

TP-00801

TP-00801

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h1>DESCRIPTIVE REPORT</h1>	
<i>Map No.</i> TP-00801	<i>Edition No.</i> 1
<i>Job No.</i> CM-7412	
<i>Map Classification</i> FINAL MAP - FIELD EDITED	
<i>Type of Survey</i> SHORELINE	
<h2>LOCALITY</h2>	
<i>State</i> ALASKA	
<i>General Locality</i> COOK INLET, EAST SIDE CAPE KASILOF TO BARREN ISLANDS	
<i>Locality</i> HEAD OF KACHEMAK BAY	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 19 75 TO 19 80 </div>	
<h2>REGISTERED IN ARCHIVES</h2>	
<i>DATE</i>	

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	
DESCRIPTIVE REPORT - DATA RECORD		SURVEY TP-00801 MAP EDITION NO. (1) MAP CLASS Final JOB RM CM-7412	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, AMC, Norfolk, VA OFFICER-IN-CHARGE Roy K. Matsushige		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation - North Sect Oct. 6, 1975 Compilation - North Sect May 3, 1976 Amendment I Aug. 17, 1976 Amendment II Jan. 14, 1977 Aerotriangulation - South Sect Oct. 4, 1976 Compilation - South Sect Aug. 2, 1979		Premarking May 6, 1975	
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 checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> 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 North Sect and METHOD: Analytic South Sect LANDMARKS AND AIDS BY		S. Solbeck, B. Thornton J. Perrow, Jr.	Mar 76, Jan 77 Mar 76, Jan 77
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat PLOTTED BY CHECKED BY		S. Solbeck, B. Thornton J. Perrow, Jr.	Mar 76, Jan 77 Mar 76, Jan 77
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:20,000 PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY		D. Butler L. Neterer, Jr. N.A. N.A.	Feb. 1978 Feb. 1978
4. MANUSCRIPT DELINEATION METHOD: SCALE: 1:20,000 PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY		D. Butler L. Neterer, Jr. N.A. N.A. D. Butler L. Neterer, Jr.	Mar 1978 Apr 1978
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		L. Neterer, Jr.	Apr 1978
6. APPLICATION OF FIELD EDIT DATA BY		L. Williams	May 1981
7. COMPILATION SECTION REVIEW BY		C. Blood	Jul 1981
8. FINAL REVIEW BY		C. Blood/J. Byrd	Jul 1985
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		J. Byrd	Nov. 1985
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		P. Dampsey	Mar 1986
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		E. DAUGHERTY	MAY 86

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00801

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8E 152.71 mm RC 10C 88.47/RC 10Z 153.14 mm		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 checked="" type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 150th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
75C(C) 6306-6310#	Jul. 5, 1975	13:33	1:60,000	9.8 ft. above MLLW	
76C(C) 4979-4981#	Jun. 11, 1976	07:52	1:60,000	3.6 ft. below MLLW	
75E(I) 0946-0951**	Jul. 10, 1975	09:32	1:30,000	2.0 ft. below MLLW	
75E(I) 0962-0970**	Jul. 10, 1975	09:45	1:30,000	1.3 ft. below MLLW	
75Z(C) 7500-7506**	Aug. 10, 1975	13:40	1:30,000	16.4 ft. above MLLW	
75E(I) 1553-1560*	Aug. 10, 1975	15:51	1:30,000	18.4 ft. above MLLW	
				Mean tide range 15.4 Seldovia	

REMARKS Bridge and/or compilation photograph centers are not shown on the manuscript. A tide gage was read at Seldovia during the time of infrared photograph exposure. The Mean High Water at Seldovia is 17.0 ft. above MLLW.

2. SOURCE OF MEAN HIGH-WATER LINE:

*The MHWL was compiled from office interpretation of the above listed 1:60,000 color photographs using stereo instrument methods. Compilation was supplemented by graphic methods using the MHW tide coordinated infrared (ratio) photographs.

Black and white ratio photographs 75 Z(C) 7500-7506 were used graphically.

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

**The MLLW line was compiled graphically from the above tide coordinated infrared ratio 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
No Survey	No Survey	TP-00805	TP-00800

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00801

HISTORY OF FIELD OPERATIONS

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

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	Jun 75, 76
2. HORIZONTAL CONTROL	RECOVERED BY L. Riggers	Jun 75, 76
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY L. Riggers	Jun 75, 76
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 <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 N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
Paneled		None	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
76C(C)4980	AURORA, 1923		
76C(C)4977	JOLLY, 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)

4 Forms 152

Project data: 2 Forms 277, 1 Form 77-53 (Tides Record Books)

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00801

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	W. Mobley	Jul 1980
2. HORIZONTAL CONTROL	RECOVERED BY J. Talbott ESTABLISHED BY J. Talbott PRE-MARKED OR IDENTIFIED BY None	Jun 1980 Jun 1980
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 <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R. Hastings	Jun 1980
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

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)

75 E(I) 0951, 0963-0966, 0968

75 E(I) 1558, 1559

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)

Master Field Edit Print

Field Edit Report

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-00801
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	Mar. 1978	Class III Manuscript	Apr. 27, 1978	Feb. 21, 1980
Field edit applied. Compilation complete	Jul 1981	Class I Manuscript	July 1981	
Final Review	Jul 1985	Final Map	mar 1986	mar 1986

II. LANDMARKS AND AIDS TO NAVIGATION None

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			<u>None</u>

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 16-48 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)

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	

NOAA FORM 76-36D

OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET No.	Sq. Mi.	SHEET No.	Sq. Mi.
TP-00793	N	TP-00810	17
TP-00794		TP-00811	17
TP-00795		TP-00812	
TP-00796		TP-00813	
TP-00797		TP-00814	
TP-00798		TP-00815	
TP-00799		TP-00816	
TP-00800			
TP-00801			
TP-00802		TP-00820	14
TP-00803			
TP-00804			
TP-00805			
TP-00806			
TP-00807		TP-00823	14
TP-00808		TP-00824	
TP-00809		TP-00825	
		TP-00826	
		TOTAL	145

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

JOB CM-7412

COOK INLET, EAST SIDE
CAPE KASLOF TO BARREN ISLANDS
ALASKA

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

MARCH 1974

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00801

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 covers the head of Kachemak Bay shoreline. The area shown is between longitudes $150^{\circ}50.0'$ and $151^{\circ}10.0'$ and between latitudes $59^{\circ}40.0'$ and $59^{\circ}50.0'$.

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 July 1975 and June 1976. The RC-8 (E) camera was used for the infrared black-and-white 1:30,000 scale photographs taken July, August 1975. The infrared photographs were used to supplement the color compilation photography. Ratio photographs taken with the RC-10(Z) camera using color film were printed as black and white, and used graphically.

Analytic aerotriangulation was adequately provided by the Washington Science Center for the north part of the project in March 1976, and the south half of the project in January 1977. Aerotriangulation operations included ruling the base manuscript and determining ratio values for the infrared photographs.

Compilation, based upon photointerpretation, was performed by the Coastal Mapping Unit at the Atlantic Marine Center in April 1978. Refer to the compilation report, item #31 and NOAA Form 76-36B for specific usage of the photography.

Field edit was conducted May through July 1980 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 July 1981.

Final review was performed at the Atlantic Marine Center in July 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-00801

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.

March, 1976

Photogrammetric Plot Report
Cook Inlet Alaska
North ~~Half~~ A-T
CM-7412

Revised March 7, 1984 C.E.B.

21. Area Covered

The area covered by this report is the eastern shoreline of Cook Inlet, Alaska, from Cape Kasilof to the northern shoreline of Kachemak Bay. This area is covered by eight 1:20,000 scale sheets (TP-00793, 795, ~~796~~ 798, 800, 802); three 1:10,000 scale sheets (TP-00794, 803, 804); and two 1:5,000 scale sheets (TP-00797 and 806).

22. Method

Eight strips of color photography (three 1:60,000, three 1:30,000, two 1:15,000) were bridged by analytic aerotriangulation methods.

Common points were located on the bridging photography and all photography being used for ratio purposes. Tie points were used on all bridging photography to ensure adequate junctioning during the strip adjustment. Ratio prints were ordered. The T-sheet manuscripts were plotted on the Coradomat.

23. Adequacy of Control

The control proved adequate except in the area along Anchor Point. Station END, 1968, was not covered on strip 75E(C)0014-0027, making it necessary to locate common points between that strip and strip 75E(C)6287-6300 to ensure adequate junctioning between the two.

The lower, or western half, of strip 75C(C)6301-6315 was often difficult to measure due to inadequate overlap and poor image quality.

For the two 1:5,000 scale sheets, no mean lower low water coverage was available. TP-00797 was also covered by 1:15,000 scale color photography flown in tandem with the infrared photography. This color strip, along with strip 75Z(c)7490-7511 (flown parallel to strip 75C(C)6301-6315), was ratioed for compilation purposes. Both were flown during mean high water.

On strip 75E(C)0057-0061, 900 points were dropped so that this strip could be used on the Wild B-8 stereoplotter to compile the NE corner of TP-00803.

Strip 75Z(C)6945-6956 was to be used for the compilation of TP-00806. Although there is color coverage (flown at mean high water) for TP-00800, no black and white infrared photography was available which covers this area at mean high water.

24. Supplemental Data

USGS quadrangles were used to provide vertical control for the adjustment.

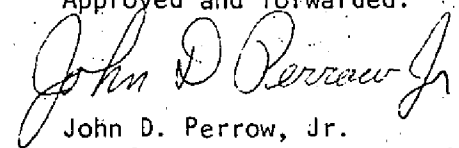
25. Photography

The coverage, overlap, and quality of the photography in general was adequate for the job.

Respectfully submitted,


Stephen R. Solbeck

Approved and forwarded:


John D. Perrow, Jr.
Chief, Aerotriangulation Section

AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALF

CM-7412

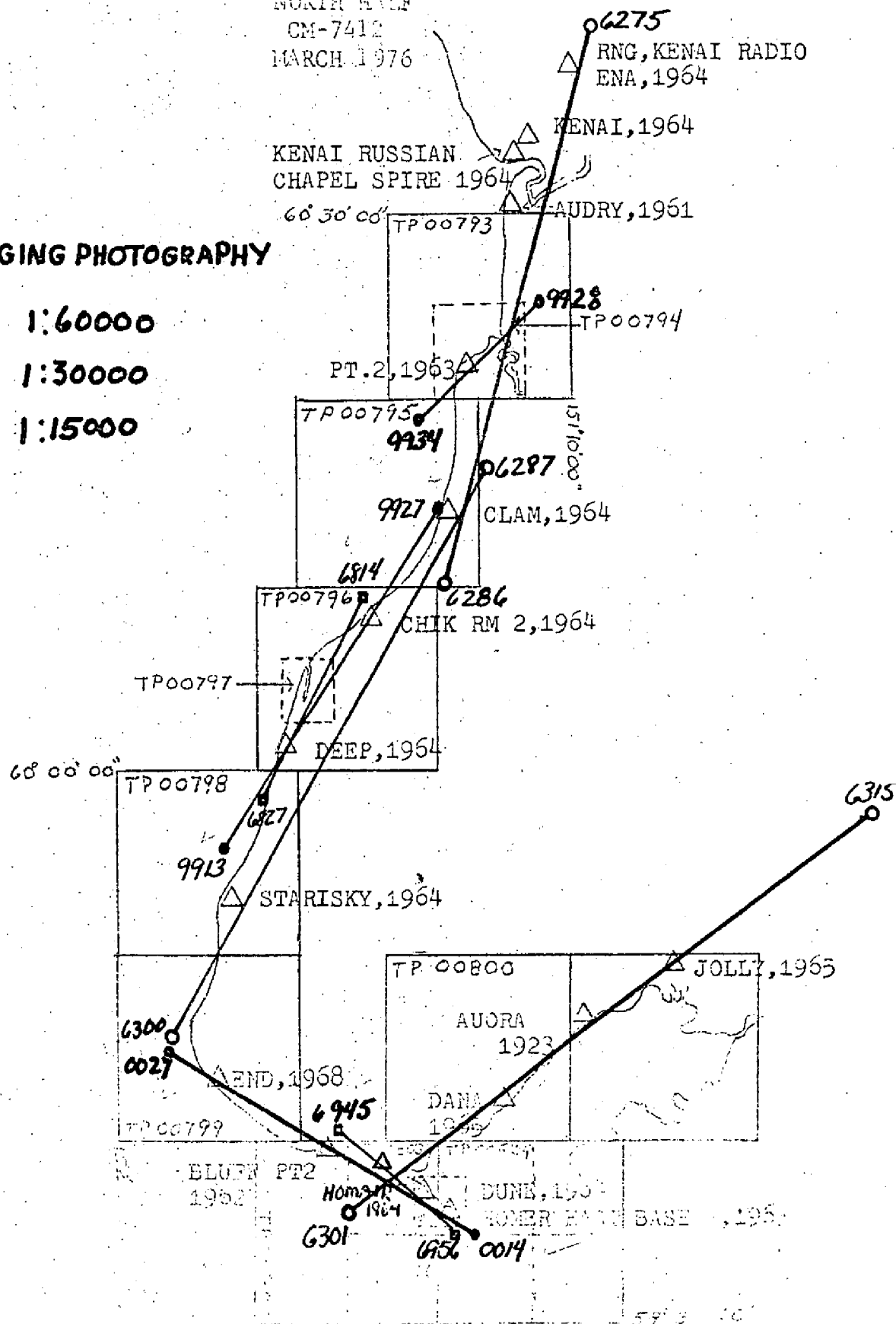
MARCH 1976

COLOR BRIDGING PHOTOGRAPHY

• 75C (c) 1:60000

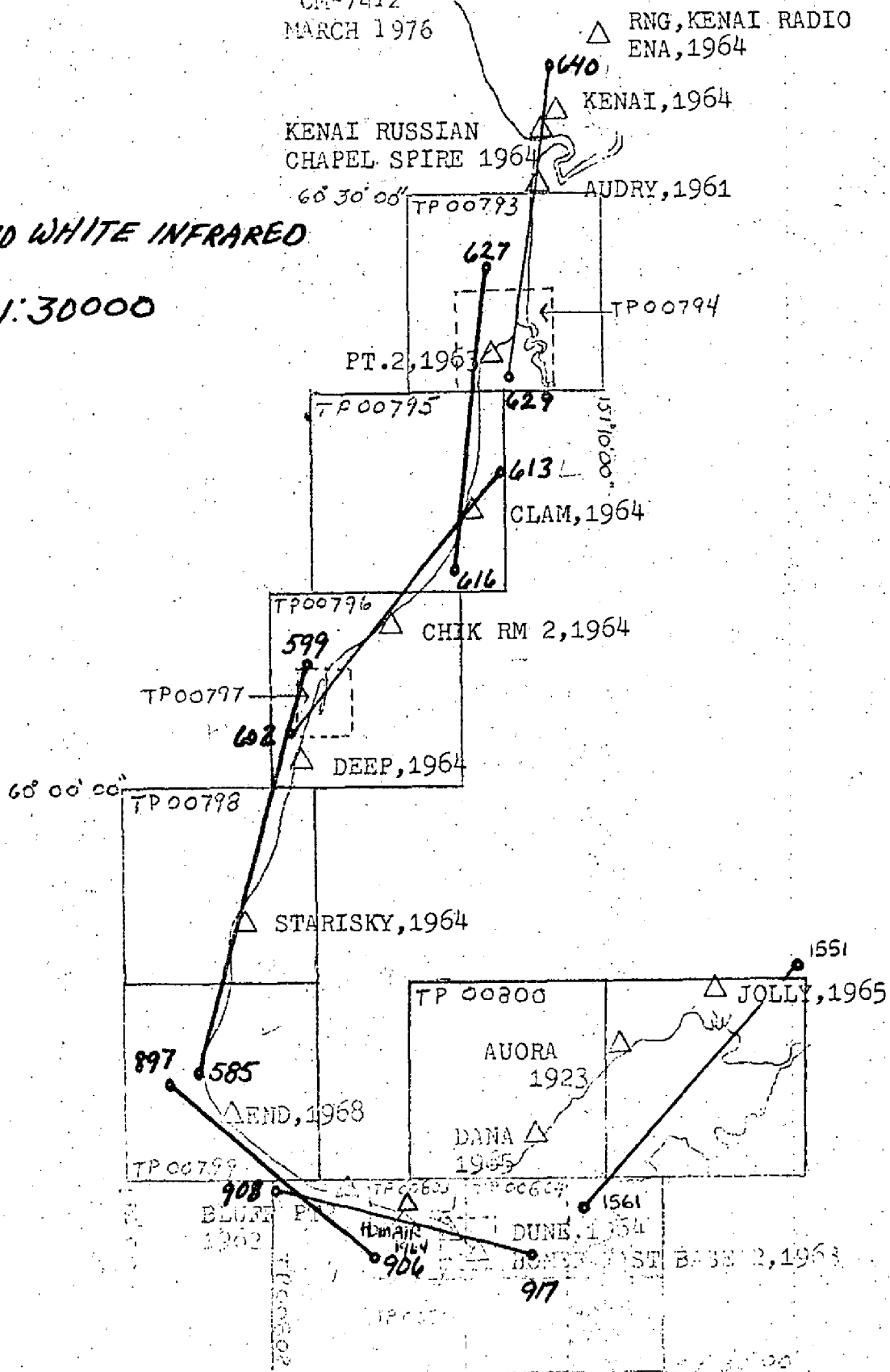
• 75E (c) 1:30000

• 75Z (c) 1:15000



AEROTRIANGULATION SKETCH
 COOK INLET, ALASKA
 NORTH HALF
 CM-7412
 MARCH 1976

BLACK AND WHITE INFRARED
 75 E(R)
 MHW



AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALE

CM-7412

MARCH 1976

△ RNG, KENAI RADIO
ENA, 1964

△ KENAI, 1964

KENAI RUSSIAN
CHAPEL SPIRE 1964

△ AUDRY, 1961

60° 30' 00"

TP 00793

TP 00794

PT. 2, 1963

TP 00795

15' 10' 00"

△ CLAM, 1964

TP 00796

874

△ CHIK RM 2, 1964

TP 00797

885

△ DEEP, 1964

60° 00' 00"

TP 00798

△ STARISKY, 1964

TP 00800

△ JOLLY, 1965

AUORA
1923DANA
1965

△ END, 1968

870

TP 00799

BLUFF PT2
1962HOMAIR
1964

DUNK, 1964

HOME EAST 3, 1963

882

BLACK AND WHITE INFRARED

75 E(R) 1:15000

MHW

AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

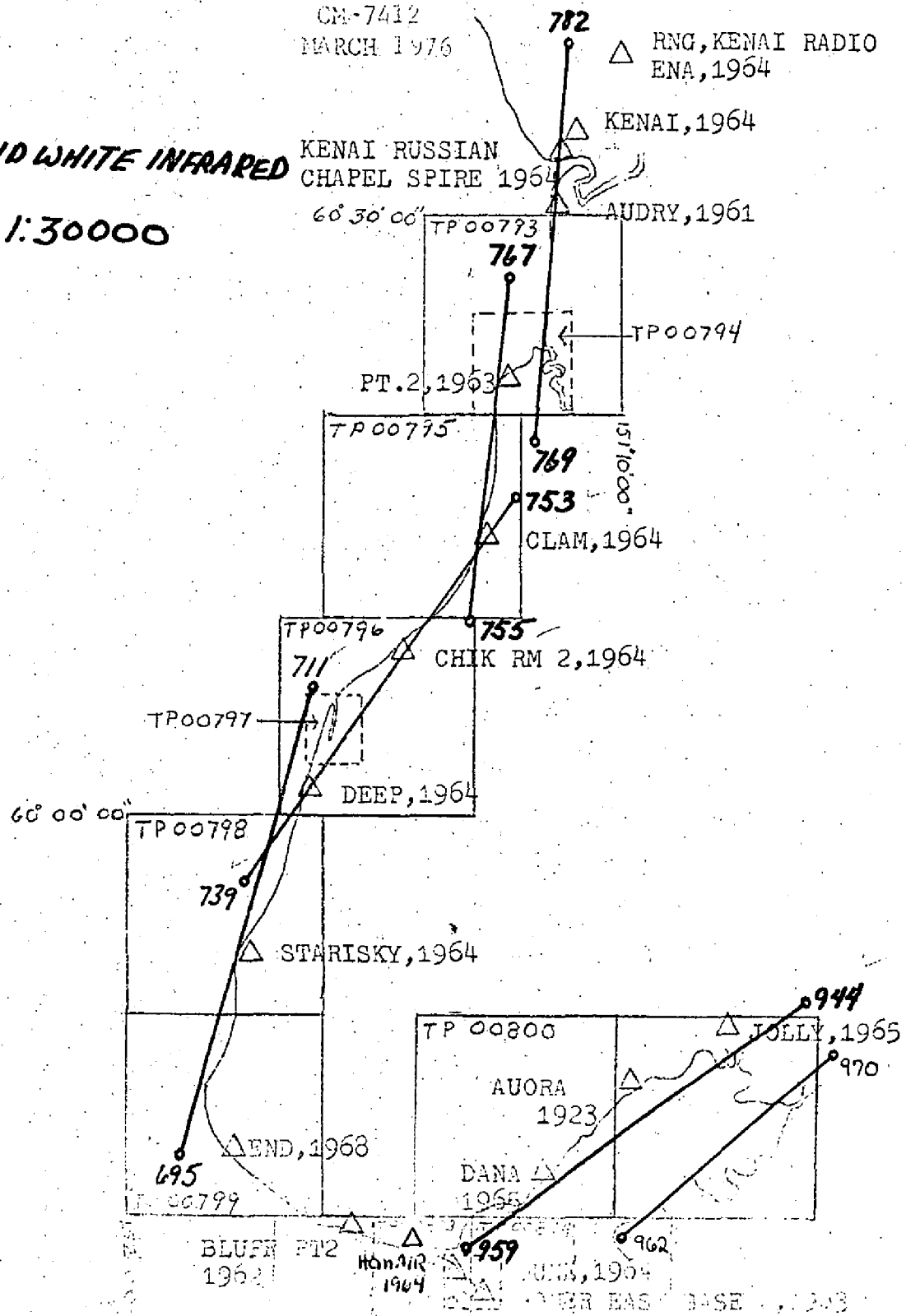
NORTH HALF

CM-7412

MARCH 1976

BLACK AND WHITE INFRARED
75E(R)
MLLW

1:30000



MLLW

AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALF

CM-7412

MARCH 1976

△ RNG, KENAI RADIO
ENA, 1964

KENAI, 1964

KENAI RUSSIAN
CHAPEL SPIRE 1964

60° 30' 00"

TP 00793

AUDRY, 1961

TP 00794

PT. 2, 1953

TP 00795

15' 00"

CLAM, 1964

TP 00796

6814

CHIK RM 2, 1964

TP 00797

6827

DEEP, 1964

60° 00' 00"

TP 00798

△ STARISKY, 1964

TP 00800

JOLLY, 1965

AUORA

1923

0057

DUNA

1965

△ END, 1968

TP 00799

BLUFF PT2
1962

TP 00801

HOMER

DUNE, 1964

HOMER EAST

BASE 2, 1963

0061

7440

5: 30' 00"

MHW

COLOR FOR RATIO
75Z(c)

● 1:15000

■ 1:30000

75E(c)

▲ 1:30000

LIST OF ACCURACY OF CONTROL USED IN STRIP ADJUSTMENT

STRIP #	POINT	X error (ft)	Y error (ft)
STRIP #1	276110 (VOR KENAI RADIO, ENA 1964)	-4.342	+2.126
	277100 (KENAI, 1964)	+3.096	-1.403
	277113 (KENAI RUSSIAN CHAPEL SPIRE, 1964)	+3.111	-.966
	278101 (AUDRY, SUB PT. 1961)	-.694	-.203
	281101 (PT. 2, SUB PT. 1963)	-4.894	+.309
	289101 (CLAM, SUB PT. 1964)	+1.731	+.156
STRIP #2	289101 (CLAM)	+1.149	+.188
	291101 (CHIK RM 2 SUB PT. 1964)	-2.593	+.365
	294100 (DEEP, 1964)	+2.091	-1.854
	294101 (SUB PT)	+1.247	-3.760
	297101 (STARISKY 1964 SUB PT)	-.672	+2.243
	300101 (END 1968 SUB PT)	+.024	-.946
STRIP #3	954101 (HOMER EAST BASE 2, 1965, SUB PT)	+.038	-1.192
	954110 (HOMER SPIT LT 1964)	-1.302	-2.238
	952100 (BLUFF POINT 2 DUNE PT. 4, 1956 1964)	-.316	+3.060
	949110 (HOMER AERO LT 1956)	+2.374	+3.742
	948110 (HOMER RADIO RANGE CENTER TOWER 1956)	-2.141	-.144
	945110 (HOMER RTR UNLITED MAST OF 5, 1964)	+2.508	-.039
	21101 (BLUFF POINT 2 RM 4 1956)	-1.282	-3.596
	300801 (STRIP #2)	-1.547	+8.669
	300802 (")	-2.721	-.623
	300803 (")	+3.827	+1.389

		X error (ft)	Y error (ft)
Strip #4	18801 (#3)	-4.690	-2.056
	18802 (#3)	+2.598	-2.468
	948110 (HOMER RADIO RANGE CENTER TOWER 1956)	+1.825	-5.416
	948802 (#9)	+4.084	+ .238
	948803 (#9)	+2.159	- .841
	949110 (HOMER AERO LT 1956)	-6.364	- .260
	949802 (#9)	-1.658	- .083
	949803 (#9)	+ .336	- .287
	17801 (#3)	-3.734	+2.154
	301101 (HOM AIR 1964 SUB PT)	- .465	+ .356
	952100 (DUNE, 1964)	-2.808	+6.592
	954101 (HOMER EASTBASE 2, 1965 SUB PT)	-13.966	+20.221
	954110 (HOMER SPIT LIGHT 1964 VOR HOMER)	-6.957	+10.535
	304110 (RADIO MON. 1964 DANA 1965)	-1.881	+9.363
	305101 (SUB PT AURORA 1923)	+ .705	+2.009
	307101 (SUB PT)	+1.897	+ .632
	310100 (JOLLY 1965)	- .690	- .550

Strip #5

294100 (DEEP, 1964)	-1.456	+2.391
294101 (SUB PT)	-1.231	+1.392
916801 (#2)	- .025	+ .575
916802 (#2)	+ .486	+2.996
917801 (#2)	+1.006	+ .551
918801 (#2)	- .012	-1.965
919801 (#2)	+3.772	-1.728
920801 (#2)	+ .565	-1.202

		X error (ft)	Y error (ft)
STRIP #5 (CONT)	921801 (#2)	- .950	+2.448
	291101 (CHIK Rm 2 1964 SUB PT)	-4.528	+ .226
	922801 (#2)	-3.924	-4.099
	923801 (#2)	+ .005	-4.693
	924801 (#2)	+2.020	- .585
	925801 (#2)	+ .229	+ .128
	289101 (CLAM 1964 SUB PT)	- .061	- .316
	926803 (#2)	+1.867	-2.156
	926804 (#2)	+1.501	-2.488

STRIP #6

928801 (#1)	- .404	- .179
928802 (#1)	- .182	+ .528
930801 (#1)	+1.362	- .043
931801 (#1)	-1.325	-3.232
281101 (PT 2, 1963 SUB PT)	-5.609	+ .708
932801 (#1)	+5.165	+5.442
932802 (#1)	+5.104	+1.864
933801 (#1)	-10.592	+3.093
933802 (#1)	+1.112	+ .351

STRIP #7

816801 (#5)	- .451	- .066
816802 (#5)	+ .986	+ .876
816803 (#5)	+1.673	+1.009
816804 (#5)	+1.681	+2.686
817801 (#5)	+1.307	+1.566

			X error (ft)	Y error (ft)
Strip #7 (CONT)	818801	(#5)	+ .563	+ .060
	819801	(#5)	+ .919	+ .616
	820802	(#5)	- 2.371	+ 1.092
	820801	(#5)	+ .520	+ 1.577
	821801	(#5)	- .764	- 1.191
	821802	(#5)		
	822801	(#5)	- 1.233	.695
	822802	(#5)	- 2.874	- .100
	823801	(#5)	- .542	- 1.085
	824801	(#5)	+ 1.164	- .042
	294100	(DEEP 1964)	- .276	- .151
	294101	(SUB PT)	- .187	- .032
	825801	(#5)	- .374	- 1.036
	825802	(#5)	+ .160	+ 1.685
	818802	(#5)	- .883	- .646

Strip #9

945110	(HOMER RTR UNLIGHTED MAST OF 5' 1964)	+ .015	- .024
948110	(HOMER RADIO RANGE CENTER TOWER 1956)	+ .289	- 5.417
949110	(HOMER AERO LT 1956)	- .006	+ .001
952100	(DUNE 1964)	+ 1.317	- .142
954101	(HOMER EAST BASE 2, 1965 SUB PT)	+ .004	- .065
954110	(HOMER SPIT LIGHT 1964)	- 1.210	- 1.041

Photogrammetric Plot Report
Cape Kasilof to Barren Islands

Job CM-7412
South Part
January 1977

Job index revised June 13, 1979
Number of sheets compiled, revised
March 7, 1984. CCB

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 1:20,000 scale sheets, ~~eight~~ ^{eleven} 1:10,000 scale sheets, ~~and seven 1:5,000 scale sheets.~~
_{Cancelled}

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 encountered 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.

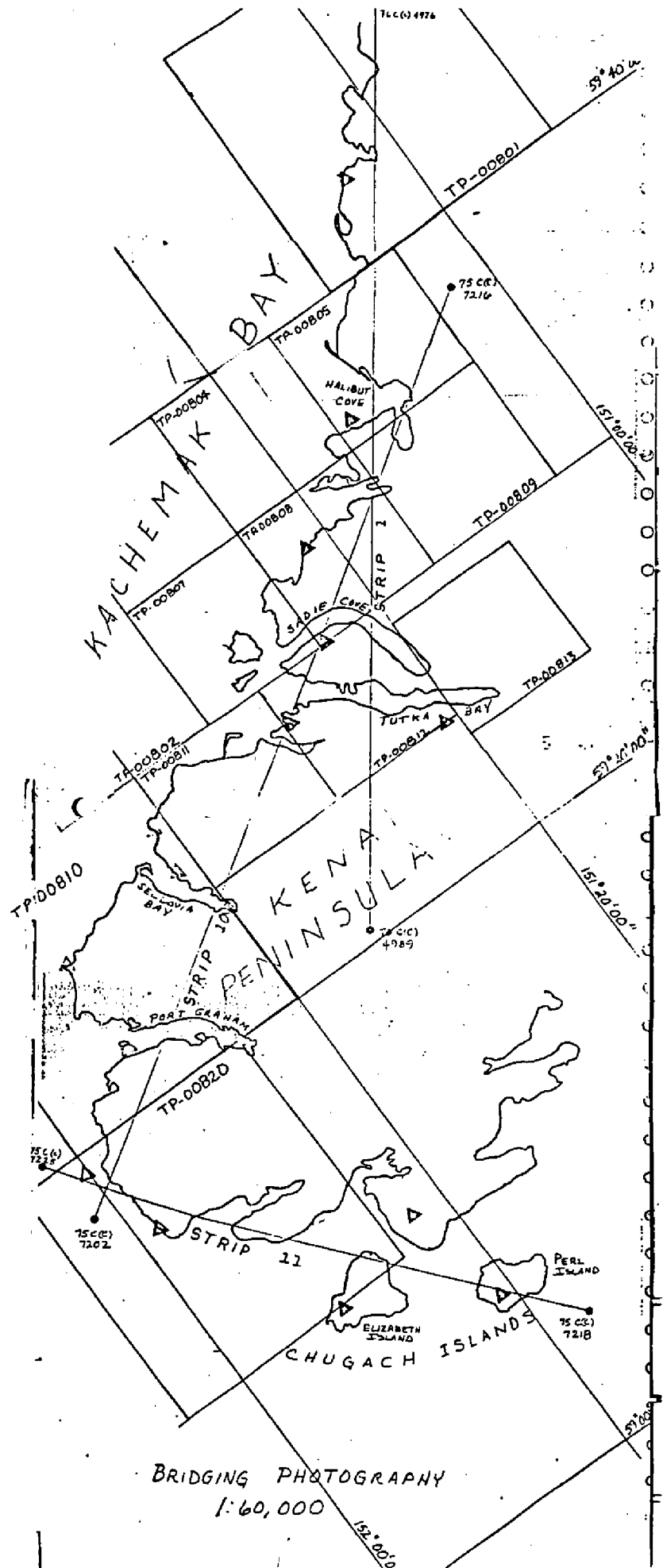
Submitted by:

Brian Thornton

Approved and Forwarded:

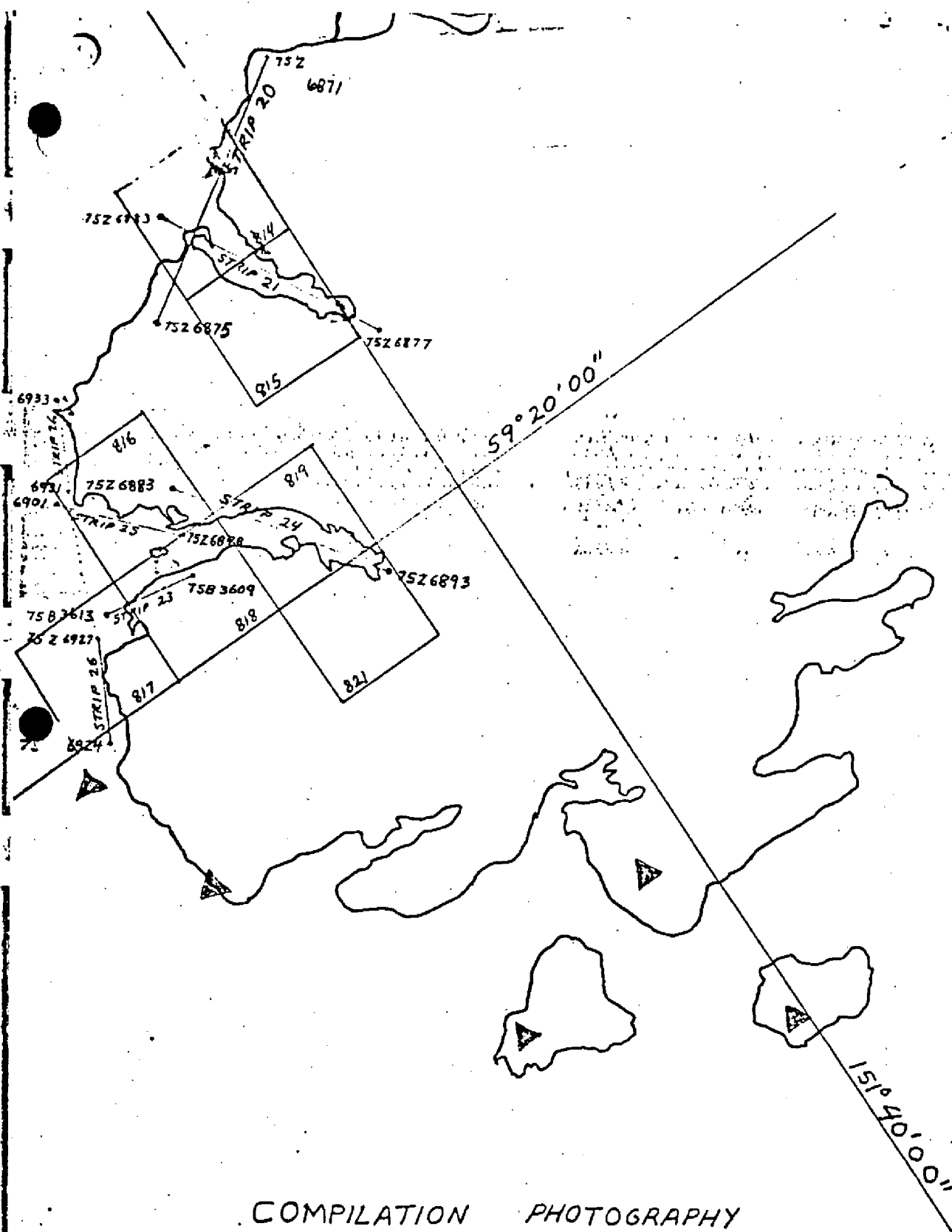
A handwritten signature in cursive script, reading "John D. Cerraw Jr.", written in dark ink.

Chief, Aerotriangulation Section





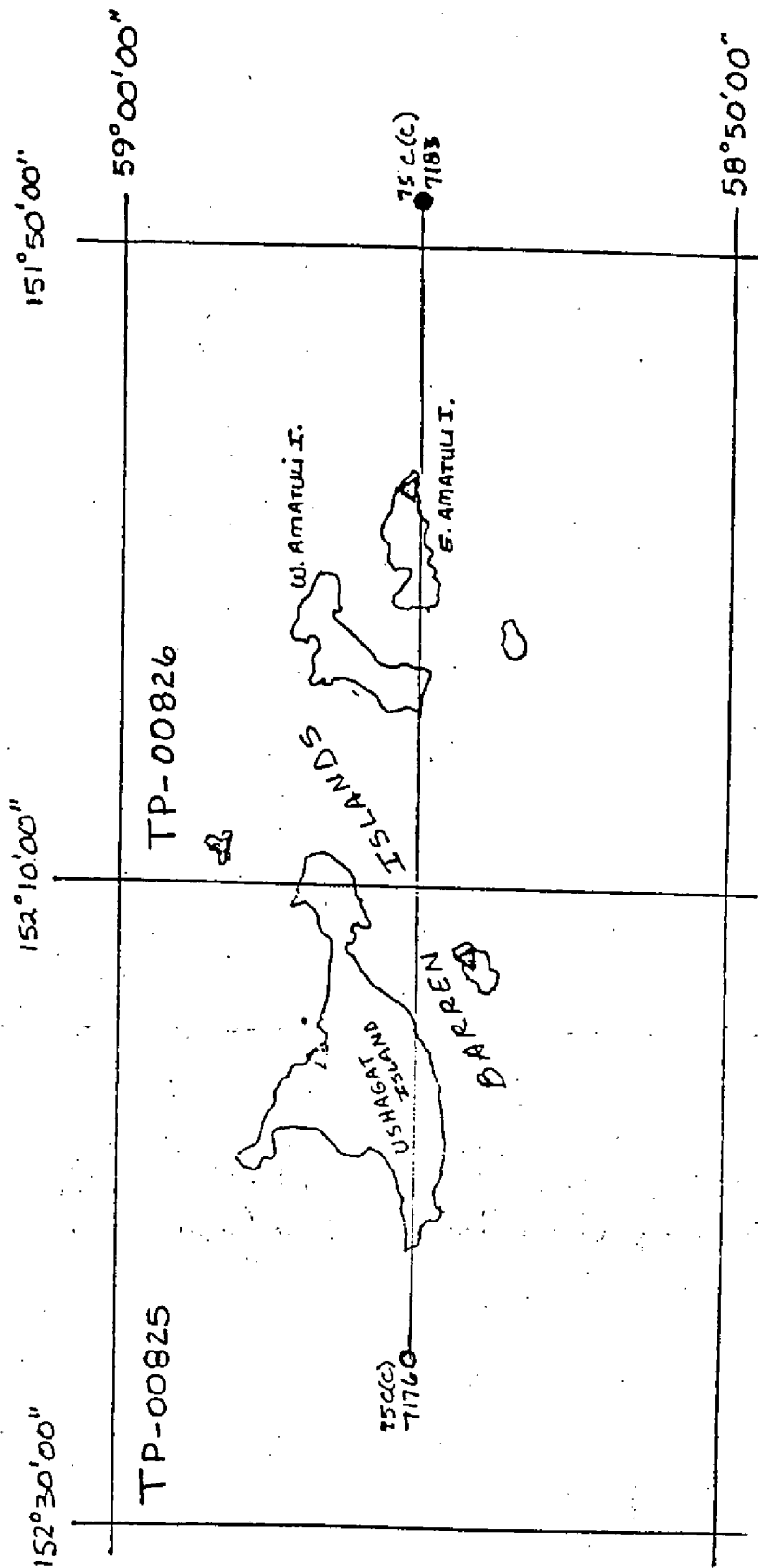
For the purpose of this study, the following hypotheses were formulated:



COMPILATION PHOTOGRAPHY

1:15,000

B and Z cameras



BRIDGING 1:60,000

STRIP 12

1:20,000

List 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	-3.278	-.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

page 2

Test 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

975801	.001	.006
977101	-.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	-.973
169	-1.089	-.030

pages

List and Accuracy of Control Used in Strip Adjustment

4-error y-error

Strip #8

941100	-1.785	-2.540
944100	1.521	-1.094
203100	-1.781	-.632
203802	1.826	-2.245

Strip #9

955101	-.515	1.133
944100	3.529	2.770
204803	-.118	-.672
204804	1.503	-1.036
204806	-.621	.619

DESCRIPTIVE REPORT CONTROL RECORD

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

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY	REMARKS
TP-00801	CM-7412	N.A. 1927	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
AURORA, 1923	List of Control Kachemak Bay Area, AK 307100		X= 59 42 07.70684 Y= 151 06 26.59163	
JOLLY, 1965	List of Control Kachemak Bay Area, AK 310100		X= 59 49 34.22890 Y= 150 58 33.34807	
SHEEP, 1923	Quad. 59150 Pg. 9	0043	X= 59 46 32.788 Y= 150 58 13.623	
BEAR 2, 1965	List of Control Kachemak Bay Area, AK 0044		X= 59 44 52.61004 Y= 151 02 52.59345	
JEFF, 1966	List of Control Kachemak Bay Area, AK 0041		X= 59 47 16.50698 Y= 151 05 01.13142	
LOST 3, 1980	NOAA Form 75-82 A Field Position		X= 59 46 37.313 Y= 151 06 52.202	
SARAH, 1980	NOAA Form 75-82 A Field Position		X= 59 43 11.046 Y= 151 01 13.890	
CHRISTINA, 1980	NOAA Form 75-82 A Field Position		X= 59 43 39.342 Y= 151 03 11.457	
CHRISTINA AZIMUTH MARK, 1980	NOAA Form 75-82 A Field Position		X= 59 43 24.332 Y= 151 03 07.774	
COMPUTED BY A. C. Rauck, Jr.		DATE 6/8/76	COMPUTATION CHECKED BY F. Mauldin	DATE 6/12/76
LISTED BY A. C. Rauck, Jr.		DATE 6/8/76	LISTING CHECKED BY F. Mauldin	DATE 6/12/76
HAND PLOTTING BY L. Williams		DATE 1/23/81	HAND PLOTTING CHECKED BY F. Mauldin	DATE 1/23/81

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

COMPILATION REPORT

TP-00801

31 - DELINEATION

Delineation was accomplished by stereo instrument and graphic compilation methods. The Wild B-8 stereoplotter with 1:60,000 scale color bridging photographs was used to delineate alongshore and interior detail, and to locate common image points to graphically control the 1:30,000 scale infrared photography. Supplemental tide coordinated infrared photographs for both MHW and MLLW were used to delineate the MHW and MLLW lines.

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 Reports, north half, dated March 1976 and south half, 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 and by office interpretation of the photographs.

The mean high water line was delineated from the photographs described in item #31.

36 - OFFSHORE DETAILS

Offshore detail was compiled by instrument and graphic methods as described in item #31.

37 - LANDMARKS AND AIDS

There are no charted aids for navigation or landmarks within the limits of this map.

TP-00801

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 quadrangles:

Seldovia (C-4), Alaska, scale 1:63,360, dated 1961

Seldovia (C-3), Alaska, scale 1:63,360, dated 1953

Seldovia (D-4), Alaska, scale 1:63,360, dated 1961.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the following National Ocean Survey charts:

No. 16645, scale 1:82,662, dated Mar. 13, 1976

No. 16640, scale 1:200,000, dated May 24, 1974.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

J. Butler for
David P. Butler
Cartographic Technician
March 17, 1978

Approved:

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

March 22, 1984

GEOGRAPHIC NAMES

FINAL NAME SHEET

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

TP - 00801

Aurora Lagoon

Aurora Spit

Battle Creek

Bear Cove

Bear Island

Bradley River

Chugachik Island

Eastland Creek

Falls Creek

Fox Creek

Fox River

Kachemak Bay

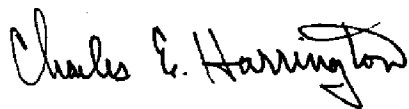
Mallard Bay

Moose Creek

Sheep Creek

Swift Creek

Approved by;



Charles E. Harrington
Chief Geographer
Nautical Charting Division

FIELD EDIT REPORT

OPR-P114-RA-80

CM-7412

TP-00801

ALASKA

COOK INLET, EAST SIDE

CAPE KASILOF TO BARREN ISLANDS

1 FIELD UNIT

MAY 13 - JULY 29, 1980

(JD 134-181)

51 METHODS

Field edit operations for TP-00801 began on May 13, 1980 (JD 134) and ended on July 29, 1980 (JD 181). Field edit began after hydrographic survey operations had commenced on OPR-P114-RA-80. Hydrographic surveys H-9569 and H-9876 include all the shoreline of TP-00801.

Inspection of the shoreline was made during both low water and high water using small boats, motorcycle and foot travel. Landmarks for charts were investigated from seaward.

Heights of rocks were estimated at close range. The times noted were GMT (Alaska Daylight Time + 9 hours).

Shoreline and topographic notes were annotated on black and white chronopaque photographs 75ER 951, 963, 966, 968, and 1558-1559 and/or the Master Film Field Edit Ozalid. Annotations were made with the following ink colors: violet - verification or changes in features; green - deletion of features; red - hydrographic features.

52 ADEQUACY OF COMPILATION

The compilation of TP-00801 was adequate and complete except for minor changes. The changes were noted on the photographs and/or the Master Film Field Edit Ozalid. All compilation questions have been answered. The mean high water line was verified or changed by visual inspection or measurement from triangulation stations.

53 MAP ACCURACY

The map accuracy of TP-00801 could not be determined because there were no stations compiled on NOAA Form 76-40 (see "Separates").

54 RECOMMENDATIONS

Matte ratio photographs were not available for field use. As a result extreme care was necessary while using the chronopaque photographs in the field. It is recommended that matte ratio photographs be made available to the field parties in the future, as has been the normal procedure in the past.

56 MISCELLANEOUS

Open communication was maintained between the field editor and hydrographer. Any duplication of information was reviewed with only one source being retained. Generally the determining factor was the field edit photographs. If the object in question was visible on the photographs it was considered as field edit information, with the duplicating hydrographic data being deleted. If the object was not visible on the

photographs it was considered as hydrographic information, and reported on the hydrographic survey.

All triangulation stations located within the limits of TP-00801 were visited. Four new traverse stations were established by the RAINIER using Third Order, Class I methods. Station descriptions and recovery notes are included in the "Separates."

A hydroelectric dam on the Bradley River with related powerhouse, runway, and boat harbor is being planned by the U.S. Army Corps of Engineers. The areas which will be affected have been delineated on the Master Film Field Edit Ozalid. Actual scheduled date of construction is not known as of this report but construction should begin in the near future. Information on this project was obtained by the field party through discussion with Mr. Wendell Moore, Army Corps of Engineers, Anchorage, Alaska.

All other pertinent information is included in the "Separates Following the Text."

Respectfully submitted,

Approved by,

Richard L. Hastings

Richard L. Hastings, SST

John C. Avinger

for Wayne L. Mobley, Captain, NOAA
Commanding Officer

REVIEW REPORT
TP-00801
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 U.S.G.S. quadrangles:
Seldovia (C-4), Alaska, scale 1:63,360, dated 1961
Seldovia (C-3), Alaska, scale 1:63,360, dated 1953
Seldovia (D-4), Alaska, scale 1:63,360, dated 1961.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

The contemporary surveys H-9876 and H-9569 were not available for comparison at the time of final review July 1985.

65 - COMPARISON WITH NAUTICAL CHARTS

Comparisons were made with the following NOS charts:
16645, scale 1:82,662, dated July 30, 1983
16645, scale 1:82,662, dated March 13, 1976
16640, scale 1:200,000, dated April 23, 1983.

A comparison was made with the 10th edition Chart 16645, 1:82,662 scale dated March 13, 1976 and the 14th edition Chart 16645, 1:82,662 scale dated July 30, 1983. A comparison between these charts indicates that rocks were added to current charts from the unreviewed Class III Chart Maintenance Print submitted to Marine Charts April 1980. The intended purpose of showing the rocks on the 1980 Chart Maintenance Print was to advise the Hydrographer of potential hazard. The Hydrographer was expected to determine whether or not the rocks existed. It was never intended for charting purposes because the photo-interpretation of the rocks did not render positive identification. The field investigation of the rocks revealed them to be nonexistent by the field editor at the time the hydrography was performed, May through July, 1980.

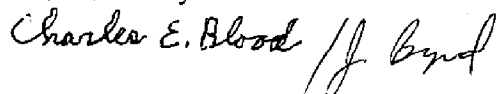
A Final Chart Maintenance Print indicating discrepancies was prepared and forwarded to Marine Charts.

TP-00801

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

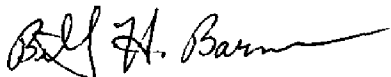
This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by:



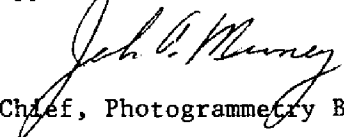
Charles E. Blood/James L. Byrd, Jr.
Final Reviewer

Approved for forwarding:



Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved:



Chief, Photogrammetry Branch



Chief, Photogrammetry Division

