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. Edition No.                        |
| TP-01148 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                                   |
| CHIGINAGAK BAY                             |
|  |
|  |
| 19 82 TO 19 83                             |
| REGISTERED IN ARCHIVES                     |
| DATE                                       |

| TYPE OF SURVEY                     | SURVEY 1   | r- <u>01148</u>   |
|------------------------------------|--|---|
| ORIGINAL                           | MAP EDITIO   | он но (1)   |
| RESURVEY                           | MAP CLASS  | III Final   |
| □ REVISED                          | лов <b>Ж</b>   | <b>‰.cm</b> _82∞∞   |
|                                    | ING MAP EDIT   | ION   |
| TYPE OF SURVEY                     | <del></del>  | PH  |
| ORIGINAL                           | MAP CLASS  | i   |
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|                                    |  | ت<br>ت 1982   |
| Field (Change 1)                   | May 2  | 1, 1982   |
| OTHER (Specify)                    |  |   |
| OTHER (Specify)                    |  |   |
|                                    |  |   |
|                                    |  |   |
|                                    | 6  |   |
| STATE                              | ZONE   |   |
|                                    |  |   |
|                                    |  | DATE  |
| <del> </del>                       |  | April 1984  |
|                                    |  | Aug. 1984<br>Aug. 1984  |
| <del></del>                        |  | Hug. 1904   |
|                                    |  |   |
|                                    |  | Oct. 1984   |
| - 10: 1                            |  | Nov. 1984   |
| N.A.                               |  |   |
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| 77 4                               | <u> </u>   |   |
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| N.A.                               | ·  |   |
| N.A.                               |  | To 3 - 1 085  |
| N.A.<br>N.A.<br>J. Minton          | In To  | July 1985<br>Sept. 1985   |
| N.A. N.A. J. Minton L. O. Neterer, |  | Sept. 1985  |
| N.A.<br>N.A.<br>J. Minton          |  | July 1985<br>Sept. 1985<br>Dic. 1985<br>Jan 1996<br>I-EB 1986   |
|                                    | RESURVEY REVISED  LAST PRECED TYPE OF SURVEY ORIGINAL RESURVEY REVISED  2. Field Field (Change 1)  OTHER (Specify)  OTHER (Specify)  OTHER (Specify)  ASTATE Alaska STATE  NAME S. Solbeck D. Norman S. Solbeck D. Norman D. Holeski J. Minton N.A. N.A. D. Holeski J. Minton N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A | RESURVEY RESURVEY REVISED  LAST PRECEDING MAP EDIT TYPE OF SURVEY ORIGINAL RESURVEY REVISED  2. FIELD  Field Field (Change 1)  OTHER (Specify)  OTHER (Specify)  At GRID(S)  STATE Alaska 6 STATE  NAME  S. Solbeck D. Norman D. Holeski J. Minton N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A |

| NOAA FORM 76-36B<br>(3-72)   | сом  | TP-01148 PILATION SOL                                   |  | C AND ATMOSPHERIC | NT OF COMMERCE<br>Administration<br>AL OCEAN SURVEY |
|--|--|---|--|-------------------|---|
| 1. COMPILATION PHOTOGRAPHY CAMERA(S) (focal length,  | 152.74 mm)   | Types OF P  | HOTOGRAPHY                                 | TIME REF          | ERENCE  |
| Wild R.C. 10 "B"   |  |   | END  |                   |   |
| TIDE STAGE REFERENCE   |  | (C) COLOR   |  | zone<br>Alaska    | STANDAR   |
| PREDICTED TIDES  | . Ì  | (P) PANCHRO   | MATIC                                      | MERIDIANA         | DAYLIGHT  |
| REFERENCE STATION RECORD TIDE CONTROLLED PHOTOGRA  | PHY  | (I) INFRAREI  | 0  | 150° W            | LJDAYLIGH   |
| NUMBER AND TYPE  | DATE   | TIME  | SCALE                                      | STAGE             | F TIDE  |
| 82B(C)6435 thru 6437<br>83B(K)5660 thru 5662   | Jul.19,1982<br>Aug.26,1983                                     |   | 1:50,000<br>1:50,000                       | 6.0 ft. abo       |   |
| REMARKS Tide levels were calc the reference station  | culated for Ar   | nchorage Bay<br>Water is 8.                             | subordinate<br>l feet above                | station using     | g Kodiak as<br>ow Water.                            |
| 2. SOURCE OF MEAN HIGH-WATE  The Mean High Water color photographs li                                | R LINE:<br>Line was comp                                       |   |  |                   |   |
| The Mean Lower Low enlargements listed report for the enla points which were some MHW line described | Water Line wa<br>in item one<br>rgement ratio<br>elected and p | s compiled :<br>above. See<br>. These pr<br>ositioned d | graphically<br>the attache<br>ints were co | ntrolled with     | pass  |

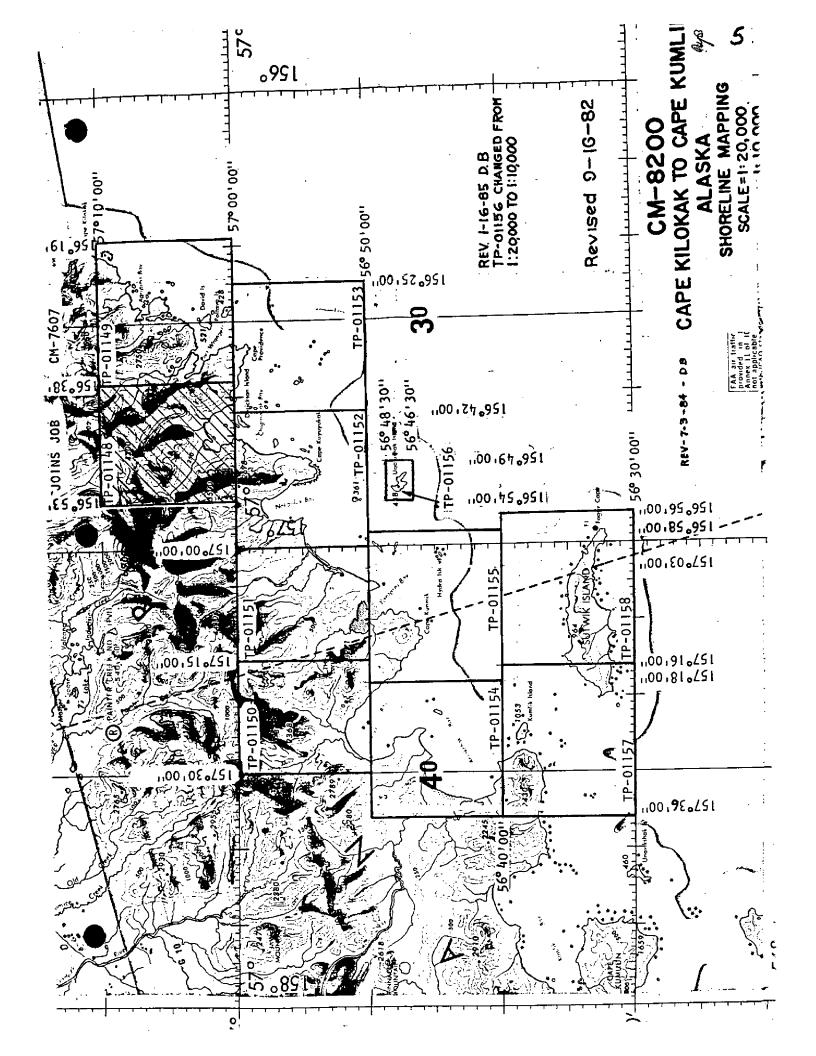
| 10AA FORM 76-36C<br>3-72)  | TP-01148                                    | NATIONAL OCEAN          | IIG AND ATMOSPHERIC | NT OF COMMERC<br>C ADMINISTRATION<br>AL OCEAN SURVE |  |  |  |
|--|---|-------------------------|---------------------|---|--|--|--|
|  | HISTORY OF FIELD                            | OPERATIONS              |                     | <del></del>   |  |  |  |
| I. XX FIELD INSPECTION OPERATION (premarking) THELD EDIT OPERATION |   |                         |                     |   |  |  |  |
|  | OPERATION                                   | N                       | AME                 | DATE  |  |  |  |
| . CHIEF OF FIELD PART  | Y   | D Molher                |                     | T 1000  |  |  |  |
| <u></u>  | RECOVERED BY                                | R. Melby<br>None        | <del></del>         | June 1982   |  |  |  |
| . HORIZONTAL CONTROL   |   | None                    |                     | 1   |  |  |  |
| •  | PRE-MARKED OR IDENTIFIED BY                 | None                    |                     |   |  |  |  |
| <u> </u>   | RECOVERED BY                                | N.A.                    |                     |   |  |  |  |
| . VERTICAL CONTROL   | ESTABLISHED BY                              | N.A.                    |                     | <u> </u>  |  |  |  |
|  | PRE-MARKED OR IDENTIFIED BY                 | N.A.                    |                     |   |  |  |  |
|  | RECOVERED (Triangulation Stations) BY       | None                    |                     | <u> </u>  |  |  |  |
| 4. LANDMARKS AND<br>AIDS TO NAVIGATION                             | LOCATED (Field Methods) BY                  | None                    |                     | <del>                                     </del>    |  |  |  |
|  | IDENTIFIED BY                               | None                    |                     | <del> </del>  |  |  |  |
|  | TYPE OF INVESTIGATION                       | 1                       |                     | }   |  |  |  |
| 5. GEOGRAPHIC NAMES INVESTIGATION                                  | COMPLETE  BY  SPECIFIC NAMES ONLY           | +                       |                     |   |  |  |  |
|  | TANO INVESTIGATION                          |                         |                     | 1   |  |  |  |
| S. PHOTO INSPECTION  | CLARIFICATION OF DETAILS BY                 | None                    |                     | <del> </del>  |  |  |  |
| 7. BOUNDARIES AND LIMIT  |   | N.A.                    |                     | <del></del>   |  |  |  |
| I. SOURCE DATA   |   | 14,6111                 |                     |   |  |  |  |
| 1. HORIZONTAL CONTROL IDENTIFIED 2. VERTICAL CONTROL IDENTIFIED    |   |                         |                     |   |  |  |  |
| None N.A.  |   |                         |                     |   |  |  |  |
| PHOTO NUMBER   | STATION NAME                                | PHOTO NUMBER            | STATION DES         | IGNATION  |  |  |  |
|  |   |                         |                     |   |  |  |  |
| 3. PHOTO NUMBERS (Clari  | fication of details)                        | <u> </u>                |                     |   |  |  |  |
| None   |   |                         |                     |   |  |  |  |
| <del></del>  | TO NAVIGATION IDENTIFIED                    | <del></del>             |                     |   |  |  |  |
| •  | . ,   |                         |                     |   |  |  |  |
| None   |   | •                       |                     |   |  |  |  |
| PHOTO NUMBER   | OBJECT NAME                                 | PHOTO NUMBER            | OBJECT              | NAME  |  |  |  |
|  |   |                         | · <del></del>       | -   |  |  |  |
|  |   | 1                       |                     |   |  |  |  |
| }  |   | 1                       |                     |   |  |  |  |
|  |   | ]                       |                     |   |  |  |  |
|  |   |                         |                     |   |  |  |  |
|  |   | <u> </u>                |                     |   |  |  |  |
| 5. GEOGRAPHIC NAMES:   | REPORT XX NONE                              | 6. BOUNDARY AN          | D LIMITS: REPO      | RT XX NONE  |  |  |  |
| 7. SUPPLEMENTAL MAPS   | AND PLANS                                   |                         |                     |   |  |  |  |
| None   |   |                         |                     |   |  |  |  |
|  | S (Sketch books, etc. DO NOT list data subm | itted to the Geodesv Di | vision)             |   |  |  |  |
| Field Operation  |   |                         |                     |   |  |  |  |
| oporation  |   |                         |                     |   |  |  |  |
|  |   |                         |                     |   |  |  |  |
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| Class<br>Comple   |       |     |

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

## TP-01148

|              |   |          | RECO          | RD OF SURVEY                                 | )SE              |                         |                |
|--------------|---|----------|---------------|--|------------------|-------------------------|----------------|
| MANUSCRIPT   |   |          |               |  |                  | DATE MANUECO            | RIPT FORWARDED |
|              | COMPILATION STAGES                        |          |               |  |                  |                         |                |
| DATA         | COMPILED                                  | D        | ATE           | REMA   | RKS              | MARINE CHARTS           | HYDRO SUPPORT  |
|              |   |          |               |  | C1.13            |                         |                |
|              |   |          |               | Sent to the                                  |                  |                         | 1              |
| Class III    | Compilation                               | May      | 1985          | NOAA Ship FA                                 | IRWEATHER        | <del></del>             |                |
|              |   | 1        |               |  | •                |                         |                |
| Class III    | Compilation                               |          |               |  | • . •            |                         |                |
| Complete     |   | July     | 1985          | Class III Ma                                 | nuscript         | <del></del>             | <del></del>    |
|              |   | ` .      |               |  |                  | j , ,                   | 1.110          |
|              |   | i        |               |  | M                | 16/12/85                | 16/12/85       |
| Final Rev    | iewed                                     | Sept     | <u>. 1985</u> | Final Class                                  | III Map          | <del></del>             | <del> </del>   |
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|              |   | <u> </u> |               | <u>                                     </u> |                  |                         |                |
| I. LANDMARK  | S AND AIDS TO NAVIG                       | ATION    | Non e         |  |                  |                         |                |
| 1. REPORT    | S TO MARINE CHART D                       | IVISION, | NAUTICAL      | DATA BRANCH                                  |                  |                         |                |
|              | CHART LETTER                              | 1 .      | DATE          |  | R                | EMARKS                  |                |
| NUMBER       | NUMBER ASSIGNED                           | FOF      | WARDED        | <u> </u>                                     |                  |                         |                |
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|              |   | ┧        |               |  |                  |                         |                |
| 2. REI       | PORT TO MARINE CHA                        | RT DIVIS | ION, COAS     | T PILOT BRANCH.                              | DATE FORWAR      | DED:                    |                |
| 3. RE        | PORT TO MARINE CHAP<br>PORT TO AERONAUTIC | AL CHA   | RT DIVISIO    | N, AERONAUTICAL                              | DATA SECTION     | . DATE FORWARDE         | D:             |
| III. FEDERAL | RECORDS CENTER D                          | ATA      |               | <u> </u>                                     |                  |                         |                |
|              |   |          |               |  |                  |                         |                |
| 1. 🔯 BE      | RIDGING PHOTOGRAPH                        | s: KX    | DUPLICAT      | E BRIDGING REPOF                             | T; XXCOMP        | UTER READOUTS.          |                |
|              | NTROL STATION IDEN                        | TIFICAT  | TION CARD     | s; FORM NOS                                  | 567 SUBMITTE     | D BY FIELD PARTI        | £S.            |
| 3 🗆 50       | SURCE DATA (except for                    | Geograp  | hic Names     | Report) AS LISTED I                          | N SECTION II, N  | OAA FORM 76-36C.        |                |
| J. [A        | COUNT FOR EXCEPT                          | ONS:     |               |  |                  |                         |                |
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| 4, 🗀 D.      | ATA TO FEDERAL REC                        | ORDS CI  | ENTER. D      | ATE FORWARDED:                               |                  |                         |                |
|              | EDITIONS (This section                    |          |               |  | edition is regis | tered)                  |                |
| IA. POKAFA   | SURVEY NUMBER                             |          | лов ичмі      | BER  | _                |                         |                |
| SECOND       | TP -                                      | (2)      | PH            |  | L                |                         | RESURVEY       |
|              | DATE OF PHOTOGRA                          |          | DATEOF        | FIELD EDIT                                   | _ =              | MAPCLASS                |                |
| EDITION      | \   |          |               |  | □n. C            | - · · · ·               | V. FINAL       |
|              | SURVEY NUMBER                             |          | JOB NUM       | BER  |                  | TYPE OF SURV            |                |
| T1000        | <u> </u>                                  | (3)      | РН            |  |                  | REVISED .               | RESURVEY       |
| THIRD        | DATE OF PHOTOGRA                          |          |               | FIELD EDIT                                   |                  | MAP CLASS               | _              |
| EDITION      | DE LEGIERO 199K                           |          | ]             |  |                  | ]ni.                    | V. FINAL       |
|              | SURVEY NUMBER                             |          | JOB NUM       | BER  |                  | TYPE OF SURV            | EY             |
|              |   | / 45     | PH            |  | [                | ]REVISED                | RESÚRVÉY       |
| FOURTH       | DATE OF PHOTOGR                           |          |               | FIELD EDIT                                   |                  | MAP CLASS               |                |
| EDITION      | DATE OF PHOTOGR                           | er e i   |               |  | l □ [            | ⊒.ıı. ( <b>_</b> ıv. [] | V. 🗆 FINAL     |



### SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

#### TP-01148

This 1:20,000 scale shoreline map is one of eleven maps that comprise project CM-8200 Cape Kilokak to Cape Kumlik, Alaska latitude 57°10'00" south to Cape Kumlik, Alaska latitude 56°30'00". This 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 was accomplished in June 1982 involved the identification of the horizontal control by pre-marking 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 August 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.



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

August 10, 1982

CPM133/RBI-

T0:

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 (Cl31, McKay) to determine, if the final adjustment of the horizontal control in/the project area has been accomplished.

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Edward J. Mckay 443 -8168

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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 Chief, PMC Photo Party



U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administra: 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 photograph; 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 statio 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

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.

/Stephen H

Approved and Forwarded:

Don O. Norman

Chief, Aerotriangulation Unit

Don O. Norman

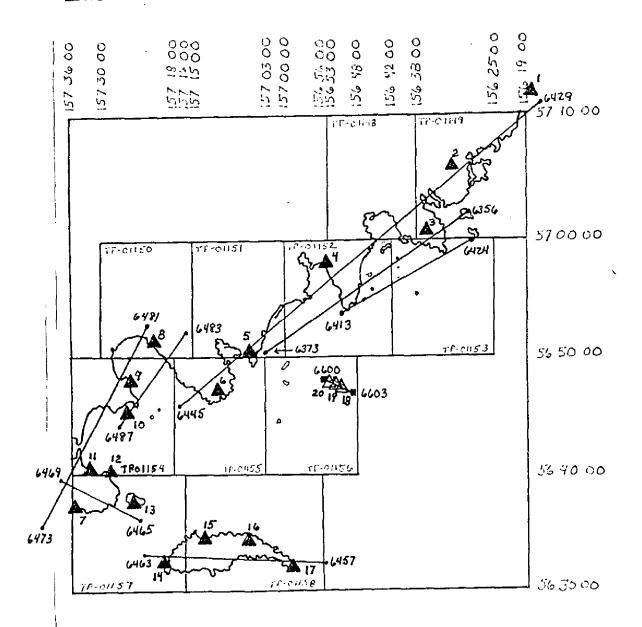
#### CIN-8200 CAPE KILOKAK TO CAPE KUMUK ALASKA

#### BRIDGING PHOTOGRAPHS

. 82 B (c) 1: 50000

¥ 82B(4) 1:12000

A HORIZONTAL CONTROL

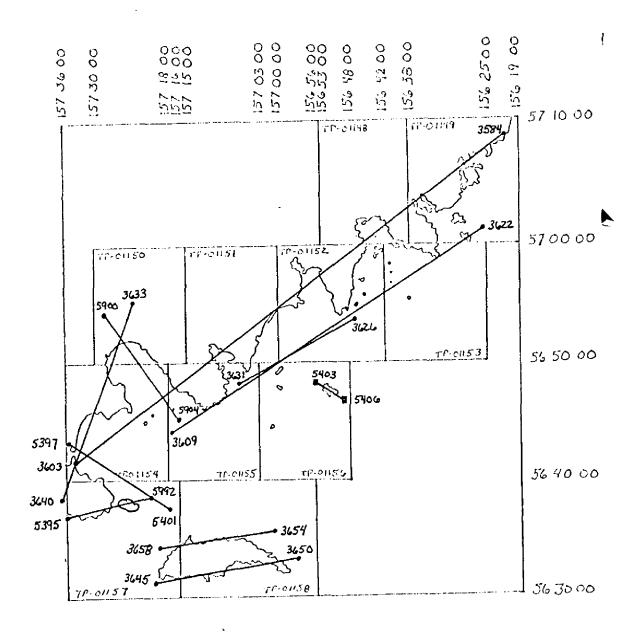


#### CM-8200 CAPE KILOKAK TO CAPE KUMLIK ALASKA

## BLACK AND WHITE INFRARED PHOTOGRAPHS MHW

83B(R) 1:50000

■ 83 B (R) 1:12000

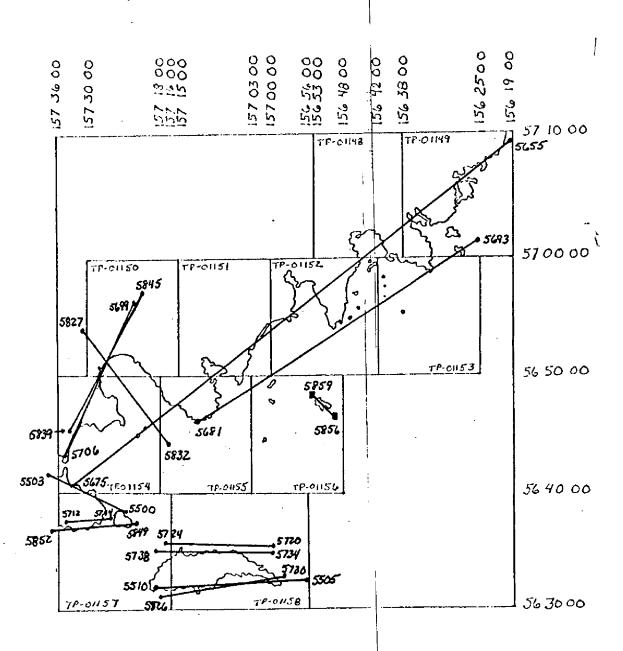


#### CM-8200 CAPE KILOKAK TO CAPE KUMLIK ALASKA

## BLACK AND WHITE INFRARED PHOTOGRAPHS

• 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

| Station Name           |                 | <u>Values in Feet</u> |                |  |
|------------------------|-----------------|-----------------------|----------------|--|
|                        | 1:12,000        | X                     | <u>Y</u>       |  |
| STRIP #1               |                 |                       |                |  |
| OGAI, 1944             | 600100 △        | .001                  | 001            |  |
| HUEY, 1982             | 602100 $\Delta$ | .000                  | .000           |  |
| HAWK, 1944             | 603100△         | .000                  | .000           |  |
|                        | 1:50,000        |                       |                |  |
| STRIP #1               |                 |                       | į              |  |
| ATTI, 1982             | 462100△         | 307                   | .068           |  |
| SUT, 1925              | 461100△         | 561                   | 954            |  |
| WIK, 1925              | 460100△         | .873                  | .497           |  |
| FOGGY CAPE LIGHT, 1944 | 458100△         | 004                   | .388           |  |
| STRIP #2               |                 |                       |                |  |
| KUMLIK, 1925           | 465100△         | .422                  | 700            |  |
| BLU, 1925              | 467100△         | -2.398                | .860           |  |
| LAG, 1945 - Sub Point  | 468101△         | 1.938                 | .300           |  |
| RUSS, 1982             | 469100△         | .024                  | 456            |  |
| STRIP #3               | ·               |                       |                |  |
| 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            |  |
| STRIP #4               |                 |                       |                |  |
| GOON, 1945             | 479100          | -15.482               | -30.214        |  |
| TIE from #3            | 485801△         | 172                   | .324           |  |
| TIE from #3            | 485002△         | 189                   | 390            |  |
| TIE from #3            | 486801△         | 729                   | 022            |  |
| TIE from #3            | 486802△         | 310                   | <b>-1.0</b> 43 |  |

|                         | 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 |
| NAKOLIŁOK 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    | 1.283  |
|                         | 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   |
|   | #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 |
|   | #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                              | 1  | 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 $\Delta$ | 1.294  | 1.127  |

|   |    | 4       |        |        |
|---|----|---------|--------|--------|
| TIE FROM                                | #6 | 356802  | 2.300  | 2.957  |
|   | #6 | 356803  | -2.906 | -3.178 |
| TIE FROM                                | #7 | 420802△ | -1.186 | 653    |
| 7 - 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | #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 | Colo   | or Br | idging Photographs                | <u>Ratio Value</u> |
|----------|--------|-------|-----------------------------------|--------------------|
| 82 B(C)  | 6356   | thru  | 6365                              | 2.565              |
|          | 6413   | 14    | 6420                              | 2.559              |
|          | 6429   | 11    | 6445                              | 2.567              |
|          | 6457   | 71    | 6463                              | 2.564              |
|          | 6465   | п     | 6469                              | 2.569              |
|          | 6473   | 14    | 5481                              | 2.568              |
|          | 6483   | 11    | 6487                              | 2.562              |
|          | 6600   | н     | 6603 (1:12,000)                   | .608               |
| 1:50,000 | Blac   | k-anc | l White-Infrared Photographs-MHW  |                    |
| 83 B(C)  | 3584   | thru  | 3603                              | 2.538              |
| 03 5(0)  | 3609   | н     | 3622                              | 2.535              |
|          | 3626   | 41    | 3631                              | 2.543              |
|          | 3633   | 11    | 3640                              | 2.538              |
|          | 3644   | 11    | 3650                              | 2.537              |
|          | 3654   | u     | 3658                              | 2.539              |
|          | 5392   | 10    | 5395                              | 2.573              |
|          | 5397   | ţı    | 5401                              | 2.571              |
|          | 5403   | 11    | 5406 (1:12,000)                   | .606               |
| 1:50,000 | O Blac | ck-an | d-White Infrared Photographs-MLLW |                    |
| 83 B(R)  | 5500   | thru  | 5503                              | 2.491              |
| 35 2(11) | 5505   | 11    | 5510                              | 2.487              |
|          | 5655   | (I    | 5675                              | 2.497              |
|          | 5681   |       | 5693                              | 2.500              |
|          | 5699   |       | 5706                              | 2.500              |
|          | 5712   |       | 5714                              | 2.503              |
|          |        |       |                                   |                    |

| 83 B(R) | 5720  | thru           | 5724                  | 2,503  |
|---------|-------|----------------|-----------------------|--------|
|         | 5726  | 11             | 5730                  | 2.504  |
|         | 5734  | ţI             | 5738                  | 2.502  |
|         | 5827  | **             | 5832                  | 2.538  |
|         | 5839  | u              | 5845                  | 2.557  |
|         | 5849  | 11             | 5852                  | 2.545  |
|         | 5856  | Н              | 5859 (1:12,000)       | .584   |
|         |       |                |                       | •      |
| 1:30,00 | 0 Co1 | or Cor         | npilation Photographs | ,      |
| 82 B(C) | 6606  | thru           | 6615                  | 1.531  |
|         | 6624  | п              | 6626                  | 1.532  |
|         | 6649  | M              | 6659                  | 1.526  |
|         | 6660  | н              | 6661                  | 1.526  |
|         | 6665  | п              | 6676                  | 1,530  |
|         | 6693  | 11             | 6703                  | 1.529  |
|         | 6708  | -09,           | 5711-13, 6715-18      | 1.532  |
|         | 6885  |                |                       | 1.524  |
|         | 8438  | thru           | 8442                  | 1.527  |
|         | 8444  | t <sub>1</sub> | 8447                  | 1.526  |
|         | 8467  | n              | 8473                  | 1.5 20 |
|         | 8484  | ti.            | 8487                  | 1.533  |
|         | 8490  | -93,           | 3495-96               | 1 529  |
|         | 8503  | thru           | 8505                  | 1 523  |
|         | 8515  | 11             | 8522                  | 1 536  |
|         | 8576  | *1             | 8584                  | 1,500  |
|         | 8651  | 0              | 8656                  | 1,531  |

#### Compilation Report

#### TP-01148

#### 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 MILW. These infrared photographs were used to graphically compile the MILW line, ledges, and additional rocks which may have not been visible on the color bridging photographs because of difference in water level.

#### CONTROL

As discussed in the preceding photogrammetric plot report, dated April 1984, control is adequate. A series of preselected hydro signals which were paneled during the field inspection operation for this project, were not carried forward on this manuscript since field edit is not required. Position listings of the aerotriangulated photo-hydro signals and forms 76-53, Control Station Identification cards, are forwarded with this project for disposition as required.

#### 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) 3589 through 3591 were provided and used as interpretive aids. The tide level displayed on these 1:50,000 scale prints was calculated to be 1.7 feet below MHW.

#### OFFSHORE DETAIL

Offshore detail was compiled in the same manner as the shoreline and alongshore detail, discussed in the preceding section of this report.

#### 37. LANDMARKS AND ALDS TO NAVIGATION

There 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 5.

#### 40. HORIZONTAL AND VERTICAL ACCURACY

Refer to the preceding aerotriangualation report dated April 1984.

#### 46. COMPARISON WITH EXISTING MAPS

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

UGASHIK (A-2), Alaska, 1951 (Limited Rev. 1981), 1:63,360 scale UGASHIK (A-3), Alaska, 1954, 1:63,360 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 scale

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

Submitted by,

Daniel C. Holeski Cartographer

November 2, 1984

Approved:

James R. Minton

Acting Chief, Photogrammetric Section

November 2, 1984

GEOGRAPHIC NAMES

FINAL NAME SHEET

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

TP-01148

Alaska Peninsula Chiginagak Bay

Approved:

Charles E. Harrington Chief Geographer

Nautical Charting Division

#### REVIEW REPORT SHORELINE TP-01148

#### 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. Quadrangle: Ugashik (A-2), Alaska, dated 1951, limited revisions 1981, scale 1:63,360
Ugashik (A-3), Alaska, dated 1954, scale 1:63,360.

#### 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 N.O.S. Chart: Preliminary Chart 16568, 5th edition, dated December 9, 1978, scale 1:106,600.

#### 66 - ADEQUACY OF RESULTS AND FUTURE SURVEY

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

Submitted by

Lowell O. Neterer, Jr.

Final Reviewer 18 September 1985

Approved for forwarding,

Billy H. Barnes

Chief, Photogrammetric Section

Approved,

Chief, Photogrammetric Section,

Rockville

Chief, Photogrammetry Branch, Rockville TO:

N/MOP - Robert L. Sandquist

N/CG2 - J. Austin Yeager 15/ Frederick K. Ganjon FROM:

Aerotriangulation Stations and Shoreline Accuracy for SUBJECT: 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 \$220, 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 I 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<br>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<br>1 <b>954</b> | 56°40'38.729"<br>157°31'53.263" | 56°40'38.779"<br>157°31'54.285"<br>DE   SURNAME   DATE, | .050"<br>1.022" | 1.55<br>17.40<br>SURNAME | DATE |

jls:

| G2311:PDempsey:443-8340:  | N/CG23    | 1 Windet | 9/11/2 | 6 | ,<br> | Ĺ |
|---------------------------|-----------|----------|--------|---|-------|---|
| :9/17/86:Aero/Alaska:APK2 |           | Brewer   | 9/17   |   |       |   |
| FILE COPY                 | -484.4-40 |          | 7      |   |       |   |
|                           |           |          |        |   |       |   |

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

#### NAUTICAL CHART DIVISION

#### **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 Rev

| CHART    | DATE        | CARTOGRAPHER | REMARK\$   |
|----------|-------------|--------------|--|
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