TP-00806

TP 00806

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-00806	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
COAL POINT, HOMER SPIT

19 75 TO 19 80

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: ☒ ORIGINAL ☐ RESURVEY ☐ REVISED

SURVEY TP- 00806

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		

II. DATUMS

1. HORIZONTAL: ☒ 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☒ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Transverse Mercator

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

5. SCALE: 1:5,000 — STATE; ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic (North Half)	BY	S. Solbeck	Mar 1976
	LANDMARKS AND AIDS BY	J. Perrow, Jr.	Mar 1976
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	S. Solbeck	Mar 1976
	CHECKED BY	J. Perrow, Jr.	Mar 1976
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	J. Moler	Apr 1979
	CHECKED BY	F. Mauldin	Apr 1979
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:5,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J. Moler	Jul 1979
	CHECKED BY	R. Kravitz	Aug 1979
	CONTOURS BY	N.A.	
METHOD: Smooth drafted and graphic	CHECKED BY	N.A.	
	HYDRO SUPPORT DATA BY	J. Moler	Jul 1979
SCALE: 1:5,000	CHECKED BY	R. Kravitz	Aug 1979
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. Kravitz	Aug 1979
6. APPLICATION OF FIELD EDIT DATA	BY	L. Williams	Jun 1981
	CHECKED BY	C. Blood	Aug 1981
7. COMPILATION SECTION REVIEW	BY	C. Blood	Aug 1981
8. FINAL REVIEW	BY	C. Blood/J. Byrd	Aug 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-00806

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 E 152.71 mm
Wild RC 10Z 153.14 mm

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

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

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

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75Z(C)6951-6954*	Jul.9,1975	13:56	1:15,000	17.8 ft. above MLLW
75E(I)0877-0880*	Jul.9,1975	13:56	1:15,000	17.8 ft. above MLLW
76E(I)4283-4286**	Jun.25,1976	07:45	1:15,000	1.87 ft. above MLLW
				Mean tide range 15.4 ft. 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 pohtograph 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 1:15,000 color pohtographs using stereo instrument methods. Compilation was supplemented by graphic methods using the MHW black and white (ratio) photographs 75 Z(C) 6951-6954.

3. SOURCE OF 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
TP-00803 TP-00804	TP-00804	TP-00803 TP-00804	TP-00803

REMARKS The MLLWL junction with TP-00803 does not match. Photos for TP-00803 are above MLLW.. This 1:5,000 scale TP sheet lies within the eastern area of TP-00803 and the western area of TP-00804.

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-00806

HISTORY OF FIELD OPERATIONS

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

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

Paneled

2. VERTICAL CONTROL IDENTIFIED

N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75Z(C)6954	HOMER EAST BASE 2, 1965 (Sub Point)		
75Z(C)6952	DUNE, 1964		

3. PHOTO NUMBERS (*Clarification of details*)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [ ] REPORT [XX] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [XX] NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

2 - Forms 152
Project Data: 2 - Forms 277, 1 - Form 77-53 (Tides Record Book)

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

NOAA FORM 76-36C
(3-72)

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

TP-00806

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		W. Mobley	June 1980
2. HORIZONTAL CONTROL	RECOVERED BY	J. Talbot	May 1980
	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	J. Talbot	
	LOCATED *(Field Methods)* BY	None	
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	R. Hastings	June 1980
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

76 E(I) 4283 thru 4286

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

Port of Homer, Proposed development plan; Figure IV. 3-1
Steel grid plan and Homer Electric Association Inc. Power cable map.

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

Field Edit Report
Master Field Edit Print
2 Form 76-40
Submerged groin sketch

☆ 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-00806

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	July 1979	Class III Manuscript superceded	Oct.17,1979	Feb.21,1980
Field edit applied. Compilation complete	Aug. 1981	Class I Manuscript	Aug 1981	
Final Review	Aug. 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	Nonfloating Aids for Charts
1		mar 1986	Landmarks for Charts

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

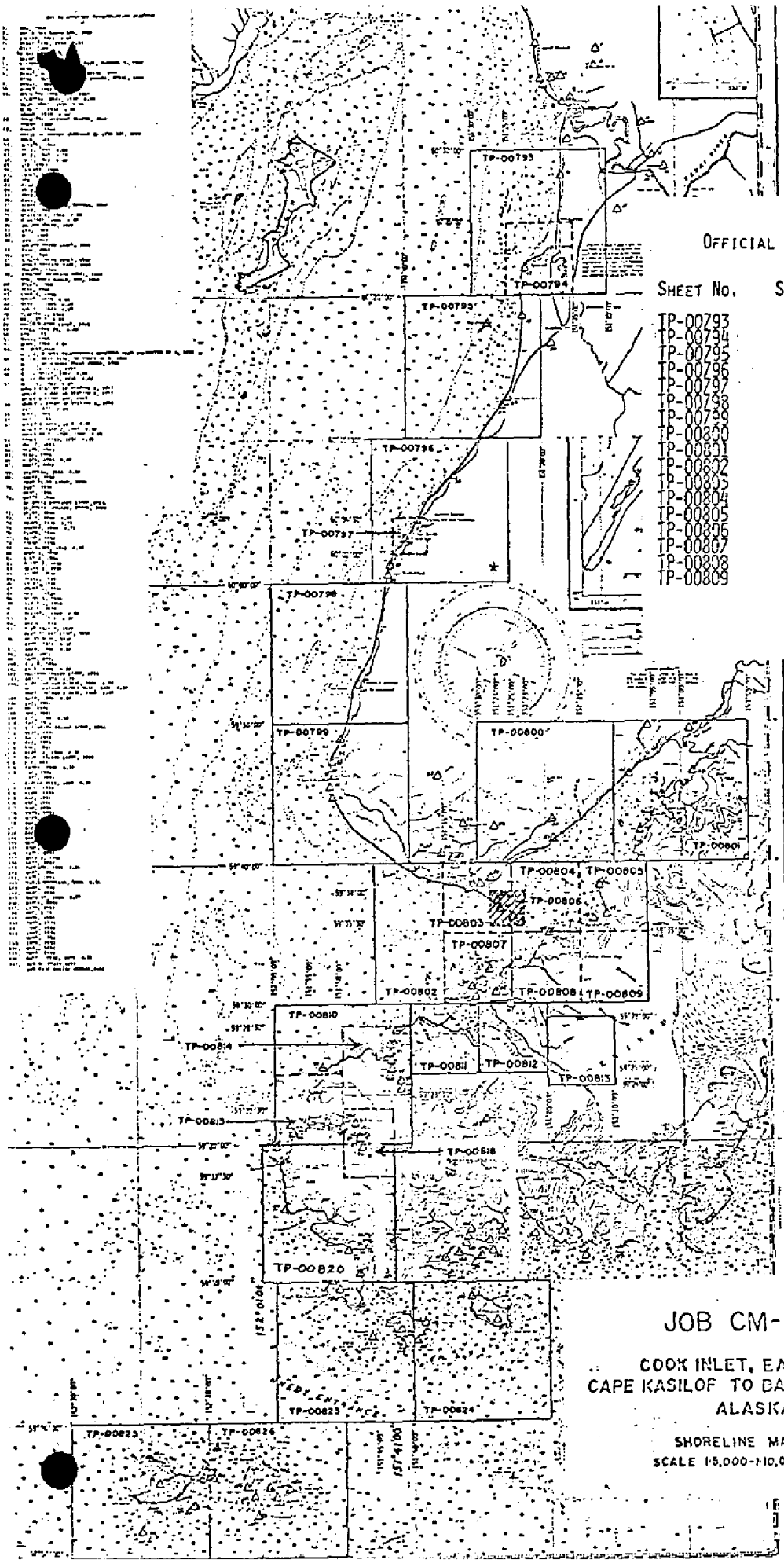
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

NOAA FORM 76-36D

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



Official Mileage for Cost Accounts

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

REVISED 9/23/75 E.W.
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-00806

This 1:5,000 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 area is limited to Homer Spit.

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 1975.

Photograph coverage was adequately provided by natural color and infrared tide coordinated photographs at 1:15,000 scale. The RC-10(Z) camera was used to expose the natural color film required for the aerotriangulation, compilation photographs taken July 1975. The RC-8 (E) camera was used for the infrared black-and-white photographs taken July 1975 and June 1976. The infrared low water and mean high water photographs were used to supplement the color compilation photography. Ratio photographs taken with the RC-10(Z) camera using color film taken July 1975, printed as black and white, were used graphically.

Analytic aerotriangulation was adequately provided by the Washington Science Center for the north part of the project in March 1976. 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 August 1979. 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 August 1981.

Final review was performed at the Atlantic Marine Center in August 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-00806

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.

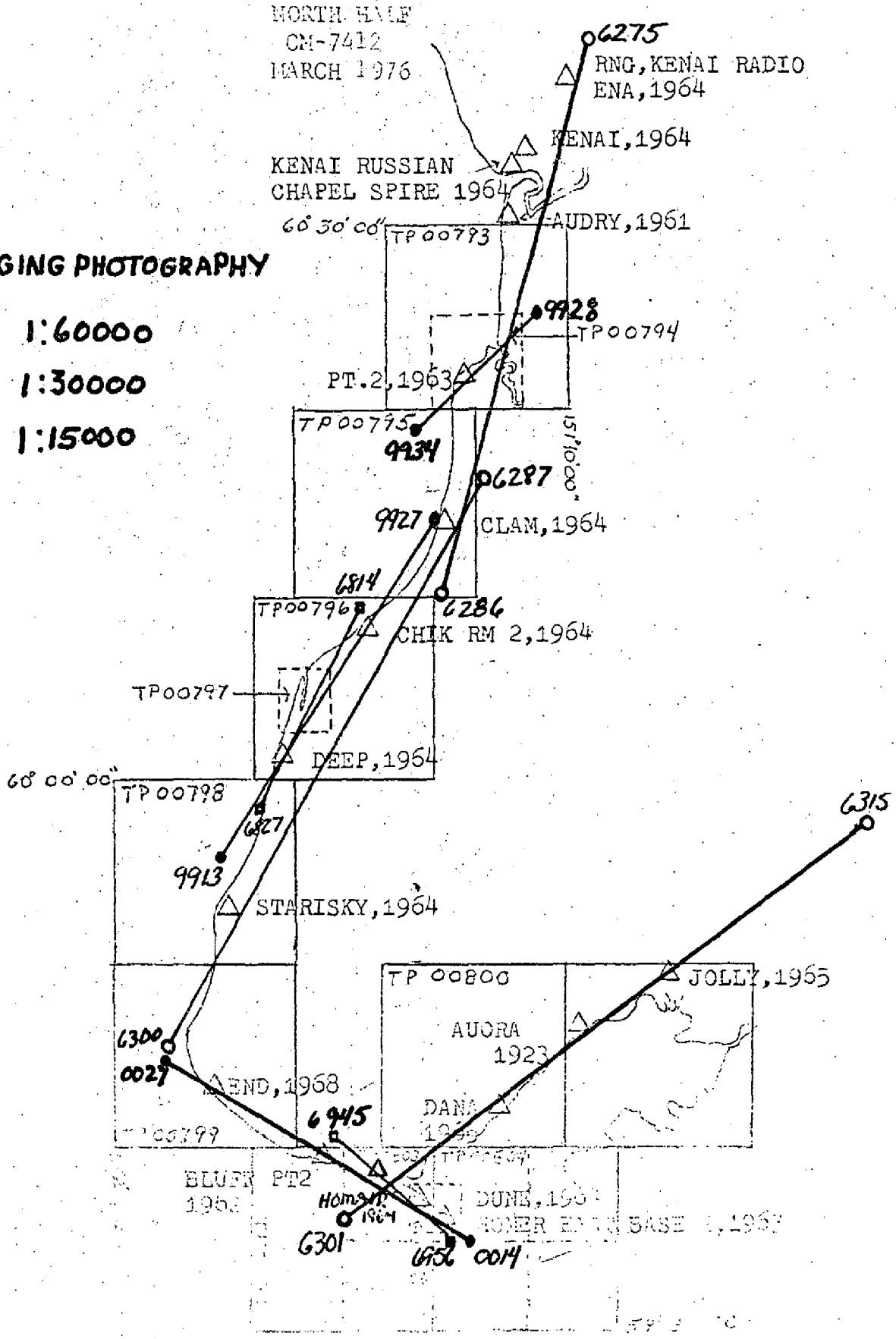
Respectfully submitted,

Stephen H. Solbeck

Approved and forwarded:

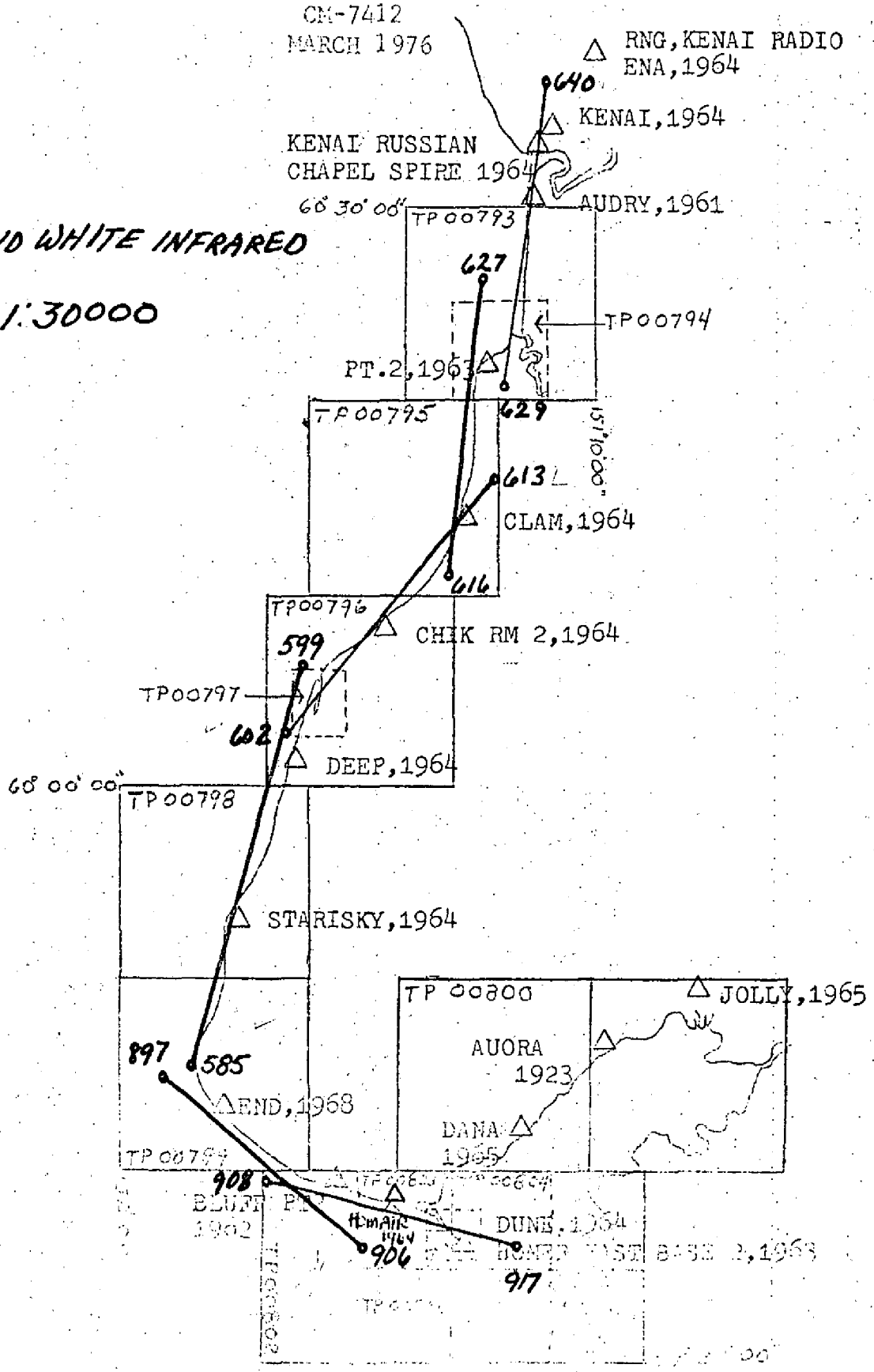
John D. Perrow, Jr.
Chief, Aerotriangulation Section

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



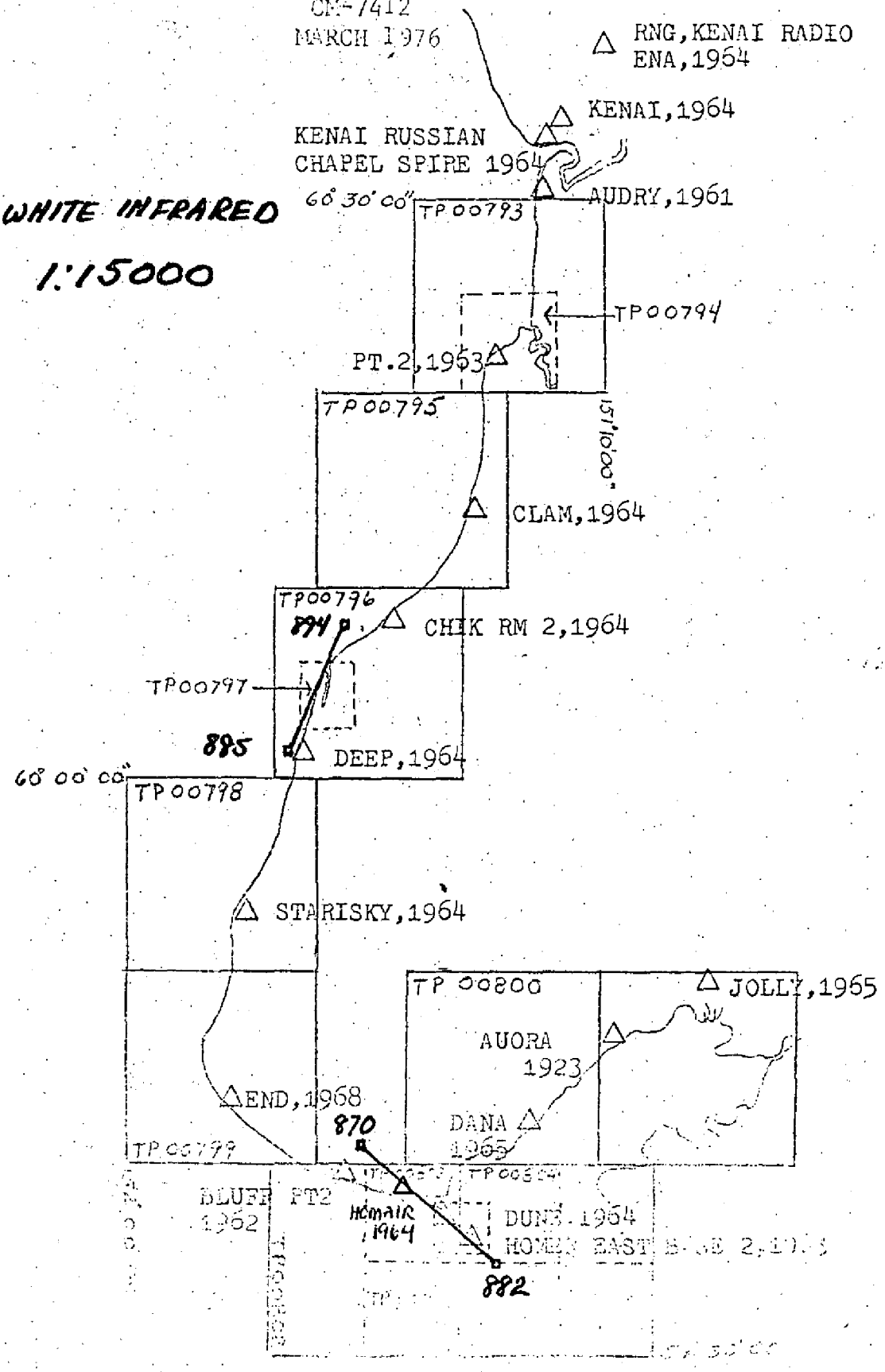
AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CM-7412
MARCH 1976

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



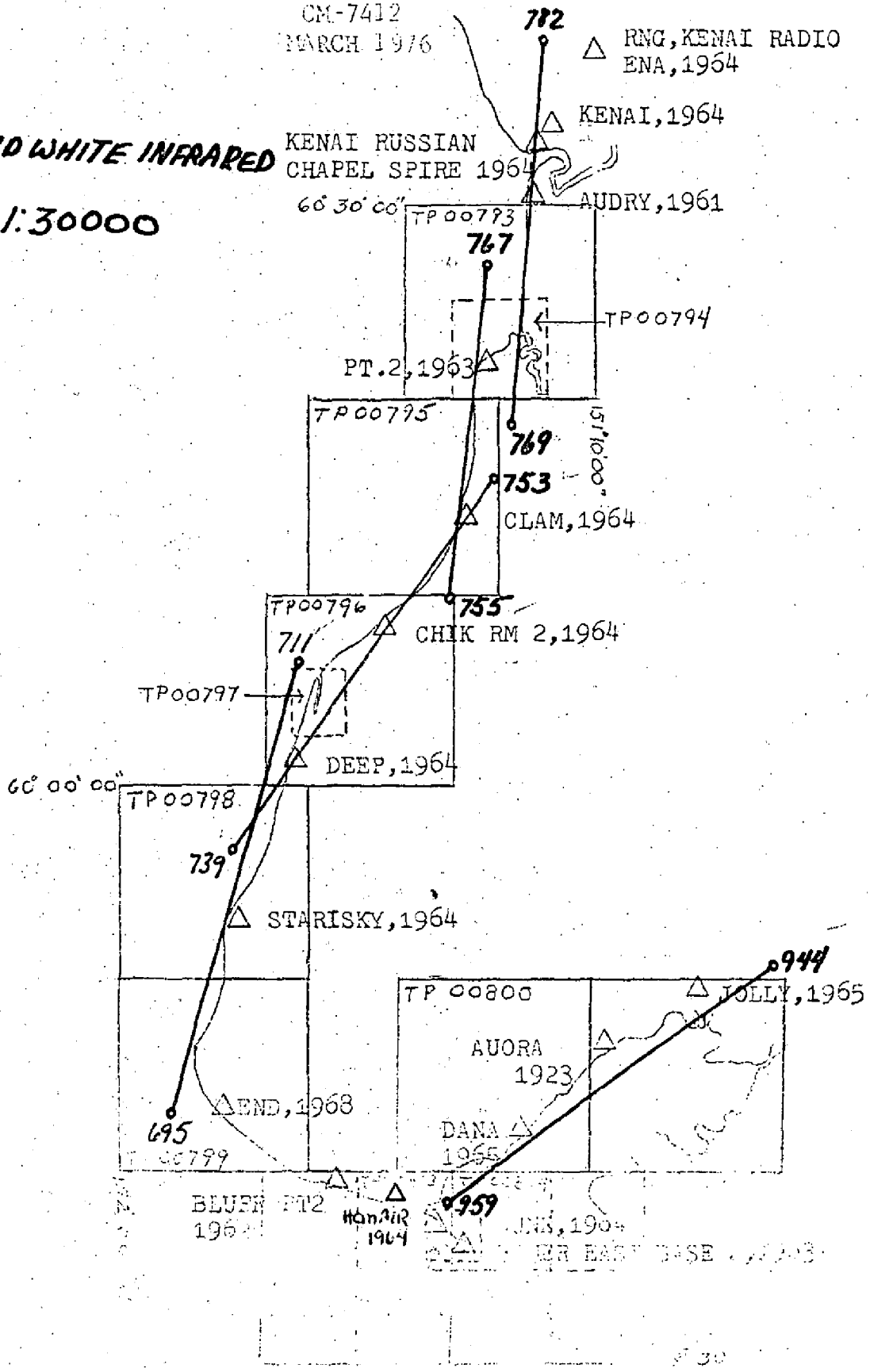
AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CM-7412
MARCH 1976

BLACK AND WHITE INFRARED
75 E(R) 1:15000
MHW



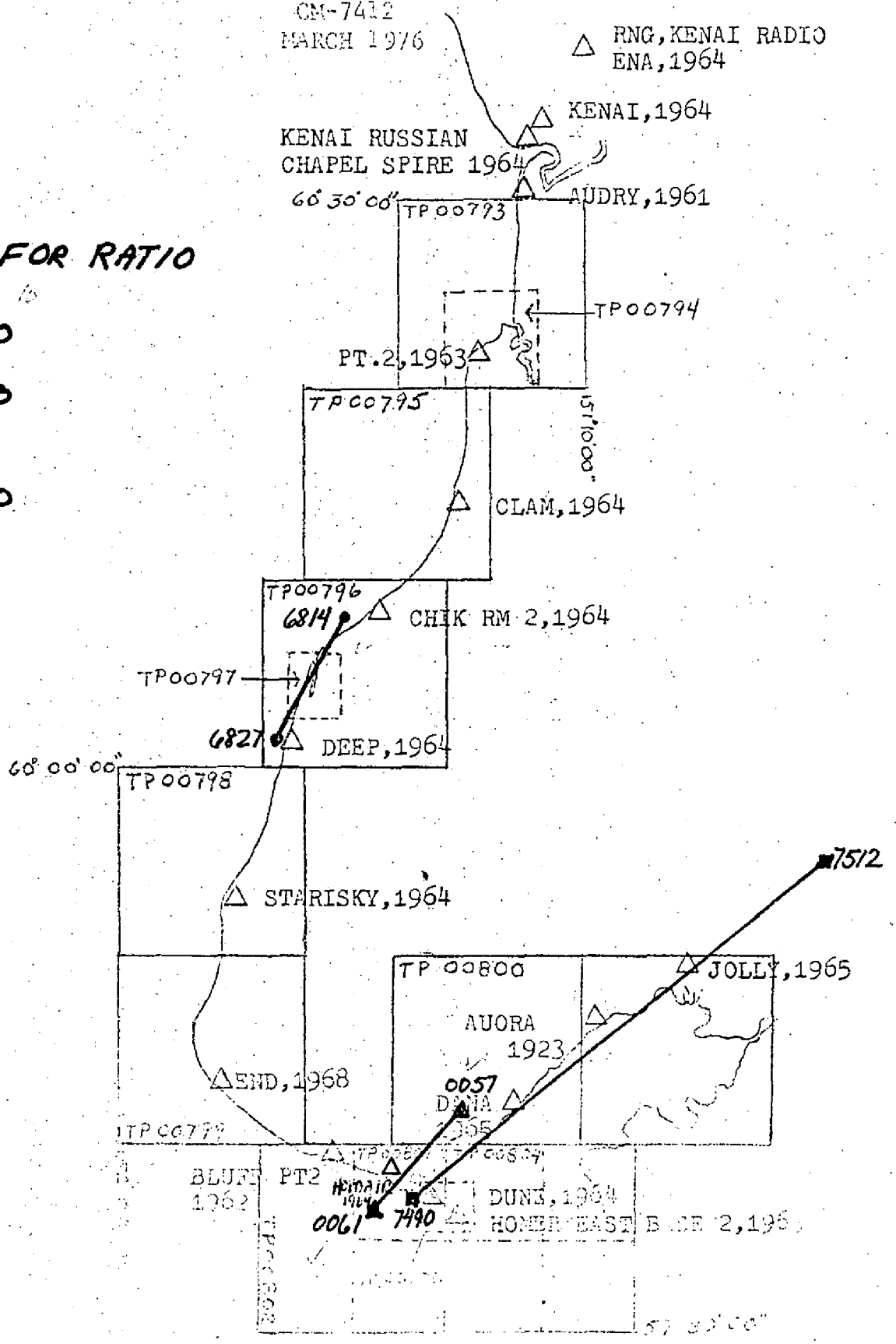
AEROTRIANGULATION SKETCH
COOK INLET, ALASKA
NORTH HALF
CM-7412
MARCH 1976

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



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

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 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 RM 1, 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	+1.389

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
954101	(HOMER EASTBASE 2, 1965 SUB PT)	-13.966	+20.221
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

OMITTED: 952100, 954101, 954110

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	921801	(#2)	-.950	+2.448
(CON'T)	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	-.555
	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
	232801	(#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
	~~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	-1.034
	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	-.005
	954110	(HOMER SPIT LIGHT 1964)	-1.210	-1.041

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-00806	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
DUNE, 1964	List of Control Homer to Soldotna, AL	952100	x=	φ 59 37 15.72054	
			y=	λ 151 27 12.45620	
HOMER EAST BASE 2, 1965	List of Control Homer to Soldotna, AL	954100	x=	φ 59 36 05.79672	
			y=	λ 151 24 54.69153	
HOMER SPIT LIGHT, 1964	List of Control Homer to Soldotna, AL	954110	x=	φ 59 36 04.18598	
			y=	λ 151 24 26.88306	
HOMER EAST BASE, 1910	List of Control Homer to Soldotna, AL	000061	x=	φ 59 36 05.00300	
			y=	λ 151 24 54.69800	
HOMER SPIT, SALTY DAWG SALOON, TOWER, 1975	Kachemak Bay Field G.P.	000169	x=	φ 59 36 09.210	
			y=	λ 151 25 09.279	
HOMER BREAKWATER LIGHT, 1975	Kachemak Bay Field G.P.	000168	x=	φ 59 26 16.458	
			y=	λ 151 24 45.809	
			x=	φ	
			y=	λ	
			x=	φ	
			y=	λ	
			x=	φ	
			y=	λ	
			x=	φ	
			y=	λ	

COMPUTED BY	A. Rauck	DATE 6/8/76	COMPUTATION CHECKED BY	J. Minton	DATE 11/4/76
LISTED BY	A. Rauck	DATE 6/8/76	LISTING CHECKED BY	J. Minton	DATE 11/4/76
HAND PLOTTING BY	None	DATE	HAND PLOTTING CHECKED BY		DATE

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

COMPILATION REPORT

TP-00806

31 - DELINEATION

Delineation was accomplished by stereo instrument and graphic compilation methods. The Wild B-8 stereoplotter with 1:15,000 scale color bridging photographs was used to delineate alongshore and interior detail, and to locate common image points to graphically control the 1:15,000 scale infrared photography. Supplemental tide coordinated infrared photographs for both MLLW and MHW were used delineate the MHW and MLLW lines. Color film used in the RC 10(Z) camera was ratio printed in black and white and used to assist in delineating the MHW line where the infrared photography did not cover.

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.

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 were two charted aids for navigation and one charted landmark within the limits of this map.

TP-00806

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

Delineation junctioned well with joining manuscripts except for the area of low gradient mean lower low water line in the vicinity of latitude 59°38.0', longitude 151°27.0' with the 1:10,000 scale manuscript TP-00803. The mean lower low water line does not junction due to the different tide levels on the photography at the junction.

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

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
with 1:10,000 scale inset of Homer Harbor small boat basin
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. Byrd for
Jeffry C. Moler
Cartographic Technician
July 10, 1979

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 - 00806

Archimandritof Shoals

Coal Point

Homer Spit

Kachemak Bay

Approved by;

Charles E. Harrington

Charles E. Harrington
Chief Geographer
Nautical Charting Division

FIELD EDIT REPORT

OPR-P114-RA-80

CM-7412

TP-00806

ALASKA

COOK INLET, EAST SIDE

CAPE KASILOF TO BARREN ISLANDS

1 FIELD UNIT

JUNE 28 - JUNE 30, 1980

(JD 180-182)

51 METHODS

Field edit operations began on June 28, 1980 (JD 180) and ended on June 30, 1980 (JD 182). Field edit began after hydrographic operations started on H-9877, but ended before operations began on H-9900. Hydrographic surveys H-9877 and H-9900 include all of the shoreline of TP-00806.

Inspection of the shoreline was made during both high and low water by vehicle and on foot. Landmarks for charts were investigated from seaward.

Heights of rocks were estimated at close range. Times noted were GMT (Alaska Daylight Time + 9 hours). Shoreline and topgraphic motes were annotated on black and white chronopaque photographs numbers NOS, 25 JUN 76 ER-4283, 4284, 4285, and 4286 and/or the Master Field Edit Print.

52 ADEQUACY OF COMPILATION

The compilation of TP-00806 was adequate at the time of photography. However, some changes have occurred since the photography was flown. The mean high water line on the westerly side and at the end of Homer Spit appears to have shifted inland a short distance. Measurements were taken from photo-identifiable prints and the correct mean high water line was drawn on the Master Field Edit Print.

The small boat harbor has been extensively remodeled since this sheet was compiled and plans are underway to start a major expansion of the marina in the Fall of 1980, with completion scheduled for the Fall of 1982. A construction diagram/plan of the planned facility is included with the field edit data. This work is being planned by the U.S. Army Corps of Engineers.

A steel grid has been constructed in the S.W. quadrant of the marina since the photography. A plan of this grid is included in the "Separates." Also included in the "Separates Following the Text" is a diagram of a submerged groin located SW of the City Pier. Both the grid and groin are located on the Master Field Edit Print. Plans for the grid were supplied by the Homer Harbormaster (business card attached). The groin was mapped by the Field Editor.

53 MAP ACCURACY

The map accuracy of TP-00806 was excellent. Three stations were used to check map accuracy. The inverse distances computed between the published geodetic positions and the geographic positions as compiled on NOAA Form 76-40 are:

STATION	INVERSE (meters)
HOMER BREAKWATER LIGHT 1975	0.494
HOMER SPIT LIGHT 1964	0.001
HOMER SPIT, SALTY DAWG SALOON, TOWER 1975	0.091

54 RECOMMENDATIONS

Matte ratio prints were not available for field use. As a result, extreme care was necessary while handling the chronopaques in the field. It is recommended that matte ratio prints be made available to the field party in the future as has been done in the past.

The expansion of the Homer boat basin planned by the Corps of Engineers and mentioned in paragraph 52 will render much of this manuscript obsolete. It is recommended that plans be made to re-map this area of the Homer Spit at the completion of construction, in two to three years' time.

56 MISCELLANEOUS

All triangulation stations within TP-00806 were visited. Station descriptions and recovery notes are included in the "Separates." All other pertinent information is also located in the "Separates Following the Text."

Respectfully submitted,

Richard L. Hastings

Richard L. Hastings, SST

Approved by,

for John C. Wright

Wayne L. Mobley, Captain, NOAA
Commanding Officer

REVIEW REPORT
TP-00806
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

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with the contemporary hydrographic survey H-9877, 1:20,000 scale, dated December 8, 1982. The hiatus of H-9877, the area between latitudes 59°36.0' and 59°37.0' and west of longitude 151°24.3' to Homer Spit is covered by survey H-9900; the work was done in 1980. H-9900 was not available for comparison at the time of final review August 1985.

65 - COMPARISON WITH NAUTICAL CHARTS

Comparisons were made with the following NOS charts:
16645, scale 1:82,662, dated July 30, 1983
with 1:10,000 scale inset of Homer Harbor small boat basin
16645, scale 1:82,662, dated March 13, 1976
16640, scale 1:200,000, dated April 23, 1983.

The above listed charts compared well with this manuscript.

The field editor, in his report, recommended to remap the area of this manuscript because the area was being changed extensively at the time he was there, which will render this manuscript obsolete. The U.S. Army Corps of Engineers are planning the work that is being done, with a completion date set for the fall of 1982.

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-00806

Submitted by:
Charles E. Blood /J. Byrd

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, Photogrammetry Branch,
Rockville

Ronald K. Brewer

Chief, Photogrammetry Division,
Rockville

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: Aug. 1981

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

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
P114-RA-80	CM-7412	TP-00806	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	Kachemak Bay, Homer Breakwater Light 2 (Homer Breakwater Light 1975)	59 36	16.458	151 24	45.809	76 E(I) 4284 June 25,1976	Triang. Rec. 5-80	16640 16645
LIGHT	Kachemak Bay, Homer Spit Light (Homer Spit Light, 1964)	59 36	04.186	151 24	26.883	76 E(I) 4284 June 25, 1976	Triang. Rec. 5-80	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
	C. Blood	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.

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
- XX FINAL REVIEWER
- ☐ QUALITY CONTROL & REVIEW GRP.
- ☐ COAST PILOT BRANCH

(See reverse for responsible personnel)

☒ TO BE CHARTED ☐ TO BE REVISED ☐ TO BE DELETED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	Coastal Mapping Unit, AMC, Norfolk, VA	Alaska	Cook Inlet, East Side Cape Kasilof to Barren Is.	Aug. 1981

The following objects HAVE ☒ HAVE NOT ☐ been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
P114-RA-80	CM-7412	TP-00806	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
TOWER	(Homer Spit, Salty Dawg Saloon, Tower, 1975)	59 36	09.210	151 25	09.279	76 E(I) 4284 June 25, 1976	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
	C. Blood	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.

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 ch

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the R

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Vi
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Vi
			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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