

TP- 01150

TP- 01150

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-01150	Edition No. 1
Job No. CM-8200	
Map Classification CLASS III FINAL	
Type of Survey SHORELINE	
LOCALITY	
State ALASKA	
General Locality CAPE KILOKAK TO CAPE KUMLIK	
Locality AMBER BAY	
19 <sub>82</sub> TO 19 <sub>83</sub>	
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>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input checked="" type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           SURVEY TP. <u>01150</u>             MAP EDITION NO. <u>(1)</u>             MAP CLASS <u>III Final</u>             JOB <u>PH CM 8200</u> </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>01150</u>  MAP EDITION NO. <u>(1)</u>  MAP CLASS <u>III Final</u>  JOB <u>PH CM 8200</u>		
TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>01150</u>  MAP EDITION NO. <u>(1)</u>  MAP CLASS <u>III Final</u>  JOB <u>PH CM 8200</u>						
PHOTOGRAMMETRIC OFFICE Pacific Marine Center Seattle, Washington  OFFICER-IN-CHARGE  David W. Yeager		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> <b>LAST PRECEDING MAP EDITION</b> </td> </tr> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           JOB <u>PH</u>            MAP CLASS _____            SURVEY DATES:            19__ TO 19__         </td> </tr> </table>		<b>LAST PRECEDING MAP EDITION</b>		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH</u> MAP CLASS _____ SURVEY DATES: 19__ TO 19__
<b>LAST PRECEDING MAP EDITION</b>							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH</u> MAP CLASS _____ SURVEY DATES: 19__ TO 19__						
<b>I. INSTRUCTIONS DATED</b>							
<b>1. OFFICE</b>		<b>2. FIELD</b>					
Aerotriangulation      Feb. 15, 1984 Office                      July 24, 1984		Field                      Feb. 5, 1982 Field (Change 1)      May 21, 1982					
<b>II. DATUMS</b>							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify) None					
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) None					
3. MAP PROJECTION  Transverse Mercator		4. GRID(S) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">STATE Alaska</td> <td style="width: 50%;">ZONE 6</td> </tr> <tr> <td>STATE</td> <td>ZONE</td> </tr> </table>		STATE Alaska	ZONE 6	STATE	ZONE
STATE Alaska	ZONE 6						
STATE	ZONE						
5. SCALE 1:20,000							
<b>III. HISTORY OF OFFICE OPERATIONS</b>							
<b>OPERATIONS</b>		<b>NAME</b>	<b>DATE</b>				
1. AEROTRIANGULATION BY METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY		S. Solbeck	April 1984				
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: <u>Calcomp 718 plotter</u> CHECKED BY		D. Norman	April 1984				
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION      CHECKED BY		D. Butler	April 1984				
INSTRUMENT <u>Wild B-8 Stereoplotter</u> CONTOURS BY		J. Minton	Oct. 1984				
SCALE: <u>1:20,000</u> CHECKED BY		N.A.	Oct. 1984				
4. MANUSCRIPT DELINEATION PLANIMETRY BY		D. Holeski	Nov. 1984				
METHOD: <u>Smooth drafted, graphic</u> CHECKED BY		J. Minton	Nov. 1984				
MLLW line      CONTOURS BY		N.A.					
SCALE: <u>1:20,000</u> HYDRO SUPPORT DATA BY		N.A.					
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		N.A.					
6. APPLICATION OF FIELD EDIT DATA BY		N.A.					
7. COMPILATION SECTION REVIEW <u>Class III</u> BY		N.A.					
8. FINAL REVIEW <u>Class III</u> BY		J. Minton	July 1985				
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr.	Oct. 1985				
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr.	Dec. 1985				
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		P. Dempsey	Jan. 1986				
		E. DAUGHERTY	FEB 1986				

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYTP-01150  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) (focal length 152.74 mm) Wild R.C. 10 "B"		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	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 150° W	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
82B(C)6479 thru 6481	Jul.19,1982	11:56	1:50,000	7.3 ft. above MLLW	
83B(I)5828 thru 5830	Aug.26,1983	9:01	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 LOW-WATER OR MEAN LOWER LOW-WATER LINE:

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

## 4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

## 5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No Survey	TP-01151	TP-01154 & TP-01155	No Survey

## REMARKS

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYTP-01150  
HISTORY OF FIELD OPERATIONSI. ☒ 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 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 and paneled

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	ASPEN, 1945		

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.

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

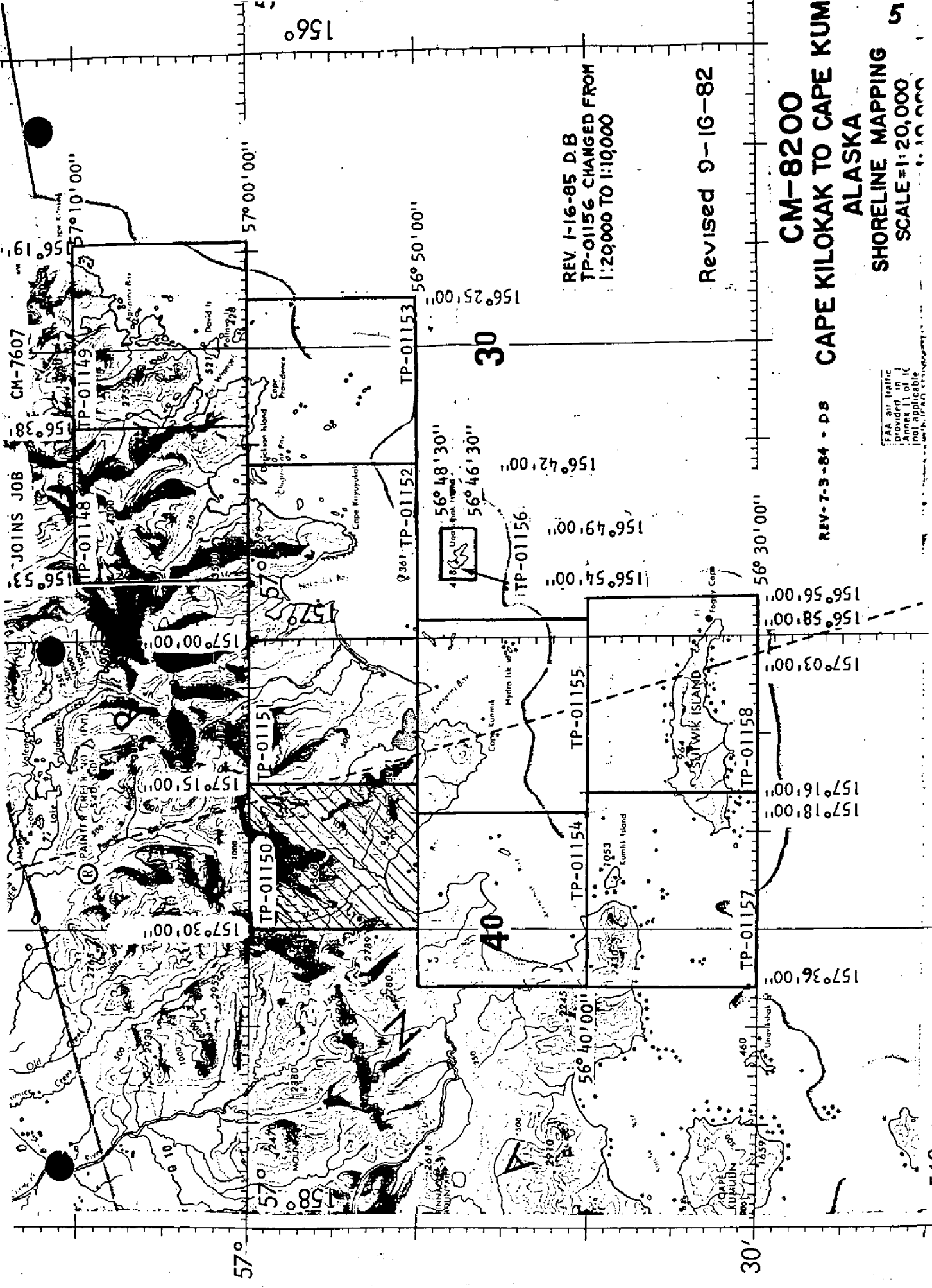
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

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  
1:20,000 TO 1:10,000

Revised 9-16-82

CM-8200  
CAPE KILOKAK TO CAPE KUM  
ALASKA

SHORELINE MAPPING  
SCALE=1:20,000  
5

FAA and other  
data are not  
guaranteed  
not applicable

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT

TP-01150

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.



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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 443-8168





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



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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/R

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

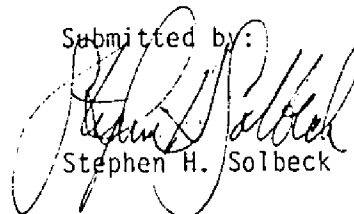
USGS quadrangles were used to provide vertical control for the project.

Nautical Charts were used to locate aids and landmarks.

#### PHOTOGRAPHY

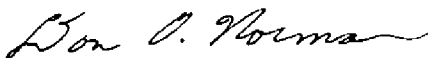
The coverage, overlap, and quality of the photographs proved adequate for completion of the project.

Submitted by:



Stephen H. Solbeck

Approved and Forwarded:

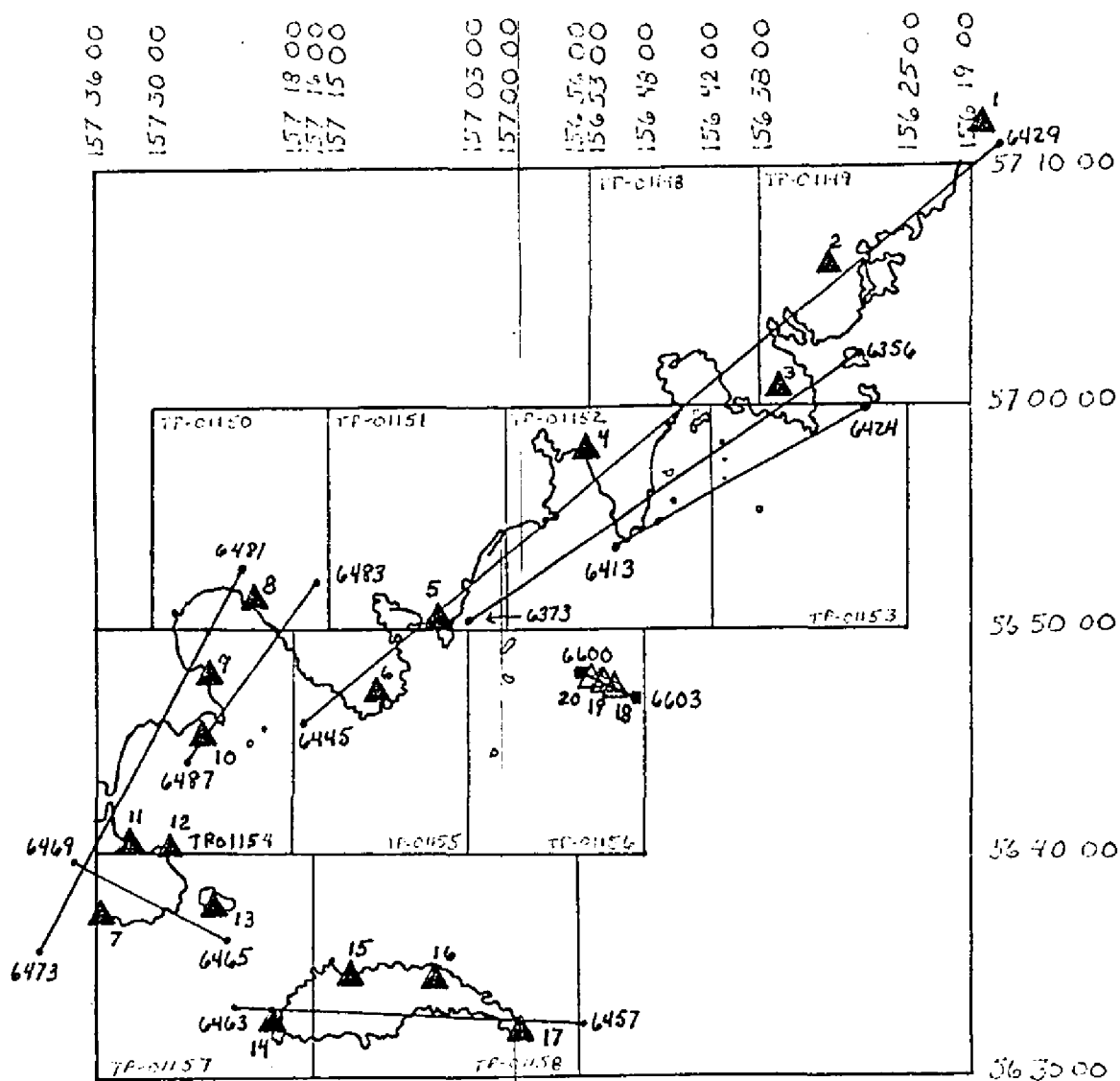


Don O. Norman  
Chief, Aerotriangulation Unit

# CII-8200 CAPE KILOKAK TO CAPE KUMLIK ALASKA

## BRIDGING PHOTOGRAPHS

- 82B(C) 1:50000
- 82B(C) 1:12000
- ▲ HORIZONTAL CONTROL

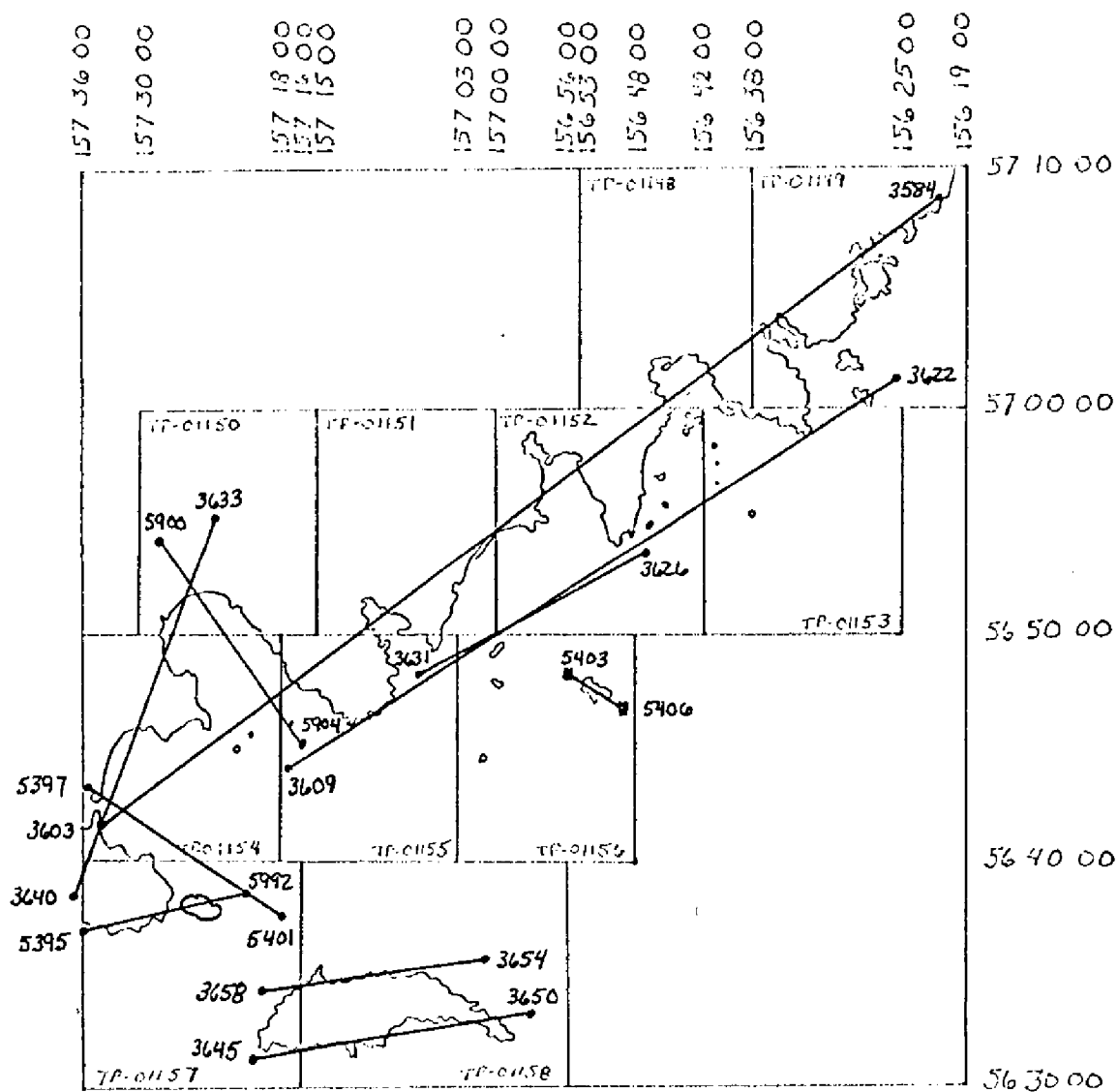


# CIN-8200 CAPE KILOKAK TO CAPE KUIHLIK ALASKA

BLACK AND WHITE INFRARED PHOTOGRAPHS

MHW

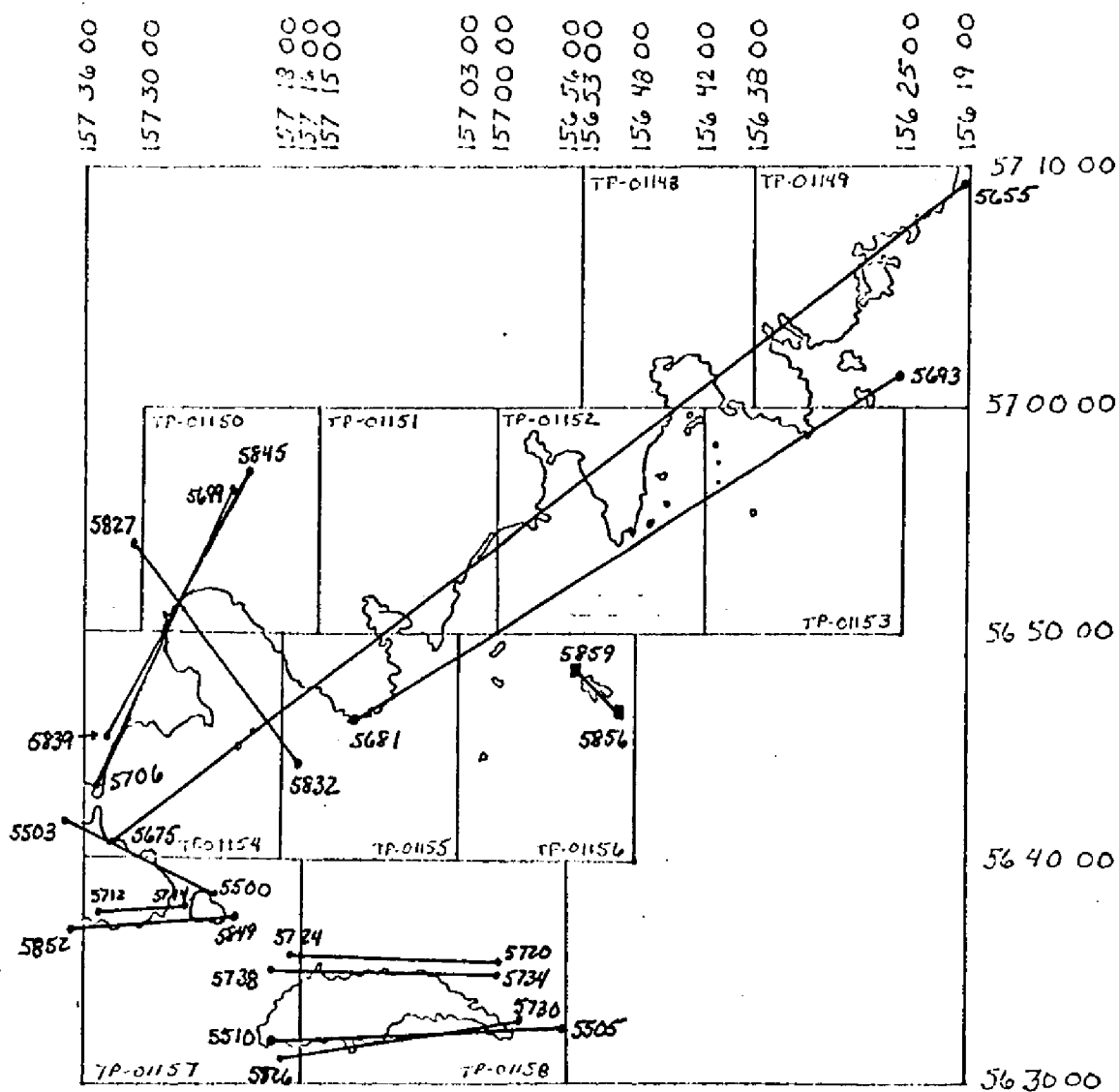
- 83 B(R) 1:50000
- 83 B(R) 1:12000



# CIN-8200 CAPE KILOKAK TO CAPE KUMLIK ALASKA

BLACK AND WHITE INFRARED PHOTOGRAPHS  
MLLW

- 83 B(R) 1:50000
- 83 B(R) 1:12000





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

STRIP #6

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

STRIP #7

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

3

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

STRIP #8

TIE 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 " 5481	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.		JOB NO.	GEODEIC DATUM		ORIGINATING ACTIVITY	
TP-115A		CJ-82AA	North American 1927		Photogrammetric Sec., Seattle, Wa.	
STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION	
			STATE	ZONE	$\phi$ LATITUDE	$\lambda$ LONGITUDE
ASPEN, 1945	G.P. Vol. V Pg. 81	4811 AA	X=		$\phi$ 56° 51' 16.267"	
			y=		$\lambda$ 157° 22' 14.858"	
			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=		$\lambda$	
			X=		$\phi$	
			y=		$\lambda$	
			X=		$\phi$	
			y=		$\lambda$	
			X=		$\phi$	
			y=		$\lambda$	
COMPUTED BY			COMPUTATION CHECKED BY		DATE	
LISTED BY	V. McNeel	DATE	LISTING CHECKED BY		DATE	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE	



Compilation Report  
TP-01150

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) 5900 through 5902 were provided and used as interpretive aids. The tide level displayed on these 1:50,000 scale prints was calculated to be 1.3 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 (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 23, 1985

Approved:

*James R. Minton*

James R. Minton  
Acting Chief, Photogrammetric Section  
July 24, 1985

26  
AUG 13 1985

GEOGRAPHIC NAMES

FINAL NAME SHEET

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

TP-01150

Alaska Peninsula  
Amber Bay  
Main Creek  
Mountain Creek  
Northeast Creek  
West Creek

Approved:



Charles E. Harrington  
Chief Geographer  
Nautical Charting Division

REVIEW REPORT  
SHORELINE

TP-01150

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 U.S.G.S. quadrangles:  
Sutwik Island (D-4), Alaska, dated 1963,  
Sutwik Island (D-5), Alaska, dated 1963; both 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.

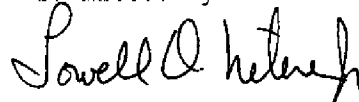
65 - COMPARISON WITH NAUTICAL CHARTS

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.  
Final Reviewer  
October 25, 1985

Approved for forwarding

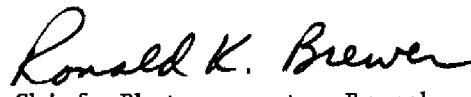


Billy H. Barnes  
Chief, Photogrammetric Section

Approved



Chief, Photogrammetric Section,  
Rockville



Chief, Photogrammetry Branch,  
Rockville

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TO: N/MOP - Robert L. Sandquist

FROM: *[Signature]* N/CG2 - J. Austin Yeager *[Signature]* 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

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

**FILE COPY**

CODE	SURNAME	DATE	CODE	SURNAME	DATE
N/CG2311	<i>Wright</i>	<i>9/17/86</i>			
N/CG2311	<i>Brewer</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

### 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 chart

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 Re

[illegible]