

TP-00794

TP-00794

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. TP-00794	Edition No. 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 KASILOF RIVER	
1975 TO 1978	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE  Coastal Mapping Division, Norfolk, VA		SURVEY TP. 00794  MAP EDITION NO. (1)  MAP CLASS Final  JOB <del>XXXX</del> CM-7412	
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__			
<b>I. INSTRUCTIONS DATED</b>			
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		Premarking May 7, 1975	
<b>II. DATUMS</b>			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION  Transverse Mercator		4. GRID(S) STATE Alaska ZONE 4	
5. SCALE 1:10,000		STATE ZONE	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		S. Solbeck	Mar 1976
		J. Perrow, Jr.	Mar 1976
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		S. Solbeck	Apr. 1976
		J. Perrow, Jr.	Apr 1976
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 SCALE: 1:10,000 CONTOURS BY CHECKED BY		J. Minton	Dec 1976
		J. Roderick/J. Byrd	Dec 1976
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth drafted and graphic SCALE: 1:10,000 CONTOURS BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY		J. Minton	Jan 1977
		F. Margiotta	Jan 1977
		N.A.	
		N.A.	
		J. Minton	Jan 1977
		F. Margiotta	Jan 1977
		N.A.	
		N.A.	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		F. Margiotta	Jan 1977
6. APPLICATION OF FIELD EDIT DATA BY		R. Kravitz	Jan 1979
		L. Neterer, Jr.	Feb 1979
7. COMPILATION SECTION REVIEW BY		L. Neterer, Jr.	Feb. 1979
8. FINAL REVIEW BY		C. Blood/J. Byrd	Sept 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 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYTP-00794  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 E 152.71 mm Wild RC 10 C 88.47 mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	
<input checked="" type="checkbox"/> PREDICTED TIDES <input checked="" type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Alaska	
				MERIDIAN	
				150th	
				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
75E(C)9929-9932	Jul.5,1975	09:37	1:30,000	8.6 ft. above MLLW	
75C(C)6281,-6282	Jul.5,1975	08:27	1:60,000	7.6 ft. above MLLW	
75E(I)0629-0632*	Jul.8,1975	15:30	1:30,000	18.4 ft. above MLLW	
75E(I)0622-0625**	Jul.8,1975	15:18	1:30,000	13.1 ft. above MLLW	
75E(I)0762-0764**	Jul.9,1975	10:59	1:30,000	1.0 ft. below MLLW	
75E(I)0770-0774**	Jul.9,1975	11:15	1:30,000	1.0 ft. below MLLW	
				Mean tide range 15.4 ft. at Seldovia.	

REMARKS Tide gauges were observed at Kenai City Pier and Seldovia for infrared photography. Bridge and /or compilation photograph centers are not shown on the manuscript. The 1:60,000 scale photography was used to complete the Kaslof River inland. Mean high water at Seldovia is 17.0 ft. above MLLW.

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

\*The MHWL was compiled graphically from the above tide coordinated infrared photography.

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

\*\*The MLLWL 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
TP-00793	TP-00793	TP-00795	TP-00793

## REMARKS

This 1:10,000 scale map lies within the south central portion of 1:20,000 scale TP-00793.

TP-00794

## HISTORY OF FIELD OPERATIONS

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

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	Jun 1975
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby	Jun 1975
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY R. Melby	Jun 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 <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

Paneled

## 2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75Z(C)6793	PT. 2, 1963		
75E(C)9931	(sub pt. paneled)		

## 3. PHOTO NUMBERS (Clarification of details)

None

## 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

## 7. SUPPLEMENTAL MAPS AND PLANS

None

## 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 - Form 152

2 - Form 277 (Tides Record Book)

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

TP-00794

## HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Randall	Aug 1978
2. HORIZONTAL CONTROL	RECOVERED BY S. Miller	Aug 1978
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY S. Miller	Aug 1978
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY S. Miller	Aug 1978
	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 D. Smith	Aug 1978
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)

75 E(I) 0763, 0764, 0770, and 0773

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

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  
Form 76-40Fix positions and Hydrographic data/notes  
Sketch of bulkhead and boatramp  
Sketch - Kasilof River Range

NOAA FORM 76-36D  
(3-72)

TP-00794

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

## 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	Jan 1977	Class III Manuscript	Apr. 4, 1977	Mar. 30, 1977
Field edit applied, compilation complete.	Feb 1979	Class I Manuscript	Apr. 9, 1979	
Final Review	Sept 1985	Final Map	Mar 1986 Nov 1985	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 to be Charted

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: April 19793. ☐ 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~~ 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)

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	

## OFFICIAL RELEASE FOR COST ACCOUNTS

SHEET No.	Sq. Mi.	SHEET No.	Sq. Mi.
TP-00703	7	TP-00210	17
TP-00704		TP-00211	
TP-00705		TP-00212	
TP-00706		TP-00213	
TP-00707		TP-00214	
TP-00708		TP-00215	
TP-00709		TP-00216	
		TP-00220	18
		TP-00223	19
		TP-00224	
		TP-00225	
		TP-00226	
		TP-00227	
		TOTAL	195

REVISED 9/23/75 R.W.  
6/13/79 L.F.V.

JOB CM-7412  
COOK INLET, EAST SIDE  
CAPE KASLOF TO BARREN ISLANDS  
ALASKA

SHORELINE MAPPING  
SCALE 15,000-HQ,000-120,000

MARCH 1974

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-00794

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 portrays the west coast of Cook Inlet area, south of Kenai latitude  $60^{\circ}20'$  north to latitude  $60^{\circ}25'$ .

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 July 1975.

Photographic coverage was adequately provided by natural color and infrared tide coordinated photographs in July 1975. The RC-8 (E) camera was used to expose both the natural color film required for the 1:30,000 scale aerotriangulation, compilation and the infrared black and white photographs. The infrared photography was used to supplement the color compilation photography. One model of color 1:60,000 scale aerotriangulation photography was used to complete the compilation of the manuscript.

Analytic aerotriangulation was adequately provided by the Washington Science Center for the north part of the project March 1976. Aerotriangulation operation 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 in January 1977. Refer to the compilation report, Item #31 and NOAA Form 76-36B for specific usage of the photography.

Field edit was conducted August 1978, 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 1979.

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

TP-00794

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-00794

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.

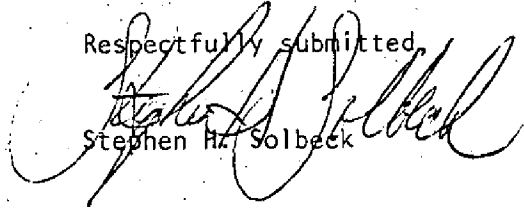
## 24. Supplemental Data

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

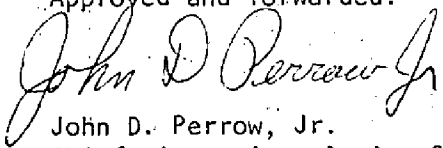
25. Photography

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

Respectfully submitted,

  
Stephen H. Solbeck

Approved and forwarded:

  
John D. Perrow, Jr.

Chief, Aerotriangulation Section

## AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALF

CM-7412

MARCH 1976

KENAI RUSSIAN

CHAPEL SPIRE 1964

68° 30' 00"

AUDRY, 1961

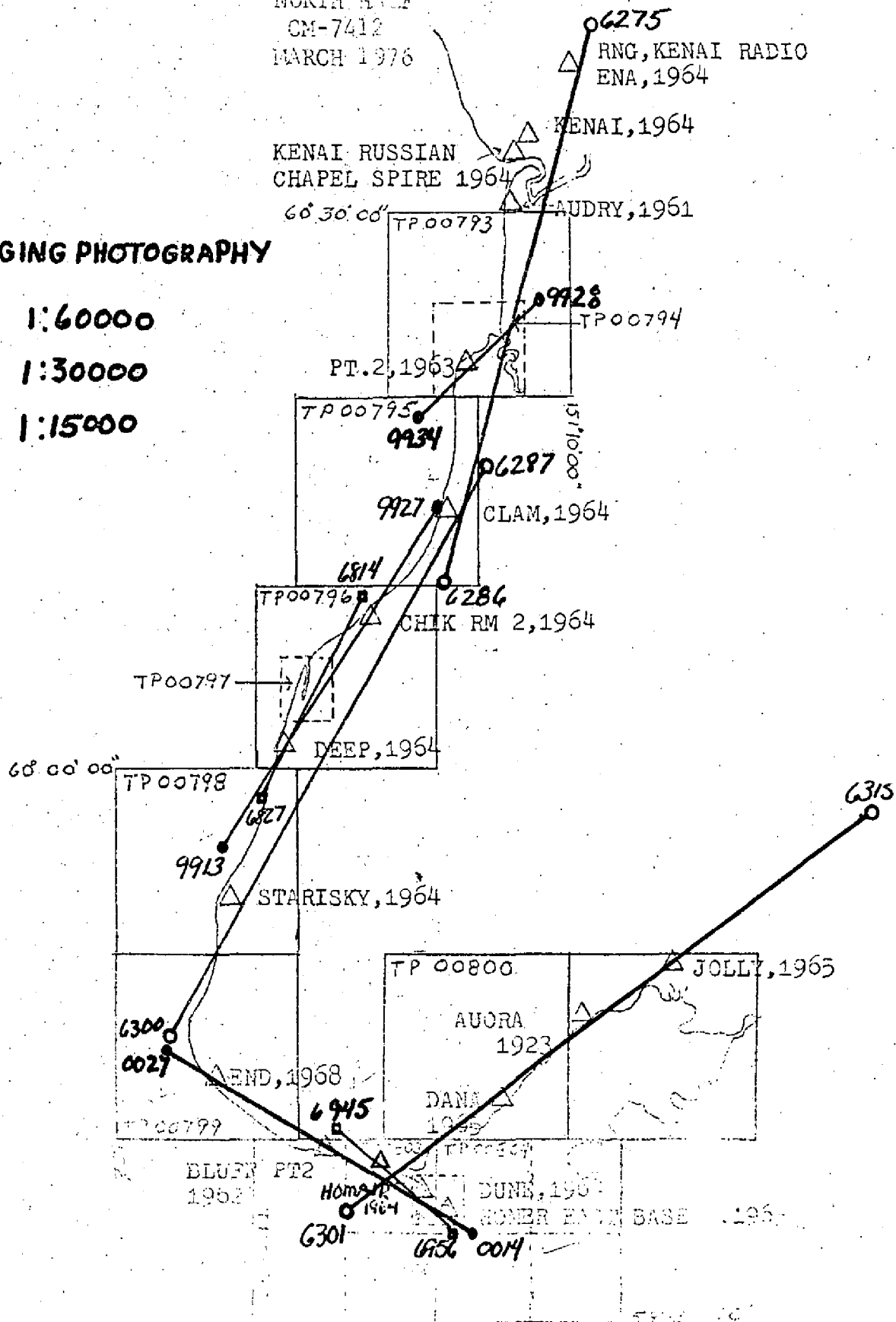
TP 00793

## 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

△ RNG, KENAI RADIO  
ENA, 1964

KENAI, 1964

KENAI RUSSIAN  
CHAPEL SPIRE 1964

AUDRY, 1961

60° 30' 00" TP 00793

**BLACK AND WHITE INFRARED**

75 E (R)

1:30000

MHW

TP00794

PT. 2, 1953

TP 00795

151

8.

CLAM, 1964

TP007916

CHIK RM 2,1964

599

TP00797

602

DEEP, 1964

60° 00' 00"

TP 00798

STARISKY, 1964

TP 00800

△ JOLLY, 1965

AUORA

1923

DANA  $\triangle$ 

1965

ITP 00799

908

BUFILE 100-441100  
100-441100

FLM, AIR

DUNE, 1954

RECEIVED POSTAL A-30 2, 1963

9/7

7200

10/1/00

## AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALF

CM-7412

MARCH 1976

△ RNG, KENAI RADIO  
ENA, 1964

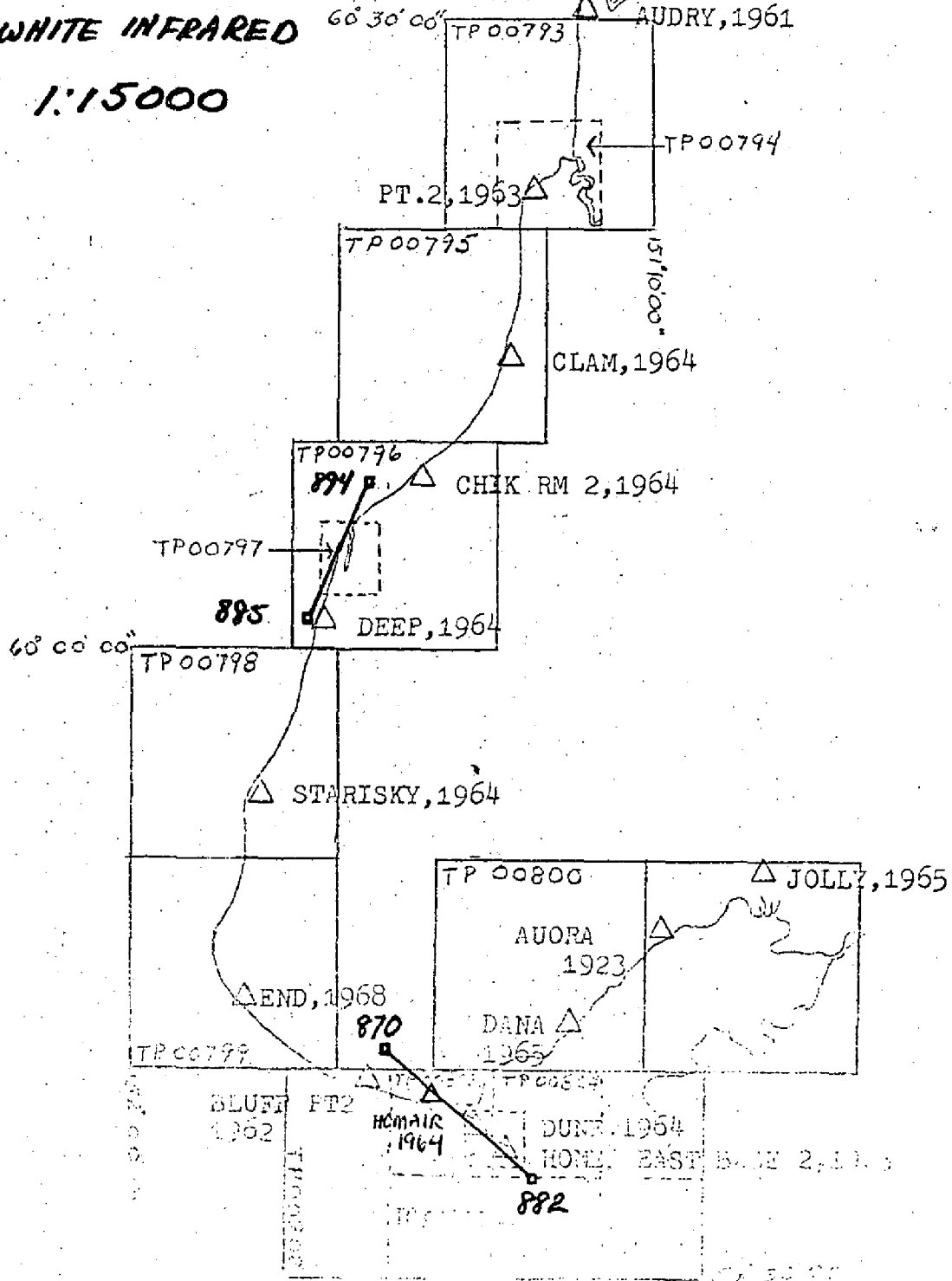
△ KENAI, 1964

KENAI RUSSIAN  
CHAPEL SPIRE 1964

△ AUDRY, 1961

BLACK AND WHITE INFRARED

75 E(R) 1:15000

MHW



## AEROTRIANGULATION SKETCH

COOK INLET, ALASKA

NORTH HALF

CM-7412

MARCH 1976

△ RNG, KENAI RADIO  
ENA, 1964

△ KENAI, 1964

KENAI RUSSIAN  
CHAPEL SPIRE 1964

68° 30' 00"

△ AUDRY, 1961

TP 00773

TP 00794

PT. 2, 1963

TP 00795

51' 00"

△ CLAM, 1964

TP 00796

6814

△ CHEK RM 2, 1964

TP 00797

6827

△ DEEP, 1964

68° 00' 00"

TP 00798

△ STARISKY, 1964

TP 00800

△ JOLLY, 1965

AUORA

1923

0057

DUNA

0055

TP 00799

△ END, 1968

BLUFF PT2

1962

HOMER

1964

0061

7490

DUNE, 1964

HOMER EAST BASE 2, 1964

TP 00802

51' 30' 00"

COLOR FOR RATIO

75Z(c)

● 1:15000

■ 1:30000

75E(c)

▲ 1:30000

# 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 ( <del>BLUFF POINT 2</del> 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 PTR 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

Strip #4

		X error (ft)	Y error (ft)
	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
omitted	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	+1.516

			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
	<del>821802</del>	<del>(#5)</del>		
	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



## COMPILATION REPORT

TP-00794

31 - DELINEATION

Delineation was by stereoplotter and graphic methods. The Wild B-8 stereoplotter with 1:30,000 scale bridging color photographs was used to delineate the shoreline and interior details and to locate common detail points needed for the graphic use of the 1:30,000 scale infrared photography. One model of 1:60,000 scale bridging photographs was used to complete the delineation of Kasilof River. The MHWL and MLLWL were delineated from the tide-coordinated infrared photography.

Air 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, North half, dated March 1976.

33 - SUPPLEMENTAL DATA

None.

34 - CONTOURS AND DRAINAGE

Contours were not applicable to this project.

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

35 - SHORELINE AND ALONGSHORE DETAILS

Alongshore details were delineated on the Wild B-8 stereoplotter from 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 methods as described in item #31.

37 - LANDMARKS AND AIDS

There are no landmarks within the limits of this manuscript. Two nonfloating aids for navigation are shown.

TP-00794

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 Photogrammetric Plot Report, North half, dated March 1976.

46 - COMPARISON WITH EXISTING MAPS

A comparison has been made with the U.S. Geological Survey  
Quadrangle:  
Kenai (B-4), Alaska, scale 1:63,360, dated 1951.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the National Ocean Survey  
chart:  
No. 16660, scale 1:194,154, dated October 18, 1975.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

*James R. Minton*  
James R. Minton  
Cartographic Technician  
January 24, 1977

Approved:

*Albert C. Rauck, Jr.*  
Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section

## ADDENDUM TO THE COMPILATION REPORT

TP-00794

FIELD EDIT

Field edit rock data was computed from predicted tide tables since there was no approved tide data available. Mean high water is based on Kenai City River entrance tide gage.

March 22, 1984

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

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

TP - 00794

Cape Kasilof

Cohoe

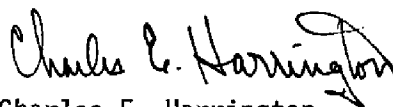
Cook Inlet

Kalifonsky

Kasilof

Kasilof River

Approved by;

Charles E. Harrington  
Chief Geographer  
Nautical Charting Division

FIELD EDIT REPORT

OPR-P114-RA-78  
CM-7412

TP-00794

ALASKA  
COOK INLET, EAST SIDE  
CAPE KASILOF TO BARREN ISLANDS

1 FIELD UNIT

August 2 - August 18, 1978

-1-

## 51 METHODS

Field edit of TP-00794 was accomplished between August 2 and August 18, 1978 using a 4 wheel drive truck, inflatable outboard powered skiff, and 16' "Boston Whaler" for transportation. Topographic detail was edited and noted on photos 0763, 0764, 0770, 0773, and the Master Field Edit Ozalid, with notes color coded as follows:

Violet - verification  
Red - addition or revision  
Green - deletion

Ten photo signals were located by radial plot for visual position control (see signal overlay sheet).

Photo-identifiable features compiled on the manuscript were verified in the field by sextant positioning (intersection and resection) and inspection of the photos. Sextant fixes were plotted directly on the signal overlay sheet with a 3-arm protractor in the field and exact G.P.s computed upon return to the ship. Sextant fixes taken to verify photo-identifiable features were not assigned position numbers and are included in the data as verification of the feature noted on the photos, not as a source of position for the feature.

Features not compiled on the manuscript and not identifiable on the photos were located by sextant resection and plotted on the Master Field Edit Ozalid. These fixes were assigned a position number and include a check angle which plots within 10 meters of the fix (1mm at 1:10,000 scale). The new features were plotted on the Master Field Edit Ozalid with a vernier scale 3-arm protractor of 1' accuracy. Computed position printouts are included with the data package.

All rocks visible at -3 foot of tide were located on the photographs or positioned by 3-point sextant fix. Rock heights were estimated at the rock and recorded with Greenwich Mean Time. Rocks deleted from the manuscript were searched for at -2 to -4 foot tides using sextant positioning.

## 52 ADEQUACY OF COMPILATION

Additions and deletions of detail necessary to render TP-00794 complete and adequate are noted on photos 0763, 0764, 0770, 0773, and the Master Field Edit Ozalid. Items requiring further explanation are as follows:

The bulkhead and boat ramp near the mouth of the Kasilof River (Lat 60/23/13, Long 151/17/44) was built after the 1975 photography and compiled by the field editor. Dimensions, position numbers, and details of construction are included in a drawing submitted with this report (separates to the text).

The rocks deleted at the mouth of the Kasilof River, #60 and #61, were plotted on a mud flat which bares at a negative tide. The area was searched on foot with sextant positioning and no rocks were found. Rocks #62, #63, #64, and #65 located south of the Kasilof River are also located in an area which bares at negative tides. A foot search of the area located no rocks. The images on the photographs were probably small fishing dorys moored off the beach. The 5 rocks located approximately Lat  $60^{\circ} 22' 40''$  N, Long  $151^{\circ} 22' 15''$  W were searched for at -4 ft. of tide from a skiff positioned by sextant. No rocks were located. The images again are probably some of the numerous fishing dorys moored in the area.

The Kasilof River range markers located photogrammetrically on TP-00794 have been replaced and are no longer of value to navigation. The old towers, although still standing, are delapidated, have had the placards removed, are unlit, and are not visible from any useful distance seaward. The new range consists of an 18' rear marker with a 6' orange and white diamond target and flashing white light. The front range marker is a 5' post with a 20"x12" orange and white reflective target. The new front range is unlit, is very difficult to see from seaward, and should be indicated so on the chart. The new range was positioned by trilateration (taped distances) from the old range. These positions are based on the photogrammetric positions of the old range. Geodetic positions are not available at this time.

NEW KASILOF RIVER REAR RANGE	LAT 60/23/16.51
	LONG 151/18/46.06

NEW KASILOF FRONT RANGE	LAT 60/23/16.57
	LONG 151/18/47.94

TRUE BEARING OF RANGE =  $93^{\circ} 46'$

See Separates to Text for computations.

#### 53 MAP ACCURACY

Positional accuracy of the compilation was verified throughout the sheet when work incidental to the field edit required positioning of photo-identifiable features such as rocks. Map accuracy was also

-3-

confirmed by the close comparison of fixes and check fixes taken from photo-located signals. The accuracy of the MHWL was verified by tape measurements from photo-identifiable features. Because of local reports of shifting, the location of the Kasilof River channel through the tidal mud flats was verified by 3 point sextant fixes taken at low water. The channel was found to be accurate as compiled. Compilation in general was found to be accurate. Changes and additions are noted on the Master Field Edit Ozalid.

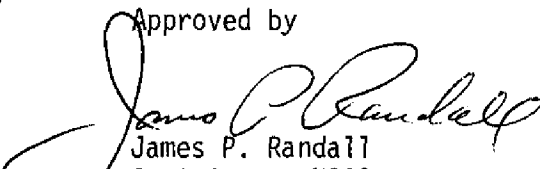
#### 54 RECOMMENDATIONS

It is recommended that TP-00794 be revised in accordance with the information presented in this report.

#### 55 MISCELLANEOUS

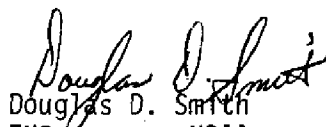
The 10 photo-signals located in this survey were positioned by radial plot on the photo signal overlay sheet.

Approved by



James P. Randall  
Captain NOAA

Respectfully submitted



Douglas D. Smith  
ENS NOAA

REVIEW REPORT  
TP-00794  
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.G.S. quadrangle:  
Kenai (B-4), Alaska, scale 1:63,360, dated 1951.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with the following contemporary  
hydrographic surveys:  
H-9777, scale 1:20,000, dated July 15, 1980  
H-9891, scale 1:5,000, dated November 4, 1981.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the NOS charts:  
16660, scale 1:194,000, dated May 8, 1982,  
16662, scale 1:100,000, dated April 4, 1983  
with 1:50,000 scale inset.

The above listed charts compared well with this manuscript.

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.

TP-00794

Submitted by,

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

Approved for forwarding,

*Billy H. Barnes*Billy H. Barnes  
Chief, Photogrammetric Section, AMC

Approved,

*John A. Mooney*Chief, Photogrammetric Section,  
Rockville*Ronald K. Brewer*Chief, Photogrammetry Branch,  
Rockville



TYPE OF ACTION		RESPONSIBLE PERSONNEL		ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD		D. Smith		<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		D. Smith		FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		R. Kravitz		OFFICE ACTIVITY REPRESENTATIVE
		C. Blood		<input checked="" type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'				
(Consult Photogrammetric Instructions No. 64.)				
OFFICE		FIELD (Cont'd)		
<b>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</b> 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		<b>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.</b> EXAMPLE: P-8-V 8-12-75 74L(C)2982		
<b>FIELD</b> <b>I. NEW POSITION DETERMINED OR VERIFIED</b> Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection		<b>III. TRIANGULATION STATION RECOVERED</b> 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		
P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant <b>A. Field positions* require entry of method of location and date of field work.</b> EXAMPLE: F-2-6-L 8-12-75		<b>II. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</b> Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75		
<b>**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</b> <b>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</b>				

