# Descriptive Report

## Map No.
TP-00581

## Edition No.
1

## Job No.
CM-7206

## Map Classification
FINAL FIELD EDITED MAP

## Type of Survey
SHORELINE

## Locality

### State
ALASKA

### General Locality
ZAREMBO ISLAND

### Locality
BURNETT INLET

## Date
1972 TO 1973

## Registered in Archives

"U.S. GOVERNMENT PRINTING OFFICE. 1980 665-115"
# Descriptive Report - Data Record

## Photogrammetric Office
Coastal Mapping Division, Norfolk, VA

Officer-In-Charge
Jeffrey G. Carlen

### Instructions Dated

<table>
<thead>
<tr>
<th>1. Office</th>
<th>2. Field</th>
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<tbody>
<tr>
<td>Aerotriangulation</td>
<td>Field</td>
</tr>
<tr>
<td>Compilation</td>
<td>Jan. 26, 1972</td>
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<tr>
<td>Sept. 19, 1972</td>
<td></td>
</tr>
<tr>
<td>Feb. 22, 1973</td>
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### Datums

1. **Horizontal:**
   - [x] 1927 North American
   - Other (Specify)

2. **Vertical:**
   - [x] Mean High-Water
   - Mean Low-Water
   - Mean Lower Low-Water
   - Mean Sea Level
   - Other (Specify)

3. **Map Projection:**
   - Polyconic

4. **Grid:**
   - Alaska
   - Zone 1

5. **Scale:**
   - 1:10,000

### History of Office Operations

<table>
<thead>
<tr>
<th>Operations</th>
<th>Name</th>
<th>Date</th>
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<tr>
<td>Method: Analytic-Block</td>
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<tr>
<td>Landmarks and Aids by</td>
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<tr>
<td>2. Control and Bridge Points</td>
<td>R. Robertson</td>
<td>Feb. 1974</td>
</tr>
<tr>
<td>Method: Coradomat</td>
<td>R. Robertson</td>
<td>Feb. 1974</td>
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<tr>
<td>Checked by</td>
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<tr>
<td>Instrument: Wild B-8</td>
<td>R. White</td>
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<tr>
<td>by</td>
<td>L. Neterer, Jr.</td>
<td>Sept. 1973</td>
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<tr>
<td>Hydro Support Data by</td>
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<td>Checked by</td>
<td></td>
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<tr>
<td>by</td>
<td>F. Mauldin</td>
<td>Sept. 1979</td>
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<tr>
<td>Checked by</td>
<td></td>
<td></td>
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<tr>
<td>7. Compilation Section Review</td>
<td>F. Mauldin</td>
<td>Sept. 1979</td>
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<tr>
<td>by</td>
<td>C. Blood</td>
<td>Nov. 1987</td>
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<td>8. Final Review</td>
<td></td>
<td></td>
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<tr>
<td>by</td>
<td>J. Byrd</td>
<td>July 1988</td>
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<td>9. Data Forwarded to Photogrammetric Branch</td>
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<tr>
<td>by</td>
<td>P. Dempsey</td>
<td>Dec. 1985</td>
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<td>10. Data Examined in Photogrammetric Branch</td>
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<td>by</td>
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<td>11. Map Registered - Coastal Survey Section</td>
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**1. COMPILED PHOTOGRAPHY**

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<th>TIME</th>
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<td>1:30,000</td>
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<td>*72 E(C) 4149-4153</td>
<td>6-23-72</td>
<td>11:58</td>
<td>1:30,000</td>
<td>11.6 ft. above MLLW</td>
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**REMARKS**

*Compilation photographs.*

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

The mean high-water line was delineated from the photographs listed above.

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

None delineated, there were no mean lower low-water photographs.

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

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<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
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<th>DATE(S)</th>
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**5. FINAL JUNCTIONS**

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<th>SOUTH</th>
<th>WEST</th>
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<tr>
<td>TP-00576</td>
<td>No Survey</td>
<td>TP-00584</td>
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**REMARKS**
**NOAA FORM 76-36C**

**U.S. DEPARTMENT OF COMMERCE**

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

**NATIONAL OCEAN SURVEY**

**TP-00581**

**HISTORY OF FIELD OPERATIONS**

1. **[ ] FIELD INSPECTION OPERATION**  
   **[x] FIELD EDIT OPERATION**

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<th>NAME</th>
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<td>1. CHIEF OF FIELD PARTY</td>
<td>K. Jeffers</td>
<td>9/73-10/73</td>
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<td>2. HORIZONTAL CONTROL</td>
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<td>3. VERTICAL CONTROL</td>
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<tr>
<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
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<td>5. GEOGRAPHIC NAMES</td>
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<tr>
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<td>K. Jeffers</td>
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<td>7. BOUNDARIES AND LIMITS</td>
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**II. SOURCE DATA**

1. **HORIZONTAL CONTROL IDENTIFIED**  
   - None

2. **VERTICAL CONTROL IDENTIFIED**  
   - None

3. **PHOTO NUMBERS (Clarification of details)**  
   - 72 E(C) 4135 and 4137

4. **LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED**  
   - None

**III. SOURCE DATA**

1. **PHOTO NUMBER**  
   - None

2. **STATION NAME**  
   - None

3. **PHOTO NUMBER**  
   - None

4. **STATION DESIGNATION**  
   - None

5. **GEOGRAPHIC NAMES:**  
   - [ ] REPORT  
   - [x] NONE

6. **BOUNDARY AND LIMITS:**  
   - [ ] REPORT  
   - [x] NONE

7. **SUPPLEMENTAL MAPS AND PLANS**  
   - None

8. **OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)**  
   - None
## RECORD OF SURVEY USE

### I. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>DATA COMPILATED</th>
<th>DATE</th>
<th>REMARKS</th>
<th>MARINE CHARTS</th>
<th>HYDRO SUPPORT</th>
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<tr>
<td>Final Review</td>
<td>Nov. 1987</td>
<td>Final Map</td>
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<td></td>
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### II. LANDMARKS AND AIDS TO NAVIGATION
None

### III. FEDERAL RECORDS CENTER DATA

1. Bridging Photographs; Duplicate Bridging Report; Computer Readouts.
2. Control Station Identification Cards; Form Not Submitted by Field Parties.
3. Source Data (except for Geographic Names Report) as listed in Section II, NOAA Form 76-36C. Account for Exceptions:

### IV. SURVEY EDITIONS

<table>
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<th>SECOND EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT
TP-00581

This final Class I shoreline map is one of thirty-six 1:10,000 scale maps designated as CM-7206, Zarembo Island, Alaska.

The purpose of this map was to provide contemporary shoreline in support of hydrographic operations and to aid in chart revision.

Field work prior to compilation during the 1972 field season consisted of recovery and premarking of horizontal control for aerotriangulation.

This map area was photographed in June 1972 with the RC-9 "M" camera at 1:60,000 scale using panchromatic film. The map area was also photographed in June 1972 with the RC-8 "E" camera at 1:30,000 scale using color film.

Aerotriangulation was completed at the Washington Office in February 1973 and revised in January 1974.

This map was compiled at the Norfolk Office in September 1973.

Field edit was acquired for TP-00581 during the 1973 field season. Field edit was applied at AMC in September 1979.

Final review was accomplished at the Atlantic Marine Center in November 1987. A Chart Maintenance Print was prepared and forwarded to the Marine Charts Branch.

This Descriptive Report contains all pertinent information used to compile this Final Field Edited Map. The original base manuscript and all related data were forwarded to the Washington Science Center for final registration.
FIELD INSPECTION

TP-00581

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and premarking of the horizontal control necessary for the aerotriangulation of the project.
Photogrammetric Plot Report  
Zarembo Island, Alaska  
CM-7206  
February 1973

21. Area Covered

This report pertains to 34 sheets in the vicinity of Zarembo Island, Alaska. The sheets covered are TP-0051 through TP-00584. All are 1:10,000 scale.

22. Method

Six strips of RC-9 photography at 1:60,000 scale and three strips of RC-8 photography at 1:30,000 scale were bridged by analytic aerotriangulation methods and adjusted to ground with the block adjustment program. Points were established for determining ratios of 1:30,000 scale support photography. Sufficient points were also established for setting 1:30,000 scale compilation photography. These points were plotted by the Coradomat.

23. Adequacy of Control

The control was adequate. Ten horizontal control stations, were used in the block adjustment. Shoreline points with approximately 0 elevation were used as vertical control.

The horizontal positions of several light structures were determined in the block adjustment. The positions of these structures are to be verified by field methods as a check on the block adjustment.

24. Supplemental Data

USGS topographic quadrangles were used in determining elevations for strip adjustments.

25. Photography

The photography was adequate, however, on sheet TP-00565, there is no coverage with 1:30,000 scale photography of Rookery and Tide Islands.

On sheet TP-00559 it was impossible to establish points for the compilation of Five Mile Island. It is recommended that a field party establish points for the graphic compilation. A ratio photograph was ordered and sent to the compilation office.

submitted by,

Don O. Norman

Approved by

John D. Perrow, Chief, Aerotriangulation Section
AEROTRIANGULATION SKETCH
ZAREKBO ISLAND, ALASKA
CH 7206
FEB., 1973
Compilation photography
1:30000 scale 72E(c)
ADDENDUM
ZAREHBO ISLAND, ALASKA
CM-7206
January 1974

In the compilation office at the Atlantic Marine Center, it was noticed that when a model in the vicinity of Wrangel Harrows (TP-00551) was set by holding the compilation points, the navigation lights would not plot in their proper positions. In this vicinity the horizontal control station LUNG, 1929, was weighted in the block and would not hold within 7 feet.

It was decided to remeasure several models to determine refined coordinates for MIDWAY ROCK LIGHT, 1929, and PORT ALEXANDER LIGHT, 1929. Plate 72E(C)4004 was also remeasured for another refined coordinate for LUNG, 1929. At this time it was noticed that the refined coordinate for point 004320 was not correct. Corrections were made and all these refined coordinates were placed in their proper place in the block.

Another block adjustment was run just as before, except MIDWAY ROCK LIGHT and PORT ALEXANDER LIGHT were also weighted. This produced satisfactory results. LUNG fit within 0.8 feet, MIDWAY ROCK LIGHT within 2.2 feet and PORT ALEXANDER LIGHT within 3.1 feet. In this same vicinity compilation points changed by as much as 16.7 feet.

It is believed that this block is now properly adjusted and will meet national map accuracy standards. New T-sheets will be ruled and forwarded to AMC for compilation.

Submitted by,

Don O. Norman

Approved by:

John D. Perrow, Jr.
Chief, Aerotriangulation Section

Note: After thorough research it was determined that the name PORT ALEXANDER LIGHT was used incorrectly in this report for POINT ALEXANDER LIGHT 1929. POINT ALEXANDER LIGHT 1929 is adjacent to LUNG 1929 and MIDWAY ROCK LIGHT 1929. PORT ALEXANDER LIGHT is located approximately 2° west of the project area.
COMPILATION REPORT

TP-00581

31. **DELINEATION**:

Delineation was by the Wild B-8 stereoplotter, using 1:30,000 scale color photographs. The stage of tide was above mean lower low-water at the time of photography, therefore, detail which covers by tide is only partially compiled.

The quality of the photography is adequate for shoreline compilation.

32. **CONTROL**:


33. **SUPPLEMENTAL DATA**:

None.

34. **CONTOURS AND DRAINAGE**:

Contours are inapplicable. Drainage was delineated from the compiler's interpretation of the photographs.

35. **SHORELINE AND ALONGSHORE DETAILS**:

The mean high-water line and alongshore details were delineated from the compiler's interpretation of the photographs.

36. **OFFSHORE DETAILS**:

Offshore detail was delineated from the compiler's interpretation of the photographs. Details which were covered by the tide at the time of photography, were not compiled.

37. **LANDMARKS AND AIDS**:

There were no charted nonfloating aids or landmarks and none were noted during stereoscopic instrument compilation.

38. **CONTROL FOR FUTURE SURVEY**:

None.
39. **JUNCTIONS:**

    A satisfactory junction was made with the adjoining contemporary maps.

    Refer to the Data Record Form 76-368, item 5.

40. **HORIZONTAL AND VERTICAL ACCURACY:**


46. **COMPARISON WITH EXISTING MAPS:**

    A comparison was made with the U.S. Geological Survey quadrangle PETERSBURG (A-2), Alaska, 1:63,360 scale, dated 1953.

47. **COMPARISON WITH NAUTICAL CHARTS:**

    A comparison was made with the U.S. Coast and Geodetic Survey chart 8160, 1:80,000 scale, dated July 4, 1970.

    **ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:**

    None.

    **ITEMS TO BE CARRIED FORWARD:**

    None.

Submitted by:

Charles E. Blood
for

Charles Parker
Cartographic Aid
September 13, 1973

Approved and forwarded:

Albert C. Rauck, Jr.
Chief, Coastal Mapping Section
GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7206 (Clarence and Sumner Straits, Alaska)

TP-00581

Burnett Inlet

Etolin Island

Approved:

[Signature]

Charles E. Harrington
Chief Geographer
Nautical Charting Division
Charting and Geodetic Services
FIELD EDIT REPORT

OPR-465, 1973

TP-12364, TP-00580 through TP-00584

Clarence Strait, Alaska

Etolin Island

NOAA ship RAINIER

Cdr. K. William Jeffers, Commanding
INTRODUCTION - METHODS

Field edit was done by personnel of NOAA ship RAINIER during September and October 1973. Work was performed in a sixteen foot skiff and twenty-six foot Boston Whaler, making landings where necessary to verify shoreline character.

The field edit started at Kelp Point, Etolin Island, and extended northwesterly to Cape Stanhope. Field edit was completed as far west as the mouth of Three Way Passage entering the Clarence Strait. Field edit was completed on TP-00580, TP-00581, TP-00584, and partially completed on TP-00582, TP-00583, TP-12364.

Photography in the Rocky Bay area was extremely poor, due mainly to a low sun angle at the time of photography. This meant that the southern one-third of the picture was useless, and the same for the northern third, because of the developer's efforts to counteract the overexposures. The photos were also fuzzy, and the prints were covered with evidence of dirty negatives, such as dirt, lint, etc. It was in some instances hard to distinguish the dirt from rocks low in the water.

All additions and corrections are noted in purple on the field edit ozalids. Deletions are noted in green. Photos used were from PH-6303 and CM-7206. Values given for distances from MHWL and heights of rocks were estimated. Time references prior to 29 October 1973 are 105 W and 120 W after this date.
ADEQUACY OF COMPILATION

The compilation of the MHWL was generally good. Compilation of offshore features was less than good. Several rocks, easily identifiable on the photos were omitted from the manuscripts. Time and height data are included on the photos.

DISCUSSION AND RECOMMENDATIONS

The project area's shoreline was composed generally of rocky outcrops with occasional sand-pebble beaches. There was little or no kelp, due probably to the abundance of sea urchins, which feed on kelp holdfasts.

The rocky shoreline was composed primarily of fissile metamorphic rocks ranging from slates to schists to phyllites. There were occasional outcrops of intrusive granitic rocks, but with little contact mineralization. The metamorphic rocks were highly fractured and thus subject to extensive erosion.

TP-12364, TP-00580 -TP-00584:

No special recommendations are made.
61. GENERAL STATEMENT:

See summary included with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with the Hydrographic Survey H-9403, 1:10,000 scale, date of survey October 4, 1973. There were no conflicts.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS chart 17382, 1:80,000 scale, dated July 25, 1981.

The chart compared well with this manuscript.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

James L. Byrd, Jr.
Final Reviewer

Approved for forwarding:

Billy H. Barnes
Chief, Quality Assurance Group, AMC

Approved:

Chief, Photogrammetric Productions Sec. Chief, Photogrammetry Branch
INSTRUCTIONS
A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Enter 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 Review.

<table>
<thead>
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<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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