TP-00804

TP-00804

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-00804	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
PETERSON POINT

19 75 TO 1980

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- 00804
MAP EDITION NO. (1)
MAP CLASS - Final
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
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		

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: 1:10,000		STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	B. Thornton	Jan 1977
METHOD: Analytic South Sect	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	J. Moler	Feb 1980
	CHECKED BY	J. Roderick	Feb 1980
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:10,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	F. Mauldin	Mar 1980
	CHECKED BY	D. Butler	Mar 1980
METHOD:	CONTOURS BY	N.A.	
	CHECKED BY	N.A.	
SCALE: 1:10,000	HYDRO SUPPORT DATA BY	F. Mauldin	Mar 1980
	CHECKED BY	D. Butler	Mar 1980
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	D. Butler	Mar 1980
6. APPLICATION OF FIELD EDIT DATA	BY	L. Williams	Jun 1981
	CHECKED BY	D. Butler	Jul 1981
7. COMPILATION SECTION REVIEW	BY	C. Blood	May 1984
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. 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-00804

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild RC 8 E 152.71

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

TIME REFERENCE
ZONE: Alaska — [xx] STANDARD
MERIDIAN: 105th — [ ] DAYLIGHT

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

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75E(C)0008-0011	Jul.5,1975	11:36	1:30,000	14.8 ft. above MLLW
75E(I)1518-1519	Aug.10,1975	10:57	1:30,000	0.85 ft. above MLLW
75E(I)1466-1467*	Aug.7,1975	12:42	1:30,000	18.65 ft. above MLLW
76E(I)2059**	Jun.12,1976	08:50	1:30,000	1.95 ft. below MLLW
76E(I)4077-4078**	Jun.12,1976	09:14	1:30,000	0.49 ft. below 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 1:30,000 color photographs using stereo instrument methods. Compilation was supplemented by graphic methods using the MHW tide coordinated infrared (ratio) photographs.

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 (scale 1:20,000)	EAST	SOUTH	WEST
TP-00800	TP-00805	TP-00808	TP-00803 TP-00806

REMARKS The Homer Spit area is not shown on this 1:10,000 scale map; it is shown on a 1:5,000 scale map TP-00806.

NOAA FORM 76-36B
(3-72)

*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-00804

HISTORY OF FIELD OPERATIONS

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

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Melby	Jun 1975
2. HORIZONTAL CONTROL	RECOVERED BY	None	
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
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	R. Melby	Jul 1975
	LOCATED *(Field Methods)* BY	R. Melby	Jul 1975
	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

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 [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)*

1 Form 76-40
Project Data: 2 Form 277, 1 Form 77-53 (Tides Record Books)

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

NOAA FORM 76-36C
(8-72)

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

TP-00804

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		W. Mobley	Jun 1980
2. HORIZONTAL CONTROL	RECOVERED BY	J. Talbott	Jun 1980
	ESTABLISHED BY	J. Talbott	Jun 1980
	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	J. Talbott	May 1980
	LOCATED *(Field Methods)* BY	J. Talbott	May 1980
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION — BY		
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)*

75E(I)1518 and 1519

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)*

Master Field Edit Print
Field Edit Report
Form 76-40

☆ 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-00804

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. 1980	Class III Manuscript	May 15,1980	May 15,1980
Field edit applied, compilation complete	Jul. 1981	Class I Manuscript	July 1981	[illegible]
Final Review	Jul. 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
1		mar 1986	Non-floating aids for Charts

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: July 1981
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:

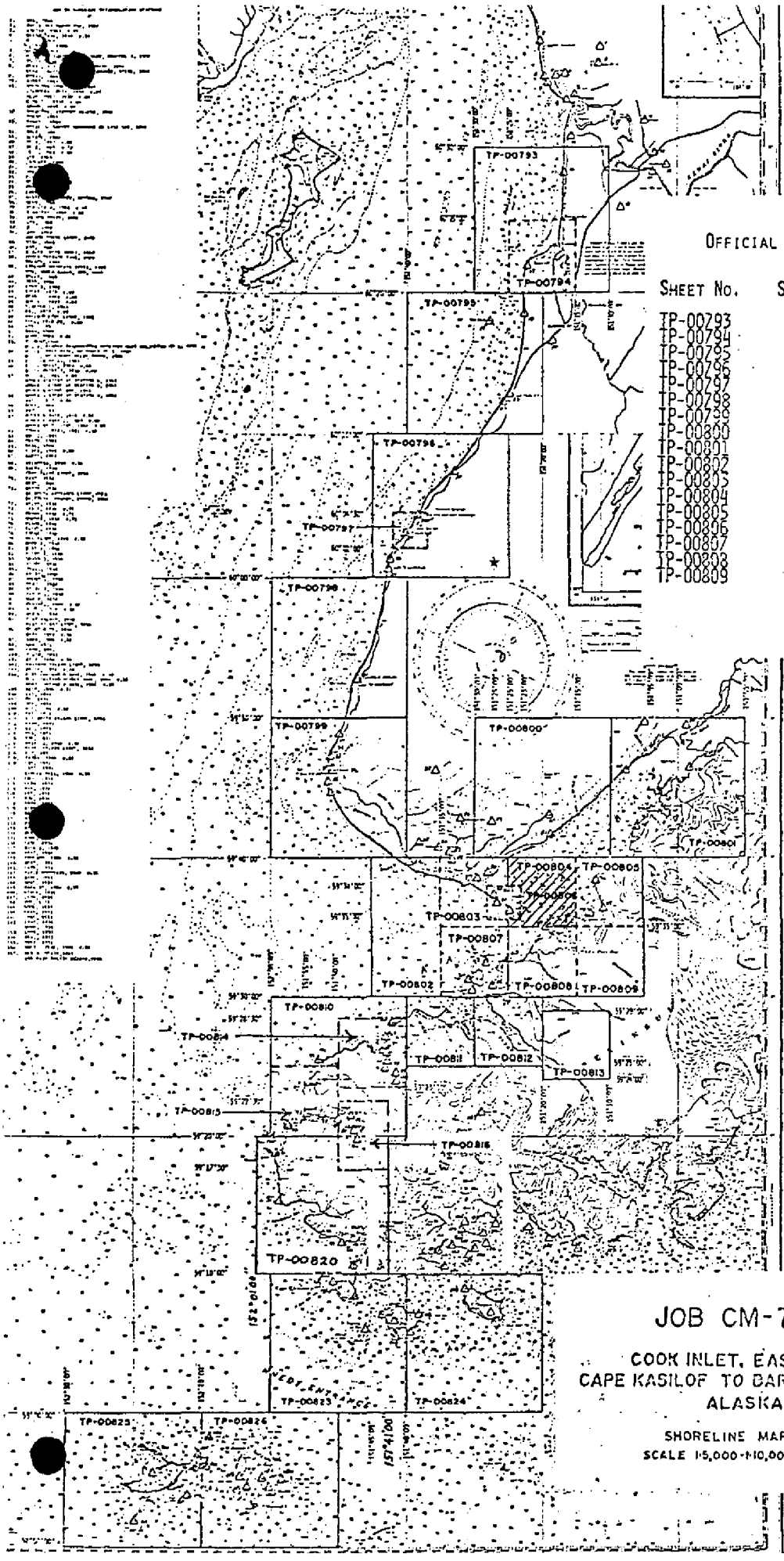
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

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	5
TP-00795	6	TP-00812	5
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	6	TP-00824	6
TP-00808	8	TP-00825	2
TP-00809	2	TP-00826	2
		TOTAL	195

REVISED 9/23/76 E.W.L.
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-00804

This 1:10,000 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 Gull Island and a section of south Kachemak Bay shoreline. The area shown is between longitudes 151°15.0' and 151°25.0' and between latitudes 59°35.0' and 59°40.0'.

Field work prior to compilation consisted of the recovery and identification of the horizontal control necessary for the aero-triangulation 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-8 (E) camera was used to expose the natural color film required for the 1:30,000 scale aerotriangulation, compilation photographs taken July 1975. The RC-8 (E) camera were used for the infrared black-and-white 1:30,000 scale photographs taken July and August 1975 and 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 north part of the project March 1976 and 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 photointerpretation, was performed by the Coastal Mapping Unit at the Atlantic Marine Center in March 1980. Refer to the compilation report, item #31 and NOAA Form 76-36B for specific usage of the photography.

Field edit was conducted in June 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 June 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 Cetner for final registration.

FIELD INSPECTION

TP-00804

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~~ Part
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, 799, 800, 801, 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 H. Solbeck

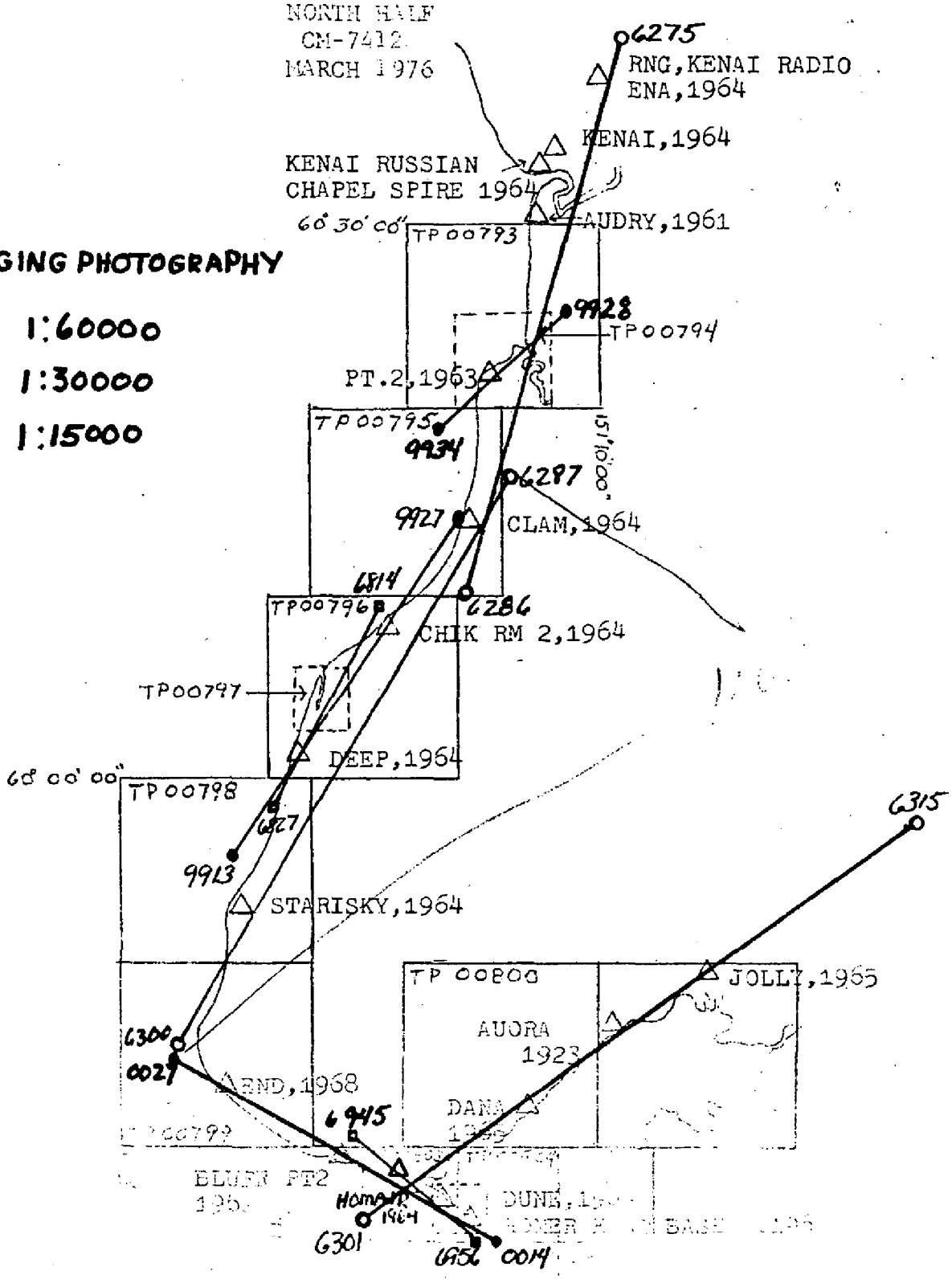
Approved and forwarded:

John D. Perrow, Jr.
Chief, Aerotriangulation Section

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

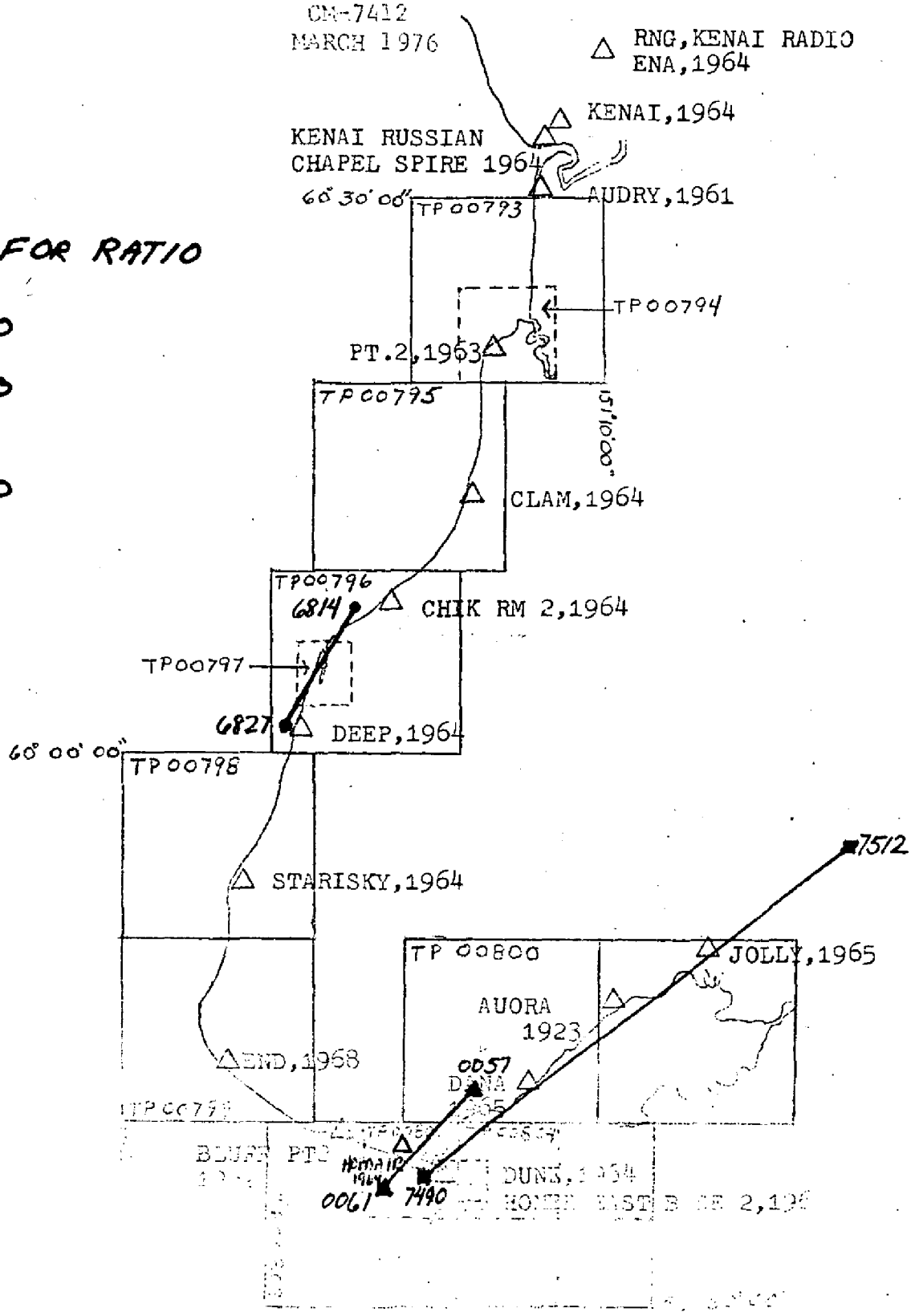
COLOR BRIDGING PHOTOGRAPHY

- ○ 75C(c) 1:60000
- ● 75E(c) 1:30000
- ▫ 75Z(c) 1:15000

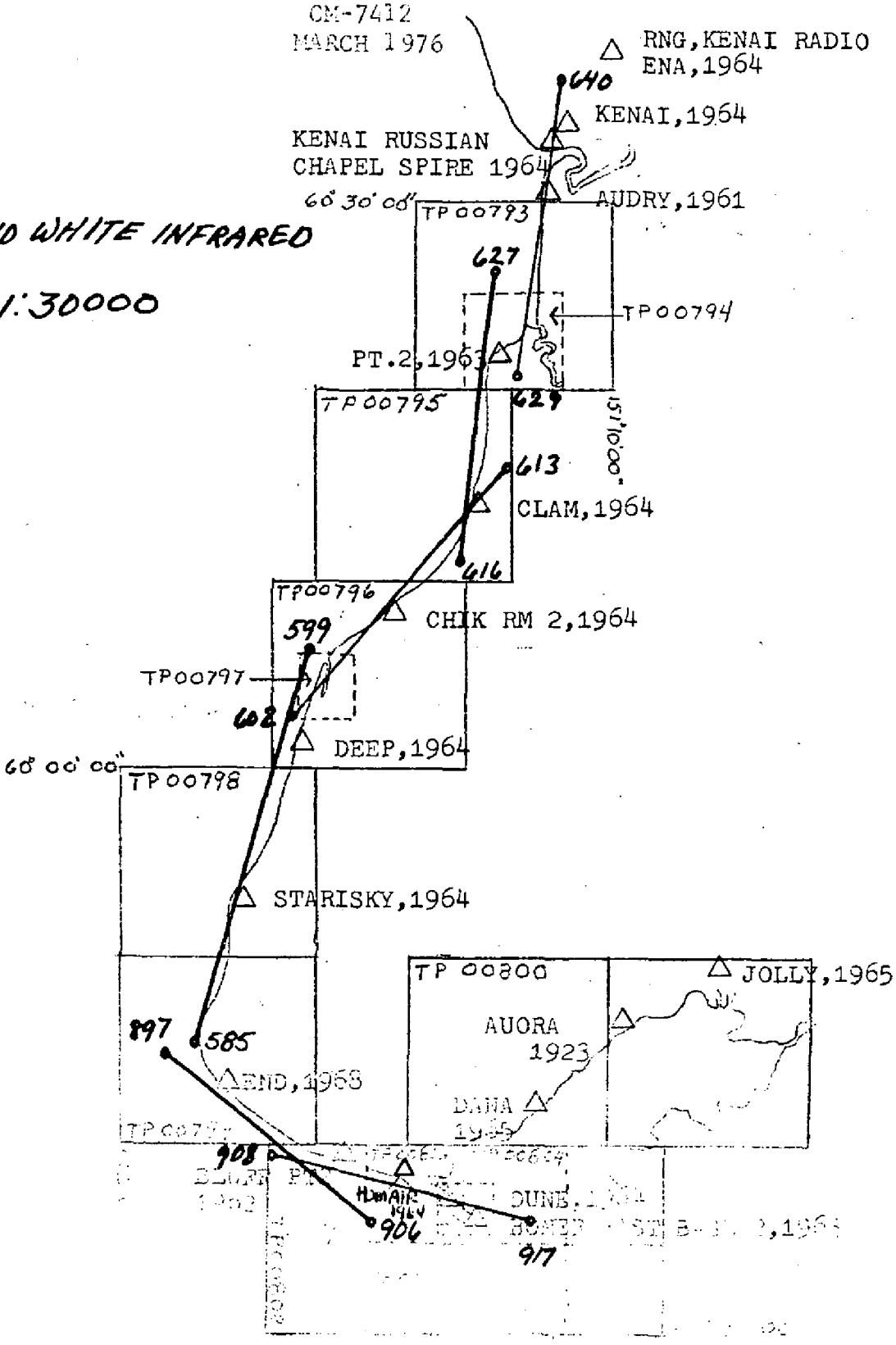


AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CM-7412
MARCH 1976

COLOR FOR RATIO
75Z(c)
• 1:15000
■ 1:30000
75E(c)
▲ 1:30000



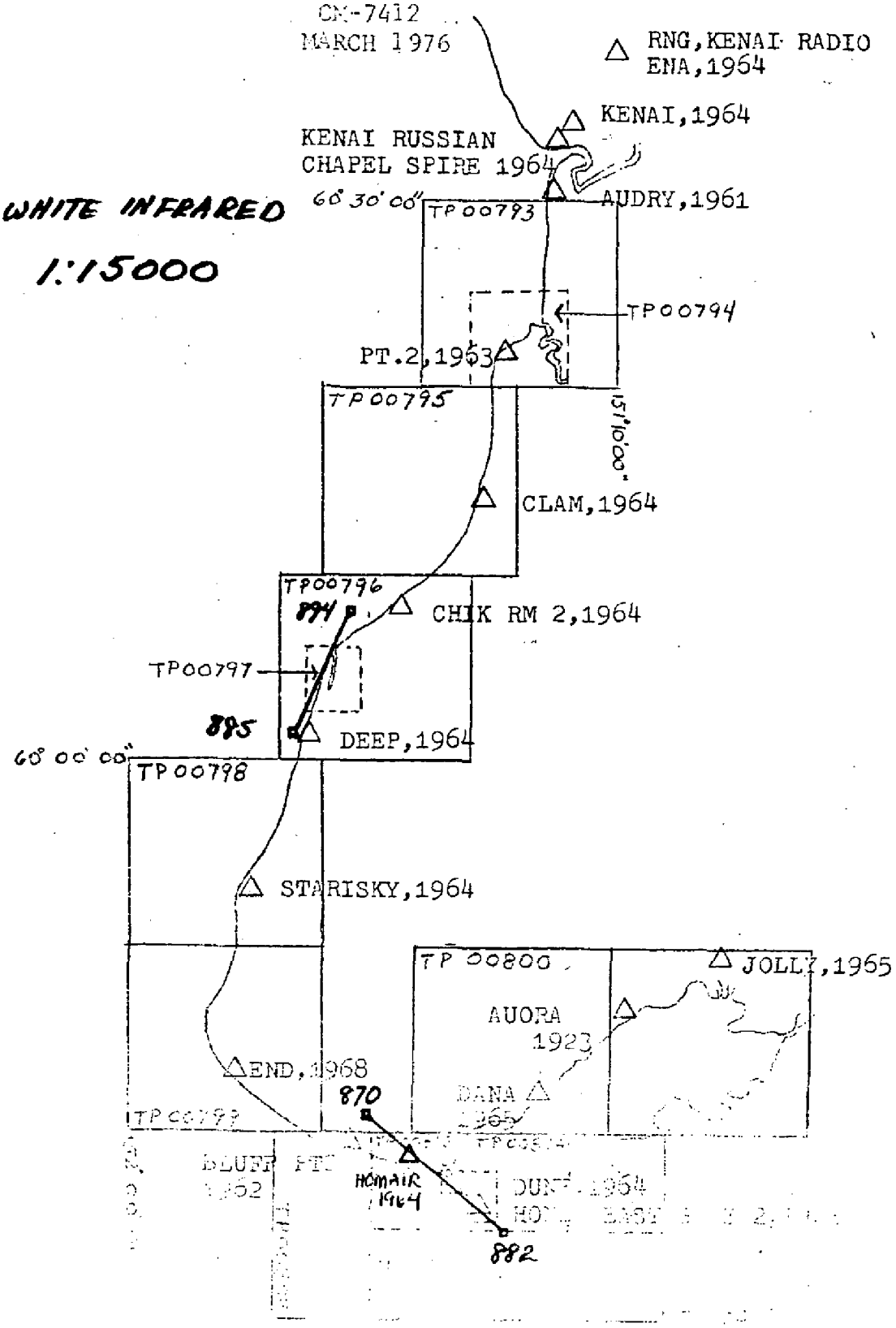
AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CM-7412
MARCH 1976



BLACK AND WHITE INFRARED
75 E (R) 1:30000
MHW

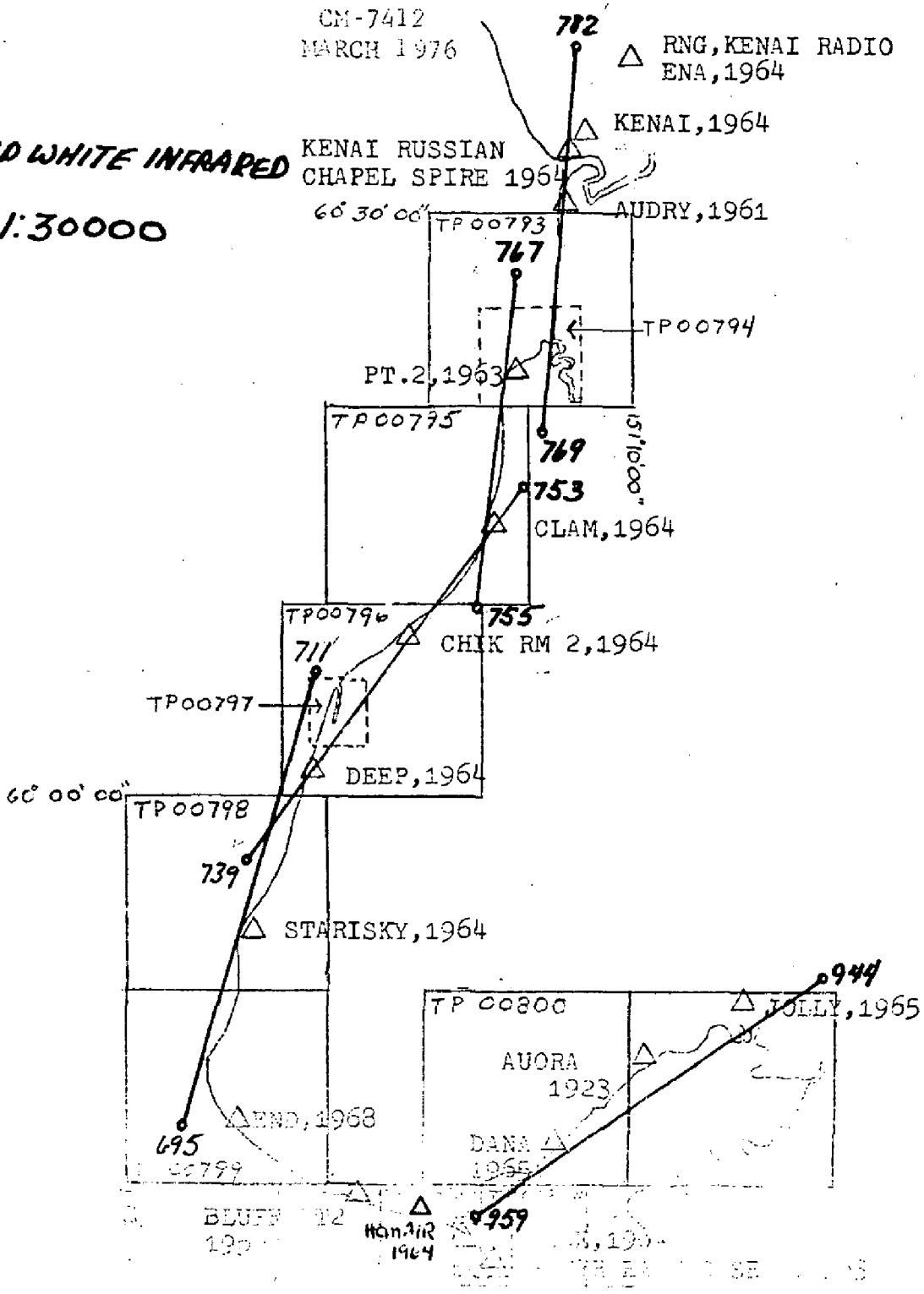
AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CK-7412
MARCH 1976

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)
1:30000
MLLW



List of Accuracy of Control Used in Strip Adjustment

	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 1965 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 RM 4, 1956)~~ (DUNE 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	+1.349

		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 (HOMAIR 1964 SUB PT)	-.465	+.356
	952100 (DUNE, 1964)	-2.808	+6.592
OMITTED	954101 (HOMER EASTBASE 2, 1965 SUB PT)	-13.966	+20.221
OMITTED	954110 (HOMER SPIT LIGHT 1964)	-6.957	+10.535
	304110 (VOR HOMER RADIO MON. 1964)	-1.881	+9.363
	305101 (DANA 1965 SUB PT)	+.705	+2.009
	307101 (AURORA 1923 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 (CON'T)	921801	(#2)	-.950	+2.448
	291101	(CHIK em 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)	+1.302	-.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 S 1964)	+.015	-.024
	948110	(HOMER RADIO RANGE CENTER TOWER 1954)	+.289	-5.417
	949110	(HOMER AERO LT 1954)	-.006	+.001
	952100	(DUNE 1964)	+1.317	-.142
	954101	(HOMER EAST BASE 2, 1965 SUB PT)	+.004	-.005
	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 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~~ Elk 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 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.

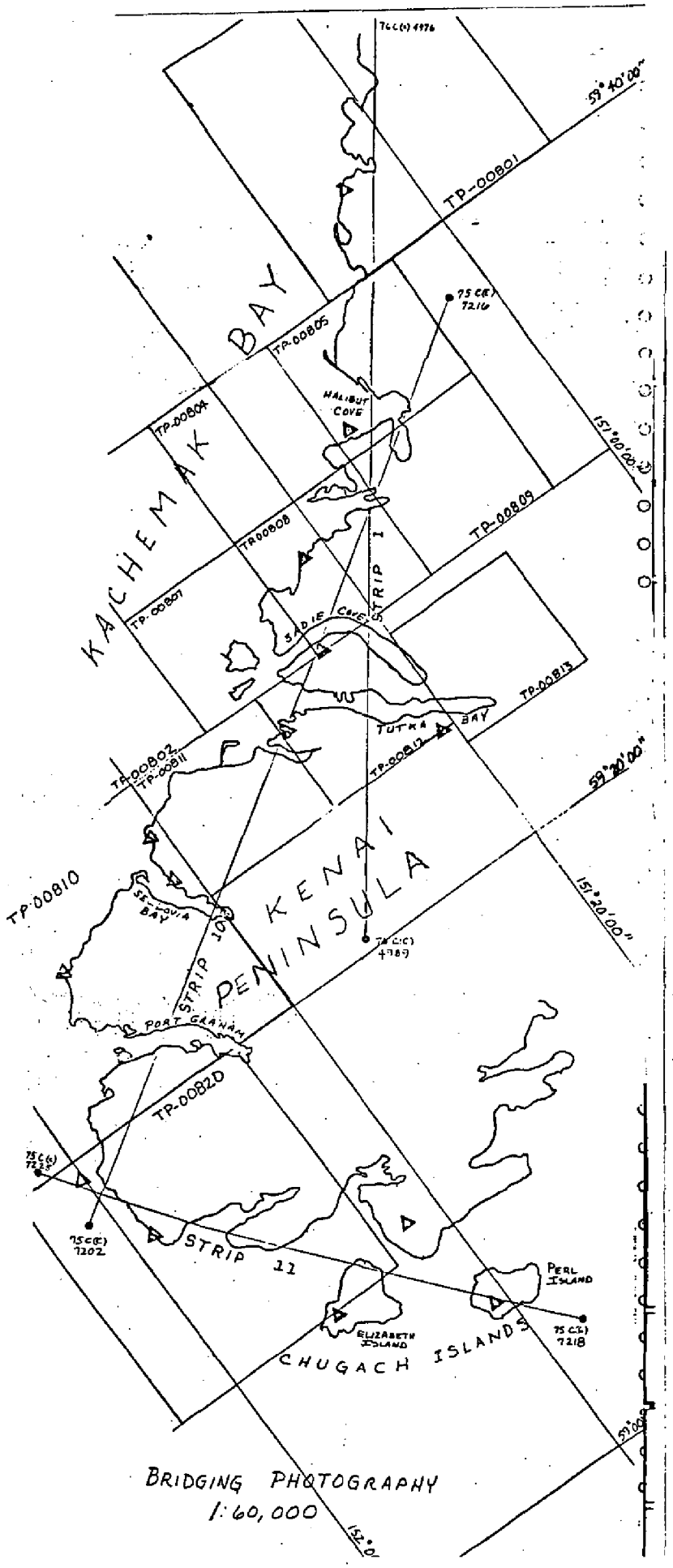
Submitted by:

Brian Thornton

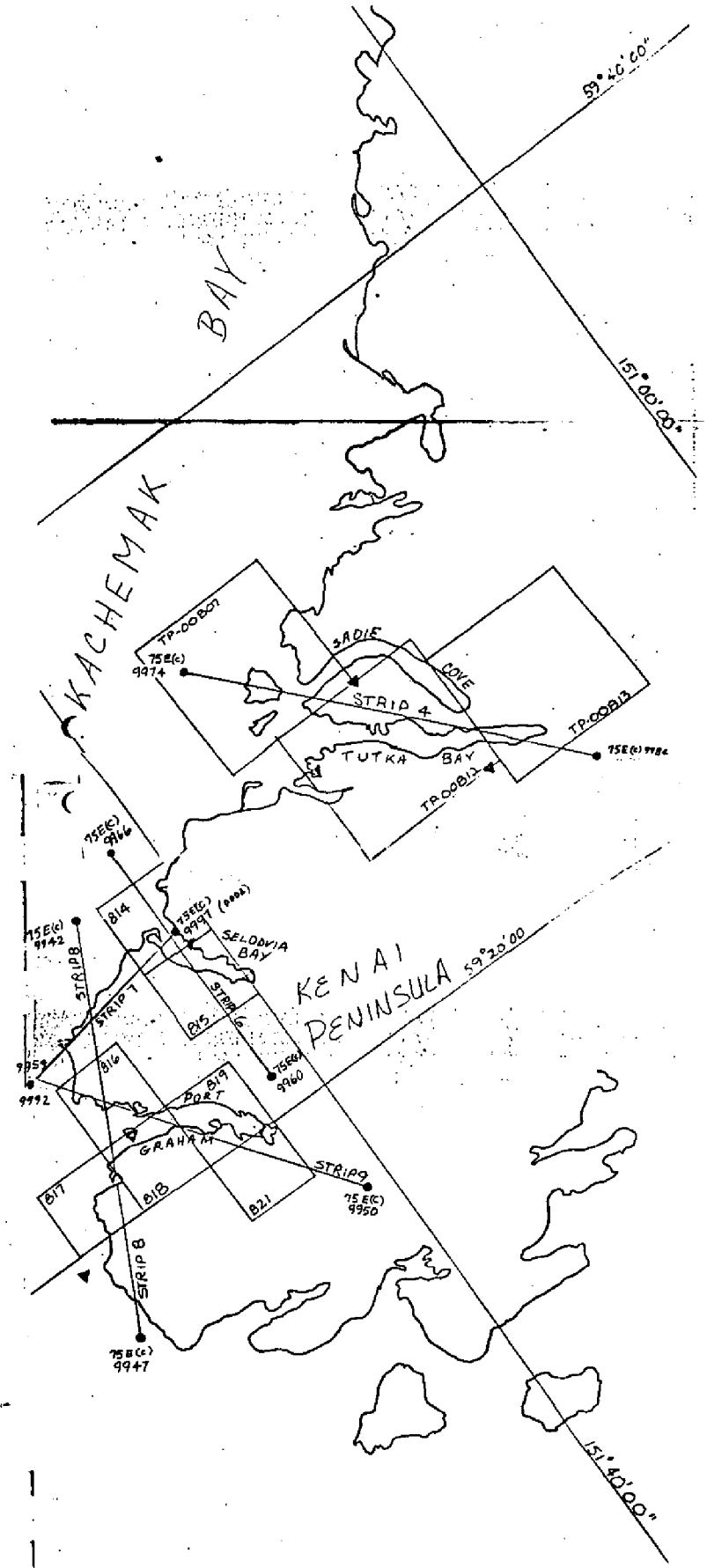
Approved and Forwarded:

John D Perrow Jr

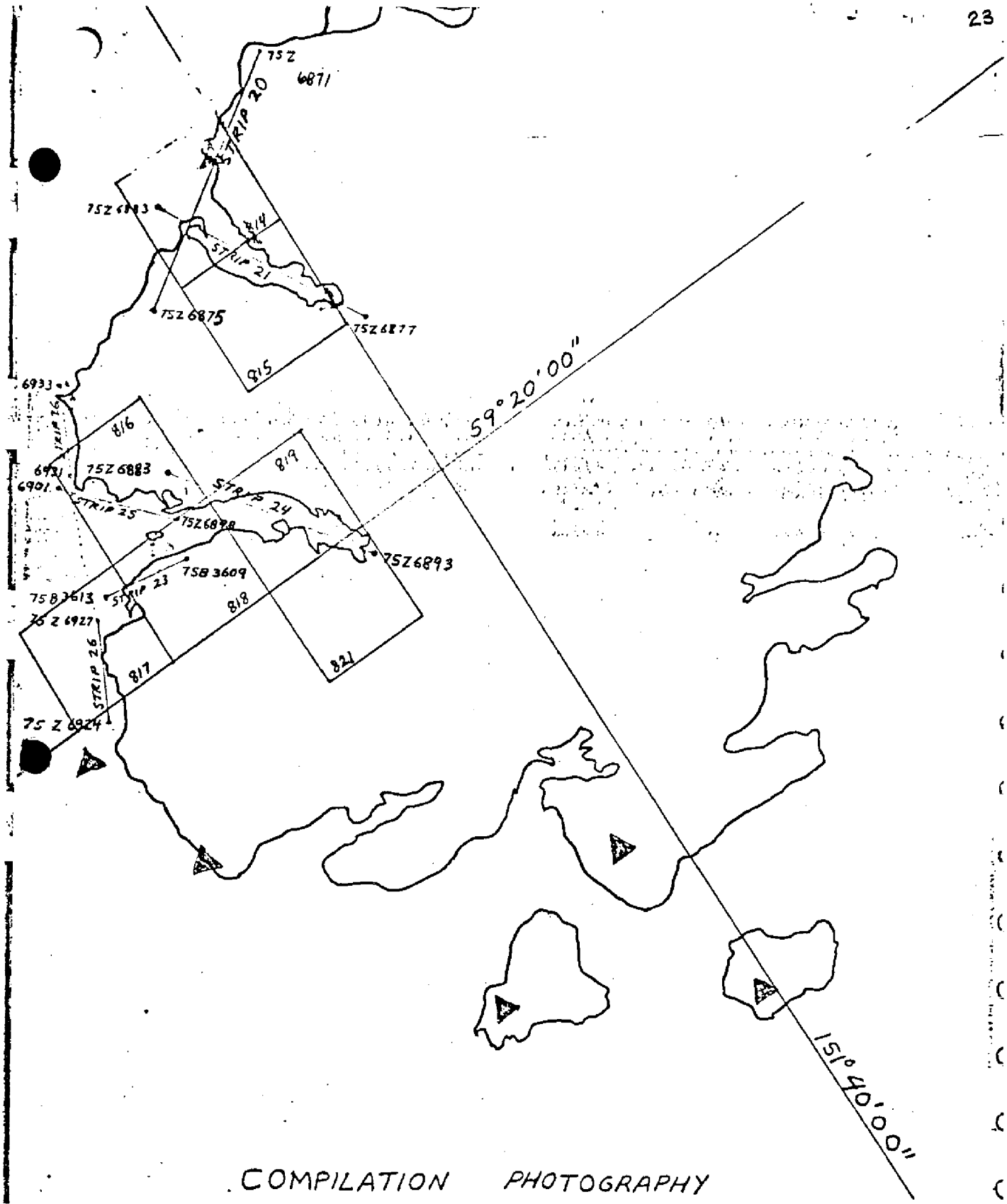
Chief, Aerotriangulation Section



BRIDGING PHOTOGRAPHY
1:60,000



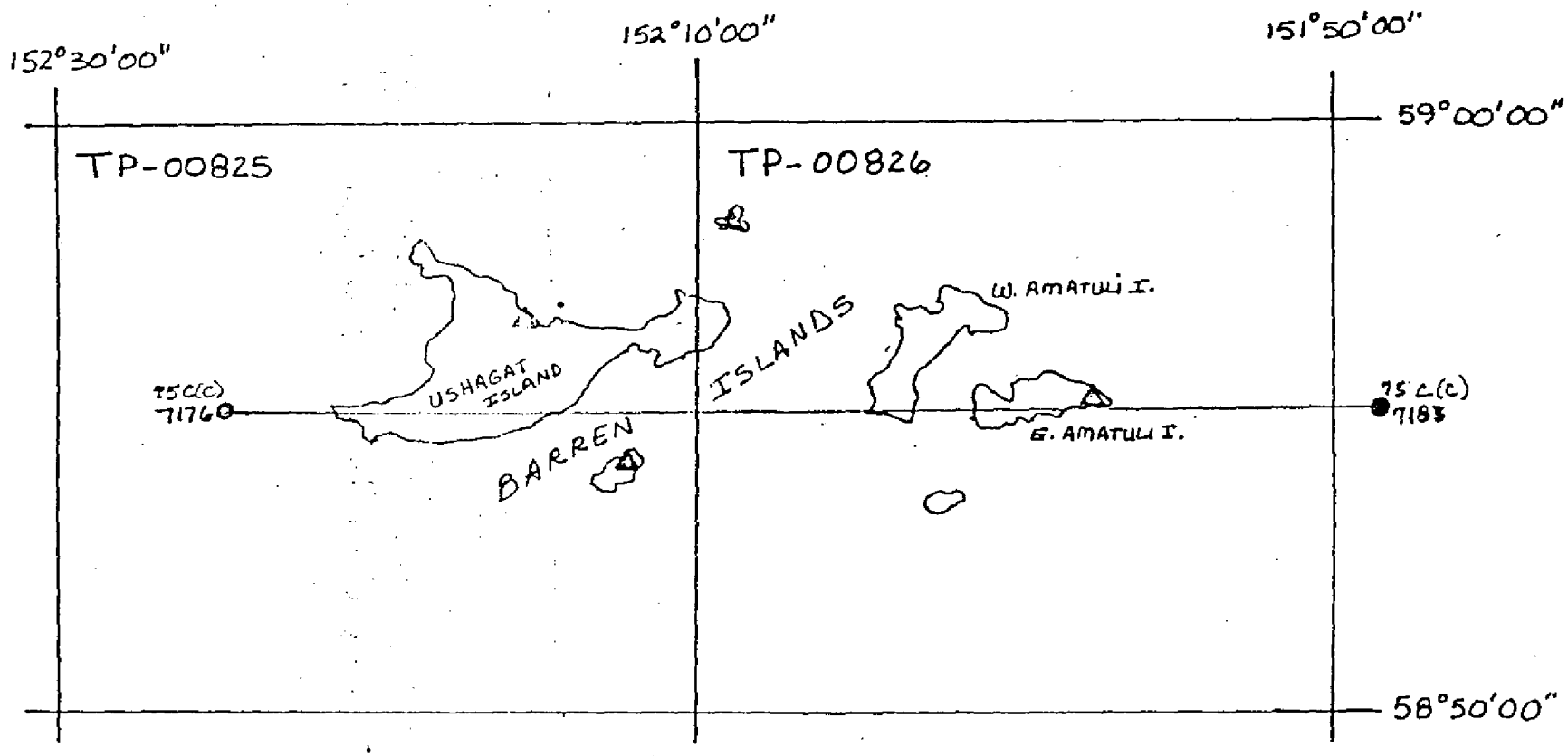
BRIDGING PHOTOGRAPHY
1:30,000



COMPILATION PHOTOGRAPHY

1:15,000

B and Z cameras



BRIDGING 1:60,000

STRIP 12

1:20,000

Test and Accuracy of Control Used in Strip Adjustment

	x-error	y-error
Strip #1		
219101	1.518	.598
221100	-3.964	.647
223100	3.269	-3.324
203100	-.840	2.100
Strip #4		
915801	.001	.006
917101	-.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

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	-3.278	-.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	-.645	1.438
Strip #12		
178101	3.435	-2.681
179100	1.047	-3.350
180101	-4.475	1.956
181100	.021	-1.299

Test 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	-1.781	-.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

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-00804	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
GULL, 1910	List of Control Kachemak Bay Area Alaska	0049	x= y=	φ 59 35 06.77805 λ 151 19 38.03146	
GULL ISLAND LIGHT, 1975	NOAA Form 76-41 p. 9 Kachemal Bay Field Position		x= y=	φ 59 35 06.807 λ 151 19 38.170	
POLE, 1980	NOAA Form 75-82A Field Position		x= y=	φ 59 35 46.945 λ 151 15 15.831	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	
			x= y=	φ λ	

COMPUTED BY A. C. Rauck, Jr.	DATE 6/17/76	COMPUTATION CHECKED BY F. Mauldin	DATE 6/17/76
LISTED BY A. C. Rauck, Jr.	DATE 6/17/76	LISTING CHECKED BY F. Mauldin	DATE 6/17/76
HAND PLOTTING BY L. Willams	DATE 7/13/81	HAND PLOTTING CHECKED BY I. Perkinson	DATE 7/13/81

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

COMPILATION REPORT

TP-00804

31 - DELINEATION

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

All photographs used to compiled 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 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 is 1 nonfloating aid for navigation, but there are no landmarks within the mapping limits of this map.

TP-00804

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

Refer to the he 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:
Seldovia (C-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:

Fay T Mauldin

Fay Mauldin
Cartographer
March 11, 1980

Approved:

J. Byrd 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 - 00804

Gull Island

Ismailof Island

Kachemak Bay

Peterson Bay

Peterson Point

The Narrows

Approved by;

Charles E. Harrington

Charles E. Harrington
Chief Geographer
Nautical Charting Division

FIELD EDIT REPORT

OPR-P114-RA-80
CM-7412
TP-00804

ALASKA

COOK INLET, EAST SIDE

CAPE KASILOF TO BARREN ISLANDS

1 FIELD UNIT

JUNE 4 - JUNE 13, 1980
(JD 156 - 165)

51 METHODS

Field edit operations for TP-00804 began on June 4, 1980 (JD 156) and ended on June 13, 1980 (JD 165). Field edit began prior to and continued concurrent with hydrographic operations for survey H-9884, OPR-P114-RA-80. Hydrographic survey H-9884 included all shoreline of TP-00804.

Inspection of the shoreline was made during low water utilizing small boats. Landmarks for charts were investigated from the ship RAINIER and her small boats while in the working grounds.

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

Shorelinesand topographic notes were annotated on black and white chronopaque photographs 10 AUG 75 ER - 1518 and 1519 and/or the Master Field Edit Print.

52 ADEQUACY OF COMPILATION

The compilation of TP-00804 is adequate and complete with the additional features noted on the photographs and/or the Master Field Edit Print. All compilation questions have been answered. The mean high water line was verified by visual inspection.

53 MAP ACCURACY

The map accuracy of TP-00804 is excellent. The compiled geographic position of GULL ISLAND LIGHT 1975 differs by 0.016 meters from the May 1977 published geodetic position.

54 RECOMMENDATIONS

Matte ratio photographs were not available for field use. Therefore, 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 communications 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 position data being deleted. If the object was not visible on the photographs it was considered as hydrographic information, and reported as such.

All triangulation stations located within the limites of TP-00804 were visited. One new traverse station, POLE 1980 was established by the RAINIER using Third Order Class I methods. Station descriptions and

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

Respectfully submitted,

Richard L. Hastings

Richard L. Hastings, SST

Approved by,

Wayne L. Mobley

Wayne L. Mobley
Captain NOAA
Commanding Officer

REVIEW REPORT
TP-00804
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. quadrangle: Seldovia (C-4), Alaska, scale 1:63, 360, dated 1951.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

The contemporary hydrographic survey H-9884 was 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.

The manuscript compared well with the latest dated charts.

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

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

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

TP-00804

Approved for forwarding:

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved:

Chief, Photogrammetry ~~Branch~~ Section

Ronald K. Brewer
Chief, Photogrammetry Division

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [XX] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [XX] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office): Coastal Mapping Unit AMC, Norfolk, VA

STATE: Alaska

LOCALITY: Cook Inlet, East Side, Cape Kasilof to Barren Is.

DATE: Jul. 1981

The following objects HAVE [XX] HAVE NOT [ ] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.: OPR-P114

JOB NUMBER: CM-7412

SURVEY NUMBER: TP-00804

DATUM: N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE // D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE // D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
LIGHT	Gull Island Light 4 (Gull Island Light, 1975)	59 35	06.807	151 19	38.170	75E(C)0009 July 5, 1975	Triang. Rec. May 1980	16640 16645

RESPONSIBLE PERSONNEL

TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	W. Mobley	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	J. Talbott	FIELD ACTIVITY REPRESENTATIVE
	L. Williams	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	C. Blood	☒ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS
Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.
EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field Identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.
EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.
EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED
When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
Enter 'V-Vis.' and date.
EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

☆ U.S.GPO:1975-0-665-080/1155

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 cha[illegible]

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[illegible]

CHART	DATE	CARTOGRAPHER	REMARKS
			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
			Drawing No.
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