NOAA FORM 76-35
(6-80)
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Map No.  
TP-00578

Edition No.  
1

Job No.  
CM-7206

Map Classification  
FINAL CLASS III MAP

Type of Survey  
SHORELINE

LOCALITY

State  
ALASKA

General Locality  
ZAREMBO ISLAND

Locality  
ROSE ISLAND

1972 TO 19

REGISTERED IN ARCHIVES

DATE

*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

#### I. INSTRUCTIONS DATED

<table>
<thead>
<tr>
<th>1. OFFICE</th>
<th>2. FIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compilation Feb. 22, 1973</td>
<td></td>
</tr>
</tbody>
</table>

#### II. DATUMS

1. **HORIZONTAL:**
   - [X] 1927 North American
   - OTHER (Specify)

2. **VERTICAL:**
   - [X] Mean High-Water
   - OTHER (Specify)

3. **MAP PROJECTION**
   - Polyconic

4. **GRID(S)**
   - State Alaska
   - Zone 1

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

#### III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>METHOD</th>
<th>LANDMARKS AND AIDS</th>
<th>BY</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>Analytic-Block</td>
<td>LANDMARKS AND AIDS</td>
<td>D. Norman</td>
<td>Feb. 1973</td>
<td></td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>Plotted by Coradomat</td>
<td>Plotted by Checked by</td>
<td>R. Robertson</td>
<td>Feb. 1974</td>
<td></td>
</tr>
<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>Contours by Checked by</td>
<td>Contours by Checked by</td>
<td>R. White</td>
<td>Aug. 1973</td>
<td></td>
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<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>Hydro Support Data by Checked by</td>
<td>Hydro Support Data by Checked by</td>
<td>C. Blood</td>
<td>Oct. 1973</td>
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<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td>None</td>
<td>None</td>
<td>A. Shands</td>
<td>Oct. 1973</td>
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<td>7. COMPILATION SECTION REVIEW</td>
<td>None</td>
<td>None</td>
<td>A. Shands</td>
<td>Oct. 1973</td>
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<td>8. FINAL REVIEW</td>
<td>None</td>
<td>None</td>
<td>A. Shands</td>
<td>Oct. 1973</td>
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<tr>
<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</td>
<td>None</td>
<td>None</td>
<td>A. Shands</td>
<td>Oct. 1973</td>
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<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</td>
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<td>None</td>
<td>A. Shands</td>
<td>Oct. 1973</td>
<td></td>
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<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td>None</td>
<td>None</td>
<td>P. Dumray</td>
<td>Dec. 1973</td>
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1. COMPILATION PHOTOGRAPHY

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<tr>
<th>NUMBER AND TYPE</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
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<td>72 E(C) 4227-4229</td>
<td>6-23-72</td>
<td>12:53</td>
<td>1:30,000</td>
<td>11.3 ft. above MLLW</td>
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<tr>
<td>72 E(C) 4244-4246</td>
<td>6-23-72</td>
<td>13:03</td>
<td>1:30,000</td>
<td>11.1 ft. above MLLW</td>
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<tr>
<td>72 E(C) 4293, 4294</td>
<td>6-23-72</td>
<td>13:37</td>
<td>1:30,000</td>
<td>10.4 ft. above MLLW</td>
</tr>
</tbody>
</table>

REMARKS

Bridging identified control points on photograph 72 E(C) 4246 for graphic compilation. *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.)

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
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</table>

5. FINAL JUNCTIONS

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<th>NORTH</th>
<th>EAST</th>
<th>SOUTH</th>
<th>WEST</th>
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<tr>
<td>TP-00573</td>
<td>TP-00579</td>
<td>T-12404 GAP</td>
<td>TP-00577</td>
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### I. MANUSCRIPT COPIES

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<th>DATA COMPILED</th>
<th>COMPILED STAGES</th>
<th>DATE MANUSCRIPT FORWARDED</th>
<th>REMARKS</th>
<th>MARINE CHARTS</th>
<th>HYDRO SUPPORT</th>
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### II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>CHART LETTER NUMBER ASSIGNED</th>
<th>DATE FORWARDED</th>
<th>REMARKS</th>
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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

- BRIDGING PHOTOGRAPHS: DUPLICATE BRIDGING REPORT: COMPUTER READOUTS.
- CONTROL STATION IDENTIFICATION CARDS: FORM NO. 85 SUBMITTED BY FIELD PARTIES.
- SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

### IV. SURVEY EDITIONS

(This section shall be completed each time a new map edition is registered)

<table>
<thead>
<tr>
<th>SECOND EDITION</th>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
<th>MAP CLASS</th>
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<td>REVISED</td>
<td>II, III, IV, V, FINAL</td>
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<td>THIRD EDITION</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
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<td>MAP CLASS</td>
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<td></td>
<td></td>
<td>REVISED</td>
<td>II, III, IV, V, FINAL</td>
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<tr>
<td>FOURTH EDITION</td>
<td>SURVEY NUMBER</td>
<td>JOB NUMBER</td>
<td>TYPE OF SURVEY</td>
<td>MAP CLASS</td>
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<td></td>
<td></td>
<td></td>
<td>REVISED</td>
<td>II, III, IV, V, FINAL</td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT
TP-00578

This final Class III 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 October 1973.

Field edit was not acquired for TP-00578.

Final review was accomplished at the Atlantic Marine Center in October 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 Class III Map. The original base manuscript and all related data were forwarded to the Washington Science Center for final registration.
FIELD INSPECTION

TP-00578

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.
21. **Area Covered**

This report pertains to 34 sheets in the vicinity of Zarembo Island, Alaska. The sheets covered are TP-00551 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
ADDITION

ZAREHOBO ISLAND, ALASKA

C/=-7206

January 1974

In the compilation office at the Atlantic Marine Center, it was noticed that when a model in the vicinity of Wranell 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 ANC 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.
<table>
<thead>
<tr>
<th>STATION NAME</th>
<th>SOURCE OF INFORMATION (Index)</th>
<th>AEROTRIGO-</th>
<th>COORDINATES IN FEET</th>
<th>GEODETIC DATUM</th>
<th>ORIGINATING ACTIVITY</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOT, 1916</td>
<td>Vol. 1 P. 162</td>
<td>157</td>
<td>x=</td>
<td>y=</td>
<td>56° 08' 42.96&quot;</td>
<td>132° 52' 29.34&quot;</td>
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<tr>
<td>JEN, 1916</td>
<td>Vol. 1 P. 157</td>
<td>154</td>
<td>x=</td>
<td>y=</td>
<td>56° 05' 02.304&quot;</td>
<td>132° 51' 22.990&quot;</td>
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<td>KEY REEF ROCK, 1915</td>
<td>Vol. 1 P. 124</td>
<td></td>
<td>x=</td>
<td>y=</td>
<td>56° 08' 59.16&quot;</td>
<td>132° 49' 05.09&quot;</td>
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<tr>
<td>BLASH 2, 1915</td>
<td>Vol. 3 P. 985</td>
<td>155</td>
<td>x=</td>
<td>y=</td>
<td>56° 06' 52.942&quot;</td>
<td>132° 50' 48.166&quot;</td>
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<tr>
<td>KEY REEF LIGHTHOUSE, 1916</td>
<td>Vol. 1 P. 162</td>
<td></td>
<td>x=</td>
<td>y=</td>
<td>56° 09' 37.116&quot;</td>
<td>132° 49' 46.919&quot;</td>
</tr>
</tbody>
</table>

COMPUTED BY
A. C. Rauck, Jr.,

DATE 3/16/73

COMPUTATION CHECKED BY
F. Margiotta

DATE 3/22/73

LISTED BY

DATE

LISTING CHECKED BY

DATE

HAND PLOTTING BY

DATE

HAND PLOTTING CHECKED BY

DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBsolete.
COMPILATION REPORT

TP-00578

31. **DELINEATION:**

Delineation was by the Wild B-8 stereoplottter, using 1:30,000 scale color photographs, except for some graphic compilation. See "Notes to Compiler" an addendum to the Plot Report. Photo images were drilled on the compilation photograph 72 E(C) 4246, which were transferred to the 1:10,000 scale ratio photographs. The geographic position of these points were plotted on the map, thus providing control for graphic compilation. Additional control points were located by joining this map to map TP-00577 and graphically resecting points from adjoining photographs.

Detail in the vicinity of Key Reef was also graphically delineated.

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:**

Refer to the Photogrammetric Plot Report, dated February 1973, and Notes to Compiler.

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 landmarks and none were noted during compilation.

   A Form 76-40 concerning a charted light was submitted to the field for verification.

38. **CONTROL FOR FUTURE SURVEY:**

   None.

39. **JUNCTIONS:**

   A satisfactory junction was made with the adjoining contemporary maps. Refer to the Data Record Form 76-36B, item 5.

40. **HORIZONTAL AND VERTICAL ACCURACY:**

   No Statement.

46. **COMPARISON WITH EXISTING MAPS:**

   A comparison was made with the U.S. Geological Survey quadrangle PETERSBURG (A-3), Alaska, 1:63,360 scale, dated 1949.

47. **COMPARISON WITH NAUTICAL CHARTS:**

   A comparison has been 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 Blood
Cartographic Technician
October 2, 1973

Approved and forwarded:

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

FINAL NAME SHEET

CM-7206 (Clarence and Sumner Straits, Alaska)

TP-00578

Blashke Islands
Clarence Strait
Kashevarof Islands
Key Reef
Key Reef Rock
Rose Island

Approved:

Charles E. Harrington
Chief Geographer
Nautical Charting Division
Charting and Geodetic Services
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:
   The Hydrographic Survey for the area of this map was not available for comparison at the time of Final Review.

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
**Field Positions are determined by field observation.**

**Example:** F-2-6-L

Field positions require entry of method or location and date of field work.

1. Position determined or verified

2. Traverse

3. Intersection

4. Resection

5. Field Identified

6. Triangulation

7. Plan table

8. Section

A field station is located, another 'Triang.'

When a benchmark of this type is also a t.r.

A triangulation station is recovered. Enter 'Triang.'

Example: T-6-12-75

Example: P-8-4-75

Example: 75E4(0)642

Objects identified and located are objects entered the number and date (cluding month),

Objects identified and located: Obscets Inspected from Section and

The applicable data by symbols are as follows:

Field (Cont'd)

<table>
<thead>
<tr>
<th>Field</th>
<th>74E(2)926</th>
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</thead>
<tbody>
<tr>
<td>8-12-75</td>
<td></td>
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</tbody>
</table>

**Photogrammetric Methods.**

Photogrammetric methods.

Entirely, or in part, upon control established

**Example:** V-A 15: 8-12-75

Entirely, V-A, 8-12-75

Example: 8-12-75

Example: T-6-12-75

Example: P-8-4-75

Example: 75E4(0)642

**Instructions for Enters Under Method and Date of Location.**

<table>
<thead>
<tr>
<th>Type of Action</th>
<th>Name</th>
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<tbody>
<tr>
<td>Office Activity Representative</td>
<td>C. Blood</td>
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<tr>
<td>Field Activity Representative</td>
<td>C. Blood</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>C. Blood</td>
</tr>
<tr>
<td>Real Estate Party</td>
<td>C. Blood</td>
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<tr>
<td>Topographic Party</td>
<td>C. Blood</td>
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<tr>
<td>Photo Field Party</td>
<td>C. Blood</td>
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<tr>
<td>Responsible Personnel</td>
<td>C. Blood</td>
</tr>
</tbody>
</table>

Forms organized by Quality Control and Review.

Forms organized by Quality Control and Review.
**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 Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
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<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
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