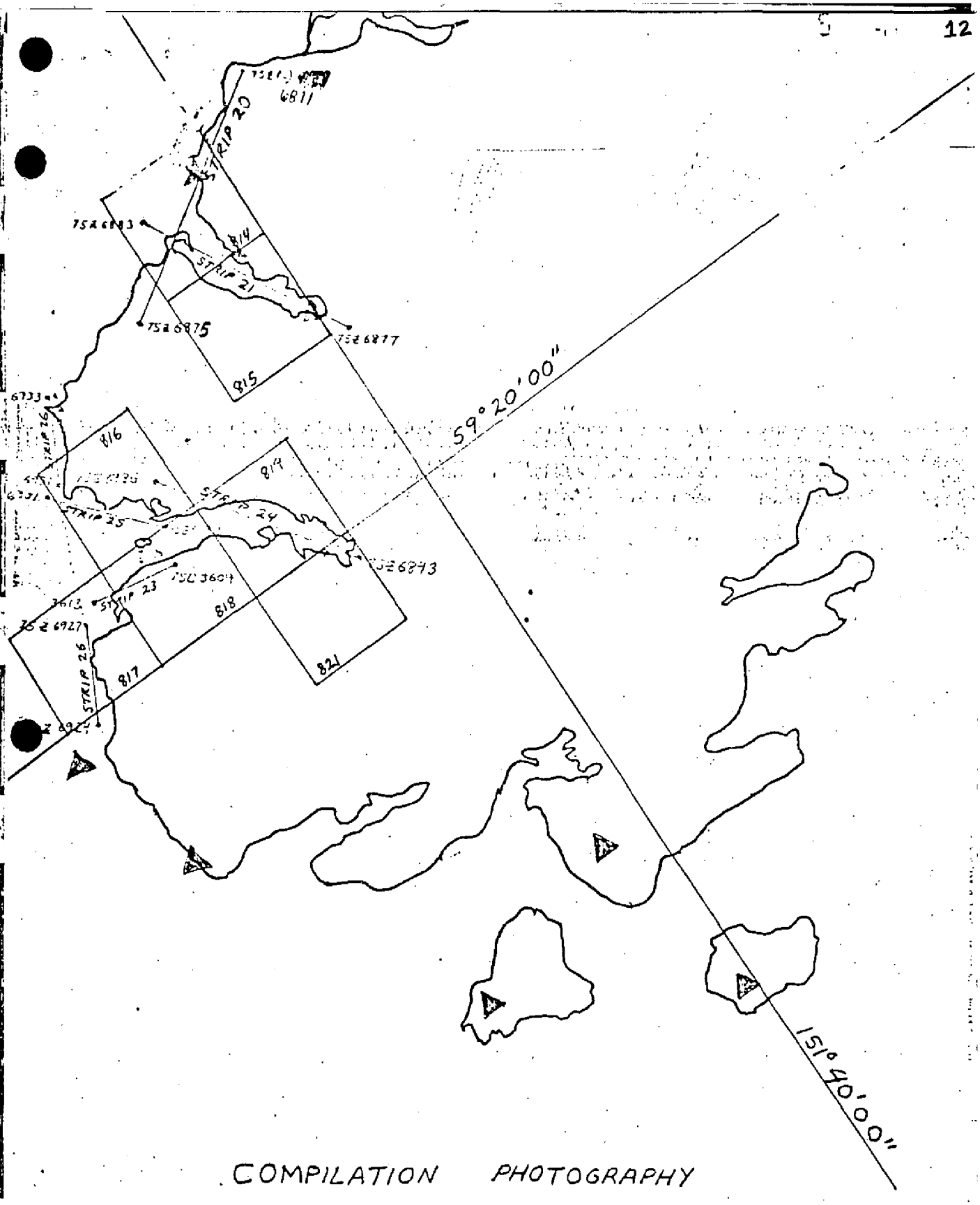
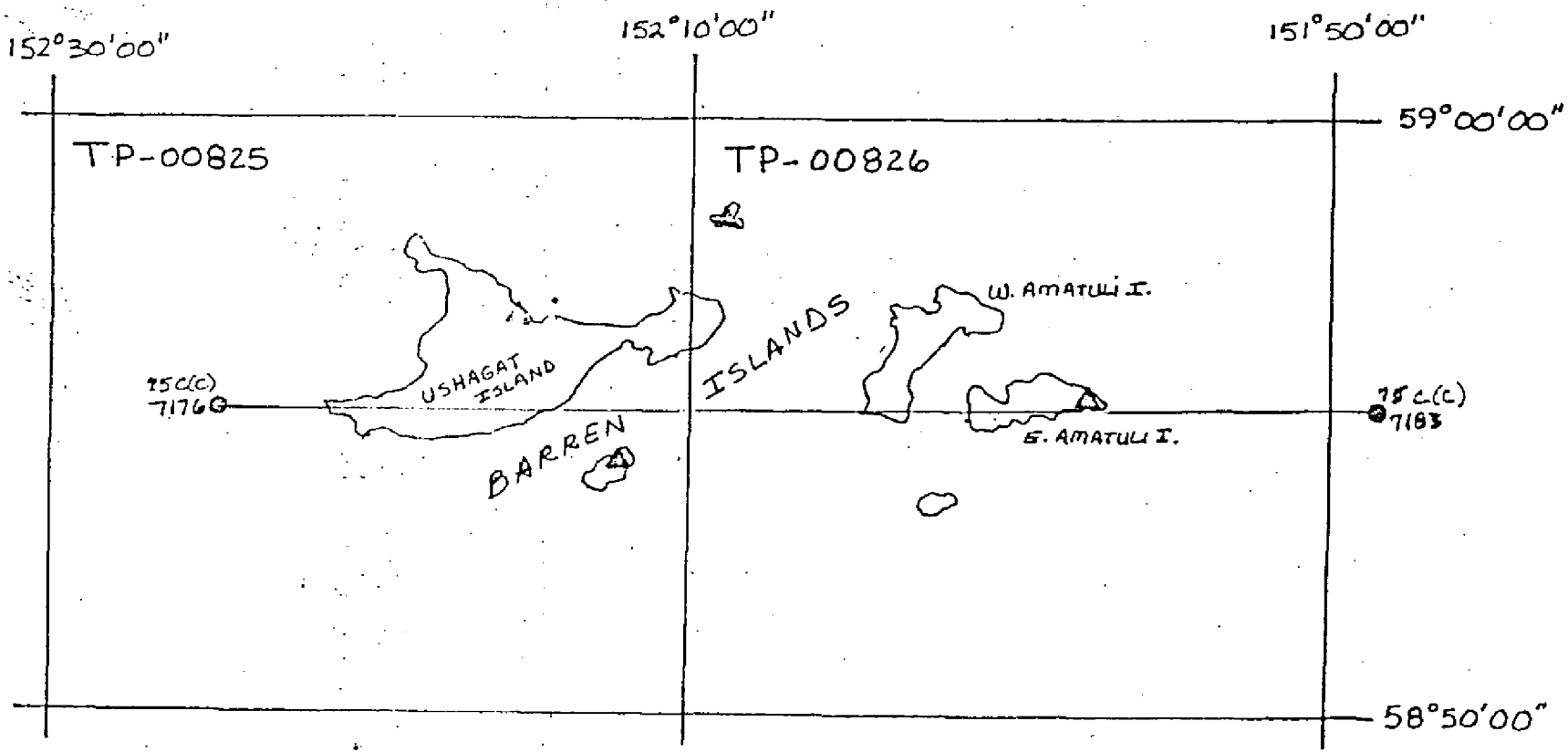


COMPILATION PHOTOGRAPHY

1:15,000



BRIDGING 1:60,000

STRIP 12

1:20,000

Test and Accuracy of Control Used in Strip Adjustment

	x-error	y-error
Strip #1		
310100	1.092	-.446
307100	-3.443	1.765
12100	.803	-1.021
984100	2.971	-.047
977101	-3.878	-.076
986101	1.253	.431
Strip #10		
203100	-.543	-3.777
944100	2.985	4.840
206100	-3.549	-3.305
207100	1.142	5.249
977101	.318	-3.937
12100	-.845	1.438
Strip #12		
178101	3.435	2.681
179100	1.047	-3.350
180101	-4.475	1.956
181100	.021	-1.299

List and Accuracy of Control Used in Strip Adjustment

	x-error	y-error
Strip #11		
219101	1.518	.598
221100	-3.964	.647
223100	3.269	-3.324
203100	-.840	2.100
Strip #4		
915801	.001	.006
911101	-.001	-.005
985805	.001	-.003
Strip #6		
206100	.000	-.010
964100	.001	-.011
207100	.006	-.007
Strip #7		
992112	-3.929	-1.672
941100	1.088	3.253
964100	-.570	-.913
169	-1.089	-.030

Cost and Accuracy of Control Used in Strip Adjustment

	x-error	y-error
Strip #8		
941100	-1.785	-2.540
944100	1.521	-1.094
203100	-1.481	-.632
203802	1.426	-2.245
Strip #9		
955101	-.515	1.133
944100	3.529	2.770
204803	-.118	-.672
204804	1.503	-1.036
204806	-.621	.619

NOAA FORM 76-41
(6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00825	CM-7412	N.A. 1927	Coastal Mapping Unit, AMC, Norfolk, VA

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Alaska ZONE 4	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS Forward	(Back)
TABLE MOUNTAIN, 1906	Quad. 58152 Pg. 17	178100	x=	φ 58 56 35.196		
			y=	λ 152 10 09.331		
SUD, 1931	Quad. 58152 Pg. 17	179100	x=	φ 58 54 06.876		
			y=	λ 152.12 11.590		
GATE, 1931	Quad. 58152 Pg. 5	141	x=	φ 58 57 02.693	83.3	(1773.3)
			y=	λ 152 10 41.783	668.1	(291.2)
USHAGAT, 1906	Quad. 58152 Pg. 18	145	x=	φ 58 55 45.58295	1410.5	(446.1)
			y=	λ 152 17 10.52364	168.4	(791.5)
RIDGE, 1931	Quad. 58152 Pg. 15	000146	x=	φ 58 54 19.36	599.1	(1257.5)
			y=	λ 152 18 02.09	33.5	(927.1)
LION, 1931	Quad. 58152 Pg. 8	000147	x=	φ 58 52 16.293	504.2	(1352.4)
			y=	λ 152 19 44.111	706.9	(254.6)
HEAD, 1931	Quad. 58152 Pg. 6	112	x=	φ 58 57 36.816	1139.2	(717.4)
			y=	λ 152 18 32.294	516.2	(442.9)
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		
			x=	φ		
			y=	λ		

COMPUTED BY A. C. Rauck, Jr.	DATE 6/21/76	COMPUTATION CHECKED BY J.R. Minton	DATE 11/5/76
LISTED BY A. C. Rauck, Jr.	DATE 6/21/76	LISTING CHECKED BY J.R. Minton	DATE 11/5/76
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT

TP-00825

31 - DELINEATION

Delineation was accomplished by using stereo instrument methods. The Wild B-8 stereoplotter was used to delineate shoreline, alongshore and interior detail based upon office interpretation of the 1:60,000 scale bridging/compilation color photographs. Supplemental tide coordinated infrared photographs at 1:30,000 scale were used to assist the compilation photographs and delineate a MLLWL.

The infrared MHW photographs are heavily shadowed and the tide is above MHW. None of the infrared MHW photographs were used.

All photographs used to compile this map are listed on NOAA Form 76-36B. Photography was adequate.

32 - CONTROL

Horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated January, 1977.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours were not applicable to this project.

Drainage was compiled from interpretation of the photographs and delineated by using the Wild B-8 stereoplotter.

35 - SHORELINE AND ALONGSHORE DETAILS

Alongshore details were delineated by the Wild B-8 stereoplotter. The infrared tide-coordinated MHW and MLLW ratio photographs were heavily shadowed and thus were not used to delineate details.

36 - OFFSHORE DETAILS

The offshore areas consist of kelp, rocks and ledge. This detail was delineated by the Wild B-8 stereoplotter as described in Item 31. The infrared MLLW photos supplemented the preceding work.

TP-00825

37 - LANDMARKS AND AIDS

There are no landmarks or aids within the mapping limits of this manuscript.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to Item 32.

46 - COMPARISON WITH EXISTING MAPS

A comparison has been made with the U.S. Geological Survey Quadrangle:
Afognak, AK, scale 1:63,360, dated 1951.

47 - COMPARISON WITH NAUTICAL CHARTS

NOS chart 16606, scale 1:77,062, dated April 7, 1973 was compared to the manuscript.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

Robert R. Kravitz
Cartographic Technician
July, 1979

Approved:

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

ADDENUM TO COMPILATION REPORT

TP-00825

Field edit was June, July and August 1984 and is recorded on the Master Field Edit Print; photographs were not used. The editor gave rock heights, ledge areas and foul areas. The field edited ledge areas extend in many places into submerged ledge, as is indicated from the tide coordinated mean low water photographs. The offshore ledge limits are shown to the low water line. Rocks edited on ledge with a height less than three feet above MLLW were deleted.

March 22, 1984

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH - 7412 (Cook Inlet, East Side - Cape Kasilof to Barren Islands, Alaska)

TP - 00825

Barren Islands

Cook Inlet

Gulf of Alaska

Sud Island

Ushagat Island

Approved by;

Charles E. Harrington

Charles E. Harrington
Chief Geographer
Nautical Charting Division

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey FIELD EDIT

Job No. CM-7412 *Map No.* TP-00824 TP-00825 TP-00826

Classification No. *Edition No.*

LOCALITY

State ALASKA

General Locality SOUTHERN COOK INLET

Locality COOK INLET, EAST SIDE

19 TO 19

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1972-760-593

FIELD EDIT NOTE

OPR-P114-RA-84

Southern Cook Inlet

INTRODUCTION

Field edit for this survey was conducted in accordance with project instructions OPR-P114-RA-84, Southern Cook Inlet, Alaska, dated February 16, 1984, Change No. 1, dated 27 April, 1984, Change No. 2, dated 21 June, 1984, and Chapter 11, Field Edit Surveys, of the Manual of Coastal Field Procedures. Hydrographic surveys H-10137, H-10033, and H-10149 were conducted concurrently with the field edit work.

MEHTODS

Field edit was performed almost entirely from small boats. A Boston Whaler was used for general shoreline verification, and one of the RAINIER's survey launches was used as a platform to obtain positions. A small amount of field edit was performed by walking the shoreline, but this was limited due to the ruggedness of the shoreline in the survey area.

All field edit was performed at or near low tide. Minus tides were taken advantage of whenever possible.

The following shoreline manuscripts were provided to the RAINIER:

Shoreline Map	Scale	Survey Affected
TP-00824	1:20000	H-10033
TP-00825	1:20000	H-10137
TP-00826	1:20000	H-10137, H-10149

All features shown on the manuscripts were either verified or deleted, and additions to the manuscripts were made where necessary. All positions on features to be verified or added to the manuscript are part of the hydrographic records. This was done to reduce the possibility of the field editor and the hydrographer taking independent positions on the same feature.

Compiled features were verified visually, or positions were taken if there was some doubt as to the accuracy of the compiled feature.

One stable base copy of each photo was all that was supplied to the RAINIER. An attempt was made to take these photos into the field with disastrous results, due to the generally wet weather encountered. Therefore, the photos had to be left on the ship, and were used only to clarify the data obtained in the field.

All of the field edit data has been depicted on the film ozalid labeled MASTER FIELD EDIT PRINT. All features shown in violet have been verified or added by the field editor. Those features shown in green are to be deleted. All times shown on the manuscripts are GMT.

Positions were determined using T-2 Theodolite, sextant, and Mini-Ranger data. Signals were Third Order, Class 1, or better, geodetic stations.

When comparing the field edit and the hydrography, it was discovered that, in certain areas, hydrography had been run inside the foul limit delineated by the field editor. This was due to the fact that shoreline hydrography is normally run at high tide, while field edit is done at low tide. Since the charting datum is MLLW, it was decided that the field editors' foul limit should supercede the hydrography in these areas.

ADEQUACY AND COMPLETENESS OF COMPILATION

All manuscripts are adequate for the purpose of field edit.

The accuracy of compilation of the manuscripts is good. A few discrepancies need to be pointed out. There were a few instances where the compiler mistook heavy kelp for rocks or islets; these were corrected on the manuscript. Another discrepancy was the use of a series of rock symbols in areas of ledges. In this case, the rock symbols were deleted, and the ledge was delineated on the manuscript. The following table lists the significant discrepancies found, all of which are on TP-00825. The features have all been deleted from the manuscripts, and the chart should be updated accordingly.

Feature	Latitude	Longitude
Rock	58/54/07 N	152/21/00 W
Islet	58/54/40 N	152/21/32 W
Rock	58/55/23 N	152/19/09 W
Islet	58/56/30 N	152/14/54 W

Manuscripts TP-00825 and TP-00826 are complete. Manuscript TP-00824 is complete except for the northeastern shore of East Chugach Island. Since no hydrography was conducted or planned on that side of the island, field edit there was given lower priority than other survey operations. Time was set aside for the work, but in the last two days of suitable low tide, conditions were lost due to weather and sea conditions, and the effort was abandoned. No plans have been made for the completion of field edit on TP-00824.

RECOMMENDATIONS

It is recommended that manuscripts TP-00825 and TP-00826 be upgraded to Class 1 Manuscripts. Since this is the last field edit survey to be performed as part of shipboard hydrographic operations, the field editor has no further recommendations.

Respectfully submitted,

Steve Konrad
LT(jg), NOAA

Approved and forwarded,

John Vandermeulen
CDR, NOAA

REVIEW REPORT
TP-00825
SHORELINE

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 the following U.S. Geological Survey quadrangle:
Afognak (D-1) AK, scale 1:63,360, dated 1951.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

H-10137 was being processed at the Pacific Marine Center and was not available for final review at this time, April 30, 1985.

65 - COMPARISON WITH NAUTICAL CHARTS

Comparisons were made with the following charts:
NOS chart 16606, scale 1:77,062, dated Oct. 20, 1979
C & GS chart 8532, scale 1:77,062, dated April 7, 1973 (These charts are representative of the same area.)

A comparison between these two charts indicate that four offshore rocks were added to the current chart from the unreviewed *Class III Chart Maintenance Print submitted to Marine Charts Sept.* 14, 1979. THe compilation photographs were near high water with heavy kelp. The intended purpose of showing the offshore rocks on the 1979 Chart Maintenance Print was to advise the Hydrographer of potential hazards. The Hydrographer was expected to determine whether or not the rocks existed. They were never intended for charting purposes because the photo interpretation of them did not render positive identification. The field investigation activity revealed the four offshore rocks to be nonexistent by the field editor at the time hydrography was performed, June through August 1984. The nonexistent rocks were removed from the Final Map. Those and other recommended are annotated on the Final Map Chart Maintenance Print.

Numerous charted rocks are not shown on this manuscript. The chart does not show any ledge, but many areas of ledge are shown on this manuscript where rocks are charted.

A Final Chart Maintenance Print indicating discrepancies was prepared and forwarded to Marine Charts.

TP-00825

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,

Charles E. Blood / J. Byrd Jr.

Charles Blood/James L. Byrd, Jr.
Final Reviewer

Approved for forwarding,

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved,

Chief, Photogrammetric Section,
Rockville

Ronald K. Brewer
Chief, Photogrammetry Branch,
Rockville

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. ______

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 R*

CHART	DATE	CARTOGRAPHER	REMARKS
16606	9/87	R Nuckfield	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 11
16580	9/21/87	R Nuckfield	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 20
			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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