

TP- 01154

TP- 01154

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
THIS MAP EDITION WILL NOT BE FIELD EDITED.	
Map No. TP-01154	Edition No. 1
Job No. CM-8200	
Map Classification FINAL CLASS III	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality CAPE KILOKAK TO CAPE KUMLIK	
Locality CAPE AYUTKA	
19 82 TO 19 83	
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 Pacific Marine Center Seattle, Washington		SURVEY TP. <u>01154</u> MAP EDITION NO. (1) MAP CLASS <u>III Final</u> JOB <u>RM CM 8200</u>	
OFFICER-IN-CHARGE David W. Yeager		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 Office		Field Field (Change 1)	
Feb. 15, 1984 July 24, 1984		Feb. 5, 1982 May 21, 1982	
<b>II. DATUMS</b>			
1. HORIZONTAL:		OTHER (Specify) None	
<input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL:		None	
<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			
3. MAP PROJECTION Transverse Mercator		4. GRID(S) STATE Alaska	
5. SCALE 1:20,000		ZONE 6	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	
DATE			
1. AEROTRIANGULATION METHOD: Analytic		BY S. Solbeck LANDMARKS AND AIDS BY D. Norman	
2. CONTROL AND BRIDGE POINTS METHOD:		PLOTTED BY S. Solbeck CHECKED BY D. Norman	
3. STEREOSCOPIC INSTRUMENT COMPILATION		PLANIMETRY BY D. Butler CHECKED BY J. Minton/D. Holeski	
INSTRUMENT: Wild B-8 Stereoplotter SCALE: 1:20,000		CONTOURS BY N.A. CHECKED BY N.A.	
4. MANUSCRIPT DELINEATION		PLANIMETRY BY D. Holeski CHECKED BY J. Minton	
METHOD: Smooth drafted, graphic MLLW line SCALE: 1:20,000		CONTOURS BY N.A. CHECKED BY N.A. HYDRO SUPPORT DATA BY N.A. CHECKED BY N.A.	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT		BY N.A.	
6. APPLICATION OF FIELD EDIT DATA		BY N.A. CHECKED BY N.A.	
7. COMPILATION SECTION REVIEW Class III		BY J. Minton	
8. FINAL REVIEW Class III		BY L. O. Neterer, Jr.	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH		BY L. O. Neterer, Jr.	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH		BY P. Dempsey	
11. MAP REGISTERED - COASTAL SURVEY SECTION		BY E. DAUGHERTY	

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYTP-01154  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild R.C. 10"B" (152.74 mm F.L.)		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Alaska MERIDIAN 150°W	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
82B(C)6485 thru 6486	Jul. 19, 1982	12:08	1:50,000	7.4 ft. above MLLW	
82B(C)6475 thru 6478	Jul. 19, 1982	11:56	1:50,000	7.5 ft. above MLLW	
83B(I)5501 thru 5503	Aug. 25, 1983	9:55	1:50,000	1.2 ft. below MLLW	
83B(I)5671 thru 5674	Aug. 26, 1983	9:09	1:50,000	0.1 ft. above MLLW	
83B(I)5829 thru 5831	Aug. 26, 1983	9:01	1:50,000	0.1 ft. above MLLW	
83B(I)5839 thru 5842	Aug. 26, 1983	9:17	1:50,000	0.1 ft. above MLLW	

## REMARKS

Tide levels were calculated for Anchorage Bay subordinate station using Kodiak as the reference station. Mean High Water is 8.1 feet above Mean Lower Low Water.

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

The Mean High Water Line was compiled on a Wild B-8 stereoplotter using the color photographs listed above.

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

The Mean Lower Low Water Line was compiled graphically from the infrared enlargements listed in item one above. These prints were controlled with pass points which were selected and positioned during the compilation of the MHW line described in item two above. See the attached aerotriangulation report for the enlargement ratio.

## 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-01150	TP-01155	TP-01157	No Survey

REMARKS

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

TP-01154

## HISTORY OF FIELD OPERATIONS

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

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	June 1982
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY L. Riggers	June 1982
3. VERTICAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY N.A. PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None LOCATED (Field Methods) BY None IDENTIFIED BY	
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 and paneled

2. VERTICAL CONTROL IDENTIFIED

N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	LAG, 1945 LAND, 1945 BLU, 1925		

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)

Field Operations Report and NOAA Forms 76-53 for paneled control  
and preselected photo - hydro stations.

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-01154  
RECORD OF SURVEY USE

## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Class III Compilation Complete:	July 1985	Class III Manuscript		
Final Reviewed	Oct. 1985	Final Class III Map	16/12/85	16/12/85

II. LANDMARKS AND AIDS TO NAVIGATION None

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			None

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

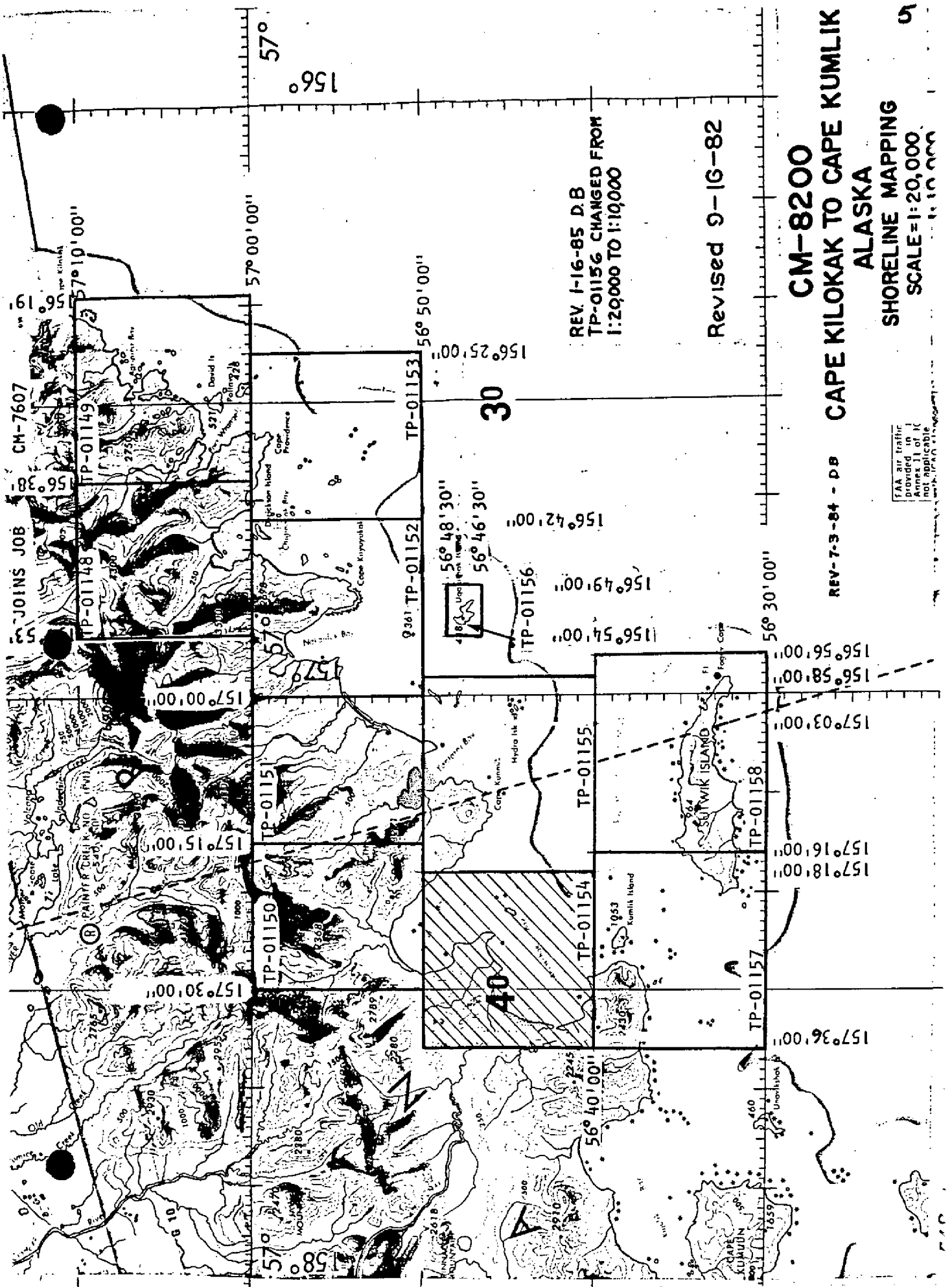
## III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 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	



JOINS JOB CM-7607

REV 1-16-85 D.B  
TP-01156 CHANGED FROM  
1:20000 TO 1:10000

Revised 9-16-82

**CM-8200**  
**CAPE KILOKAK TO CAPE KUMLIK**  
**ALASKA**  
**SHORELINE MAPPING**  
**SCALE=1:20,000**

FAA air traffic  
provided in  
Annex II of IC  
not applicable

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-01154

This 1:20,000 scale shoreline map is one of eleven maps that comprise project CM-8200 Cape Kilokak, Alaska latitude 57°10'00 south to Cape Kumlik, Alaska latitude 56°30'00". This project includes Sutwik Island.

Photographic coverage was provided in July 1982 with color film at 1:50,000 scale and in August 1983 with black-and-white infrared film at 1:50,000 scale. The Wild RC-10 "B" camera (focal length 152.74 mm) was used for all photography.

Field work prior to compilation, accomplished in June 1982, involved the identification of horizontal control by premarking techniques to meet aerotriangulation requirements.

Analytic aerotriangulation was performed at the Washington Science Center in April 1984.

Compilation was performed at the Pacific Marine Center from office interpretation of the 1982 and 1983 photography in July 1985.

Final Review was performed at the Atlantic Marine Center in October 1985. This map is to be registered as a Final Class III map.

This Descriptive Report contains all pertinent information used to compile this final map.

The original base map and all pertinent data were forwarded to the Washington Science Center for final registration.



7  
**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL OCEAN SURVEY  
Pacific Marine Center  
1801 Fairview Avenue East  
Seattle, Washington 98102

August 10, 1982

CPM133/RBM

TO: C3415 - National Ocean Survey

FROM: CPM133 - Pacific Photo Party

SUBJECT: Field Operations Report - Project CM-8200, Cape Kilokak to Cape Kumlik, Alaska, Shoreline Mapping dated February 5, 1982

This shoreline mapping project was undertaken by the Pacific Marine Center Photogrammetric Party during the month of June 1982.

The purpose of the field project was to place panels on selected, horizontal control stations, prior to the scheduled, aerial photography.

Each of the selected stations were paneled as per project instructions.

Additional points were paneled to allow their positioning during the aerotriangulation and monumented to permit future recovery. These points are designated as "PR" Points. "PR" numbers less than 50 are marked with a P-K nail through an aluminum washer, with the point designation stamped on it, and driven into the bare rock, such as PR 10 1981. Numbers above 50 were marked with a length of 3/4" thin-wall conduit pipe, with the point designation stamped on the side of the pipe, such as PR 62 1982 and driven in the ground. A copy of a chart with the approximate location of these points will be included with the field data. Control Station Identification, Form 76-53, was filled out for each horizontal control station or point paneled.

Transportation was by a NOAA helicopter, based out of Port Heiden, Alaska, and Wide Bay, Alaska, with support by the NOAA Ship FAIRWEATHER.

Where stations were missing, new horizontal control was established by Third-order, Class I methods.

A problem developed with the present adjustment of the horizontal control in the area of Sutwik Island. NGS headquarters has been notified of this problem and will probably readjust the existing horizontal control in this area. All field computations are based on the old 1948 adjustment. Station SHANE 1982 was computed on this older adjustment also. Copies of the field observations by the NOAA Ship FAIRWEATHER are included to permit an interim position to be computed for SHANE.

Prior to any aerotriangulation, the National Geodetic Survey headquarters should be contacted (C131, McKay) to determine, if the final adjustment of the horizontal control in the project area, has been accomplished.

Edward J. McKay 442-8118





The horizontal control has been transmitted to NGS headquarters via the telephone data terminal. Again, all computations and positions are based on the old 1948 adjustment to permit consistency of data.

Respectfully Submitted,

*Robert B. Melby*

Robert B. Melby  
Chief, PMC Photo Party



**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL OCEAN SURVEY  
Pacific Marine Center  
1801 Fairview Avenue East  
Seattle, Washington 98102

August 10, 1982

CPM133/RBM

TO: C174 - National Ocean Survey

FROM: CPM133 - Pacific Photo Party

SUBJECT: Field Report, Cape Kilokak to Cape Kumlik, Alaska  
Project CM-8200, TSN No: 315 thru 365

Authority: Project Instructions, Field - Job CM-8200, Cape Kilokak to Cape Kumlik, Alaska, Shoreline Mapping dated February 5, 1982.

General: The project is along a section of the southeast shoreline of the Alaska Peninsula, Shelikof Strait, Alaska. The main purpose of the project was to premark horizontal control stations, prior to scheduled aerial photography. The supplemental, horizontal control stations that were established by the field party, were to augment the existing control or to replace missing stations.

Terrain: The area is a barren, rainy, windswept coastline of the Alaska Peninsula, devoid of permanent human habitations or trees.

Personnel: Two employees of the NGS Mark Maintenance Program, one member of the Pacific Photo Party, and one Junior officer of the NOAA Ship FAIRWEATHER, performed the field functions.

Transportation: Transportation was accomplished by a NOAA helicopter with support from the NOAA Ship FAIRWEATHER.

Equipment: 2 Wild T-2 theodolites  
1 Hewlett-Packard, Model 3808A EDM Instrument  
2 Tellurometers Model CA-1000  
1 0.5. Meter, Mirror Bar  
2 K&E Retrodirective Prisms  
Various tripods, signal poles, etc.

Field Methods: Third-order traverse methods were employed by the field party.

Computations: The field computations were performed with Hewlett-Packard hand held and desk calculators, and satisfactory results were obtained.

A problem developed during the field observations at station KUMLIK 1925. The field observed, check angle, between BLU 1925 and SUT 1925, failed to agree by more than 20 seconds using the most recently published horizontal positions. (Adjustment of Nov 1976 (G-15838)). By reverting to the old lithograph, Geographic Positions, Vol. V, pages 35 and 81, Revised 6/10/48,



a satisfactory check angle was obtained. There appears to be a problem with the NOV 1976 readjustment, as the horizontal angle produced by inverses worked between KUMLIK to BLU and KUMLIK to SUT, using both the old and the 1976 adjustments, failed to agree by about 20 seconds. There appears a possible problem of rotation and an uneven lateral shift in the 1976 adjustment.

The NGS headquarters were alerted to the possible discrepancies, and stated that the final disposition of the adjustment in the area of Sutwik Island would not be finalized, until the field records of this project, are submitted to do a further comparison of observations at station KUMLIK, involving BLU and SUT.

All the positions used and transmitted through the telephone data terminal are the "old" Geographic Positions, to allow the field data to be consistent throughout, until the final horizontal control adjustment is made.

Records: All the field data was entered and processed through the NGS data telephone terminal.

Respectfully Submitted,

*R.B. Melby*

R. B. Melby  
Chief, Pacific Photo Party

PHOTOGRAMMETRIC PLOT REPORT  
Cape Kilokak to Cape Kumlik, Alaska  
CM-8200  
April 1984

AREA COVERED

The area covered by this report is the eastern shoreline of the Alaskan Peninsula, from Cape Kumlik, north to Cape Kilokak. The area is covered by eleven 1:20,000 scale manuscripts (TP-01148 through TP-01158).

METHOD

Seven strips of 1:50,000 scale color photographs and one strip of 1:12,000 scale color photographs (TP-01156) were bridged by Standard Analytic Aerotriangulation Methods. The horizontal control was premarked with positions being determined on a revised 1948 adjustment (see Field Report). Tie points were needed to supplement the premarked horizontal stations to control three of the strips. Tie points were also used to ensure the adequate junctioning between adjacent bridging strips.

The 1:50,000 scale bridging photographs provided two additional functions: one, to locate and identify a series of premarked hydrographic panels which are to be used in future hydrographic surveys in this area; the other being to provide ratio values for the 1:30,000 scale color compilation photographs and all of the 1:50,000 scale photographs used in the project.

Ratio values were determined for the bridging photographs, 1:30,000 scale color, and the black-and-white infrared photographs that are to be used for delineating MLLW and MHW. Ratios of the bridging and the MLLW photographs were ordered.

The positions of nineteen Hydrographic Control Stations were determined. All were measured on the 1:50,000 scale bridging photography. The panels of three Hydrographic Control Stations could not be identified and, therefore, were not positioned.

The manuscripts were plotted on the Calcomp 718 Plotter using the Alaska State Plane Coordinate System, Zone 6.

ADEQUACY OF CONTROL

Of the control provided, all held within the National Standards of Map Accuracy, except for station Goon, 1945. This station was paneled direct, but could not be held closer than 15 feet in X and 30 feet in Y. Upon completion of the photo mission, the field party did not return to verify that the panels, which had been set in place one month prior, had

remained in tact. station Goon, along with other paneled stations, did not appear on the photographs as sketched by the field party. This office is assuming that the panel marking station Goon had moved prior to being photographed. It was not held in the adjustment.

Except for station Goon, 1945, the control provided, proved to be adequate for completion of the project. Tie points were required in some areas to supply necessary horizontal control.

#### SUPPLEMENTAL DATA

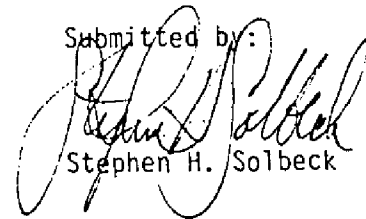
USGS quardrangles were used to provide vertical control for the project.

Nautical Charts were used to locate aids and landmarks.

#### PHOTOGRAPHY

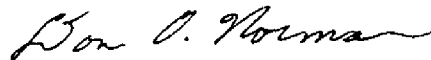
The coverage, overlap, and quality of the photographs proved adequate for completion of the project.

Submitted by:



Stephen H. Solbeck

Approved and Forwarded:



Don O. Norman  
Chief, Aerotriangulation Unit









## REFERENCE TO SKETCH OF BRIDGING PHOTOGRAPHS

1	SHANE, 1982	(429100)
2	LAGOON, 1944	(433100)
3	PORT, 1944	(435100)
4	NAKOLILOK E. BASE, 1944	(438100)
5	YANT, 1944	(442100)
6	KUNMIK, 1944	(444100)
7	RUSS, 1982	(469100)
8	ASPEN, 1945	(481100)
9	GOON, 1945	(479100)
10	LAND, 1945	(478100)
11	LAG, 1945	(468100)
12	BLU, 1925	(467100)
13	KUMLIK, 1925	(465100)
14	ATTI, 1982	(462100)
15	SUT, 1925	(461100)
16	WIK, 1925	(460100)
17	FOGGY CAPE LIGHT, 1944	(458100)
18	HAWK, 1944	(603100)
19	HUEY, 1982	(602100)
20	UGAI, 1944	(600100)

## Fit to Control

<u>Station Name</u>		<u>Values in Feet</u>	
	<u>1:12,000</u>	<u>X</u>	<u>Y</u>
<u>STRIP #1</u>			
OGAI, 1944	600100△	.001	-.001
HUEY, 1982	602100△	.000	.000
HAWK, 1944	603100△	.000	.000
	<u>1:50,000</u>		
<u>STRIP #1</u>			
ATTI, 1982	462100△	-.307	.068
SUT, 1925	461100△	-.561	-.954
WIK, 1925	460100△	.873	.497
FOGGY CAPE LIGHT, 1944	458100△	-.004	.388
<u>STRIP #2</u>			
KUMLIK, 1925	465100△	.422	-.700
BLU, 1925	467100△	-2.398	.860
LAG, 1945 - Sub Point	468101△	1.938	.300
RUSS, 1982	469100△	.024	-.456
<u>STRIP #3</u>			
RUSS, 1982	469100△	-2.184	.991
LAG, 1945 - Sub Point	468101△	5.473	-1.354
LAND, 1945	478100△	-4.094	.753
GOON, 1945	479100	-15.787	-32.546
ASPEN, 1945	481100△	.806	-.388
<u>STRIP #4</u>			
GOON, 1945	479100	-15.482	-30.214
TIE from #3	485801△	-.172	.324
TIE from #3	485802△	-.189	-.390
TIE from #3	486801△	-.729	-.022
TIE from #3	486802△	-.310	-1.093

2

TIE FROM 3#	486803△	.881	.990
LAND, 1945	478100	-6.042	5.116
TIE FROM #3	487801△	.472	-.773
TIE FROM #3	487802△	-.963	.813
TIE FROM #3	487803△	.900	.051

STRIP #6

SHANE, 1932 - Sub Point	429101△	.838	-1.243
LAGOON, 1944	433100△	-2.495	3.446
PORT, 1944	435100△	1.204	-2.546
NAKOLILOK E. Base, 1944	438100△	-.038	.454
YANT, 1944	442100△	1.785	-.397
KUNMIK, 1944	444100△	-1.290	.293

STRIP #7

ALL POINTS ARE TIES	356801△	1.099	-.088
FROM STRIP #6	356802△	-1.134	1.198
	356803△	.794	.266
	357801△	-2.517	-1.172
	357802△	.991	-1.309
	357803△	-1.949	.448
	358801△	2.983	-.853
	358802△	1.302	.231
	358803△	.840	1.773
	360801△	.320	.020
	360802△	-1.647	.175
	360803△	-2.752	.519
	362801△	2.019	1.803
	362802△	-.686	.804
	362803△	.151	-3.205
	364801△	-.485	1.800
	364802△	-.670	1.288
	364803△	1.380	.985

3

365801	.948	1.272
365802	-.842	-.433
365803	-.458	-.873

STRIP #8

TIES FROM #6	413801	-.026	.789
#6	413802	-.191	2.415
#6	413803△	-1.430	1.784
#6	413804	-.566	.704
#6	413805	-3.305	.638
TIE FROM #7	413806	-.407	-2.578
#7	413807	.371	-.638
#7	413808	-2.094	.115
#7	414801	3.171	-.452
#7	414802△	2.085	-1.015
#7	414803	3.397	-4.059
TIE FROM #6	360801△	2.766	-1.955
#6	360802	1.186	1.216
#6	360803△	-2.546	-.019
TIE FROM #7	416801	2.708	3.426
#7	416802△	1.537	1.787
#7	416803	-.989	-.915
TIE FROM #6	417801△	-3.838	1.437
#6	417802	-3.929	1.244
TIE FROM #7	417804△	.109	-.675
#7	417805	-.753	.041
#7	417806	-.479	-.108
#7	417807	-1.098	-.992
PORT, 1944	435100△	-.016	-1.680
TIE FROM #7	419801△	1.225	-.138
#7	419802	2.174	-1.229
#7	419803	.490	1.077
TIE FROM #6	356801△	1.294	1.127

	4		
TIE FROM #6	356802	2.300	2.957
#6	356803	-2.906	-3.178
TIE FROM #7	420802 $\Delta$	-1.186	-.653
#7	420803	-.779	-1.627

$\Delta$  STATIONS HELD IN THE STRIP ADJUSTMENTS

Ratio Values  
 CM-8200  
 Cape Kilokak to Cape Kumlik, Alaska

1:50,000 Color Bridging Photographs Ratio Value

82 B(C)	6356 thru 6365	2.565
	6413 " 6420	2.559
	6429 " 6445	2.567
	6457 " 6463	2.564
	6465 " 6469	2.569
	6473 " 6481	2.568
	6483 " 6487	2.562
	6600 " 6603 (1:12,000)	.608

1:50,000 Black-and-White-Infrared Photographs-MHW

83 B(C)	3584 thru 3603	2.538
	3609 " 3622	2.535
	3626 " 3631	2.543
	3633 " 3640	2.538
	3644 " 3650	2.537
	3654 " 3658	2.539
	5392 " 5395	2.573
	5397 " 5401	2.571
	5403 " 5406 (1:12,000)	.606

1:50,000 Black-and-White Infrared Photographs-MLLW

83 B(R)	5500 thru 5503	2.491
	5505 " 5510	2.487
	5655 " 5675	2.497
	5681 " 5693	2.500
	5699 " 5706	2.500
	5712 " 5714	2.503

2

83 B(R) 5720 thru 5724	2.503
5726 " 5730	2.504
5734 " 5738	2.502
5827 " 5832	2.538
5839 " 5845	2.557
5849 " 5852	2.545
5856 " 5859 (1:12,000)	.584

1:30,000 Color Compilation Photographs

82 B(C) 6606 thru 6615	1.531
6624 " 6626	1.532
6649 " 6659	1.526
6660 " 6661	1.526
6665 " 6676	1.530
6693 " 6703	1.529
6708-09, 6711-13, 6715-18	1.532
6885	1.524
8438 thru 8442	1.527
8444 " 8447	1.526
8467 " 8473	1.520
8484 " 8487	1.533
8490-93, 8495-96	1.529
8503 thru 8505	1.523
8515 " 8522	1.536
8576 " 8584	1.500
8651 " 8656	1.531

## DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODETTIC DATUM		ORIGINATING ACTIVITY		
			North American 1927	Photogrammetric Sec., Seattle, WA			
TP-01154	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION		REMARKS
			STATE	ZONE	$\phi$ LATITUDE	$\lambda$ LONGITUDE	
LAND, 1945	G.P. Vol. V Pg. 81	479100	X=		$\phi$ 56° 45' 22.397"		
			Y=		$\lambda$ 157° 29' 20.323"		
LAG, 1945	G.P. Vol. V Pg. 82	468100	X=		$\phi$ 56° 40' 38.729"		
			Y=		$\lambda$ 157° 31' 53.263"		
BLJ, 1925	G.P. Vol. V Pg. 82	467100	X=		$\phi$ 56° 40' 13.202"		
			Y=		$\lambda$ 157° 28' 31.918"		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
			X=		$\phi$		
			Y=		$\lambda$		
COMPUTED BY			COMPUTATION CHECKED BY				DATE
LISTED BY V. McNeel			LISTING CHECKED BY Thornton				DATE 08/25/82
HAND PLOTTING BY			HAND PLOTTING CHECKED BY				DATE 08/25/82



Compilation Report  
TP-01154

31. Delineation

Delineation was accomplished by a combination of stereo instrument and graphic methods. The color bridging photographs were used in conjunction with a Wild B-8 to compile the MHW line and interior detail as well as bare and awash rocks. Pass points were also selected and positioned on the B-8 to control the enlarged infrared photographs taken at predicted mean lower low water. These enlarged infrared photographs were used to graphically compile the MLLW line, ledges, and additional rocks which may not have been visible on the color bridging photographs because of the difference in water level.

32. Control

As discussed in the preceding Photogrammetric Plot Report, dated April 1984, control is adequate.

33. Supplemental Data

None.

34. Contours and Drainage

Contours are not required on this project. Drainage was delineated on the stereoplotter from the color 1:50,000 scale bridging photographs.

35. Shoreline and Alongshore Detail

The preceding form 76-36B, as well as section 31 of this report detail the sources and method used to compile the shoreline and alongshore detail. Standard symbolization was used throughout this manuscript. Infrared contact prints 83B(I) 3598 through 3603, 83B(I) 3635 through 3639, and 83B(I) 5902 and 5903 were provided and used as interpretive aids. The tide level displayed on these 1:50,000 scale prints was calculated to be from 1.3 to 1.8 feet below Mean High Water.

36. Offshore Detail

Offshore detail was compiled in the same manner as the shoreline and along-shore detail discussed in the preceding section of this report.

37. Landmarks and Aids to Navigation

These are no charted landmarks or aids to navigation within this manuscript.

38. Control for Future Surveys

None.

39. Junctions

Refer to the preceding form 76-36B, item five.

40. Horizontal and Vertical Accuracy

Refer to the Photogrammetric Plot Report, dated April 1984.

46. Comparison with Existing Maps

A comparison was made with the following U.S.G.S. quadrangles:

SUTWIK ISLAND (C-5), Alaska, 1963, 1:63,360 scale  
SUTWIK ISLAND (D-5), Alaska, 1963, 1:63,360 scale  
SUTWIK ISLAND (D-4), Alaska, 1963, 1:63,360 scale  
SUTWIK ISLAND, Alaska, 1963, 1:250,000 scale

47. Comparison with Nautical Charts

A comparison was made with the following National Ocean Service chart:

Wide Bay to Cape Kumlik, 16568, 5th edition, December 9, 1978, 1:106,000<sup>6</sup>  
scale.

Items to be applied to Nautical Charts immediately:      None

Submitted by.

*Daniel C. Holeski*

Daniel C. Holeski  
Cartographer  
July 24, 1985

Approved:

*James R. Minton*

James R. Minton  
Acting Chief, Photogrammetric Section  
July 25, 1985

26  
AUG 13 1985

GEOGRAPHIC NAMES

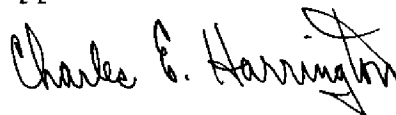
FINAL NAME SHEET

CM-8200 (Cape Kilokak to Cape Kumlik, Alaska)

TP-01154

Alaska Peninsula  
Amber Bay  
Aniakchak Bay  
Aniakchak River  
Black Creek  
Cape Ayutka  
Eagle Island  
Elephant Head Point  
Garden Island  
Shelikof Strait  
Village Creek  
Wolverine Creek

Approved:



Charles E. Harrington  
Chief Geographer  
Nautical Charting Division

REVIEW REPORT  
SHORELINE

TP-01154

61 - GENERAL STATEMENT

See Summary included with this 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. quadrangles:  
Sutwik Island (C-4), Alaska, dated 1963,  
Sutwik Island (C-5), Alaska, dated 1963;  
Sutwik Island (D-5), Alaska, dated 1963; all three are 1:63,360 scale;  
Sutwik Island, Alaska, dated 1963, scale 1:250,000.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There are no contemporary hydrographic surveys within the limits of this map.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following NOS chart:  
Preliminary Chart 16568, 5th edition, dated December 9, 1978, scale 1:106,600.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by

*Lowell O. Neterer, Jr.*  
Lowell O. Neterer, Jr.  
Final Reviewer  
October 29, 1985

Approved for forwarding

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

Approved

*JA Money*  
Chief, Photogrammetric Section,  
Rockville

*Ronald K. Brewer*  
Chief, Photogrammetry Branch,  
Rockville

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TO: N/MOP - Robert L. Sandquist

FROM: *JS* N/CG2 - J. Austin Yeager *JS* Frederick K. Ganjon

SUBJECT: Aerotriangulation Stations and Shoreline Accuracy for  
OPR-P180-FA-86

REF: Memorandum to N/MOP from Commanding Officer, NOAA Ship  
FAIRWEATHER, Same Subject, dated August 19, 1986

The Commanding Officer, NOAA Ship FAIRWEATHER S220, has established that the control points furnished by the Aerotriangulation Unit, Photogrammetry Branch (PB), for Job CM-8200, Cape Kilokak to Cape Kumlik, Alaska, have a datum shift of approximately 18 meters. PB investigated this discrepancy and found it correct. When this project was bridged by aerotriangulation, the control points used were based on a 1948 geodetic adjustment. A new geodetic adjustment was performed in 1976. This adjustment caused a datum shift in longitude of approximately 1 second and .05 to .1 second in latitude

Five geodetic control stations were selected from Job CM-8200 extending over the whole project. A comparison was made between the 1948 and 1976 adjustments.

Station	1948 Adjustment	1976 Adjustment	Datum Shift	Meters
Lagoon	57°06'02.626"	57°06'02.722"	.096"	2.97
1944	156°30'28.250"	156°30'29.290"	1.040"	17.50
Port	57°00'40.699"	57°00'40.792"	.093"	2.87
1944	156°35'41.795"	156°35'42.836"	1.041"	17.57
Yant	56°50'45.505"	56°50'45.579"	.074"	2.29
1944	157°06'22.039"	157°06'23.072"	1.033"	17.51
Sut	56°34'17.611"	56°34'17.673"	.062"	1.92
1925	157°12'56.916"	157°12'57.916"	1.000"	17.08
Lag	56°40'38.729"	56°40'38.779"	.050"	1.55
1954	157°31'53.263"	157°31'54.285"	1.022"	17.40

CG2311:PDempsey:443-8340:  
jls:9/17/86:Aero/Alaska:APK2

**FILE COPY**

CODE	SURNAME	DATE	CODE	SURNAME	DATE
N/CG231	<i>Wright</i>	<i>9/17/86</i>			
N/CG23	<i>Breche</i>	<i>9/17</i>			

The mean value of this adjustment is 17.4 meters in longitude and 2.3 meters in latitude. This should be taken into consideration when applying these manuscripts.

A copy of this Memorandum will be inserted in each Descriptive Report for Job CM-8200.

cc:

N/MOP21 - Richards  
N/CG22 - Nortrup  
N/CG23 - Brewer  
N/CG24 - Matsushige

