FORM C&GS-504
U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey: Shoreline (Photogrammetric)
Field No: Office No: T-10578

LOCALITY
State: Alaska
General locality: Maurelle Islands
Locality: Turtle Island

19.56
CHIEF OF PARTY
W.F. Deane, Baltimore District Office

LIBRARY & ARCHIVES

DATE

* THIS SURVEY IS "INCOMPLETE". REFER TO PAGES 14 AND 15 OF THIS REPORT.
# DESCRIPTIVE REPORT - DATA RECORD

**T - 10578**

**PROJECT NO. (III):**

PH087

**FIELD OFFICE (II):**

USGS Ship HODGSON

**PHOTOGRAMMETRIC OFFICE (III):**

Baltimore, Maryland

**CHIEF OF PARTY**

**OFFICER-IN-CHARGE**

William F. Deane

**INSTRUCTIONS DATED (II) (III):**

- Office: 7 Nov. 1955
- 13 Nov. 1956
- 15 July 1957
- 30 Oct. 1957

**METHOD OF COMPILATION (III):**

Graphic

**MANUSCRIPT SCALE (III):**

1:10,000

**STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):**

**DATE RECEIVED IN WASHINGTON OFFICE (IV):**

**DATE REPORTED TO NAUTICAL CHART BRANCH (IV):**

**APPLIED TO CHART NO.**

**DATE:**

**DATE REGISTERED (IV):**

**GEOGRAPHIC DATUM (III):**

NA 1927

**REFERENCE STATION (III):**

HOH, 1922

**LAT.:**

55° 40' 28.670"

**LONG.:**

133° 37' 50.194"

**VERTICAL DATUM (III):** MHW

**ADJUSTED**

**STATE**

Alaska

**ZONE**

U.T.M. 8

roman numerals indicate whether the item is to be entered by (ii) field party, (iii) photogrammetric office, or (iv) washington office.

when entering names of personnel on this record give the surname and initials, not initials only.

usccomm-dc 36393a-p66
**DESCRIPTIVE REPORT - DATA RECORD**

**FIELD INSPECTION BY (III):**

<table>
<thead>
<tr>
<th>DATE:</th>
</tr>
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**MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):**

Office interpretation of August 1956 nine-lens photography.

**PROJECTION AND GRIDS RULED BY (IV):**

<table>
<thead>
<tr>
<th>DATE</th>
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<tbody>
<tr>
<td>Haskins</td>
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<td>9 Dec. 1957</td>
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**PROJECTION AND GRIDS CHECKED BY (IV):**

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<tr>
<td>I. Y. Fitzgerald</td>
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<td>9 Dec. 1957</td>
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**CONTROL PLOTTED BY (III):**

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**CONTROL CHECKED BY (III):**

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**RADIAL PLOT EXTENSION (III) EXTENSION BY (III):**

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<tr>
<th>DATE</th>
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<tbody>
<tr>
<td>E. L. Williams</td>
</tr>
<tr>
<td>January 1958</td>
</tr>
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**STEREOSCOPIC INSTRUMENT COMPILATION (III):**

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<tbody>
<tr>
<td>PLANIMETRY</td>
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<table>
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<tr>
<th>DATE</th>
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<tbody>
<tr>
<td>CONTOURS</td>
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**MANUSCRIPT DELINEATED BY (III):**

<table>
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<tr>
<th>DATE:</th>
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**SCRIBING BY (III):**

<table>
<thead>
<tr>
<th>DATE:</th>
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**PHOTOGRAMMETRIC OFFICE REVIEW BY (III):**

<table>
<thead>
<tr>
<th>DATE:</th>
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</table>

**REMARKS:**


### Descriptive Report - Data Record

**Camera (Kind Or Source) (III):**

nine-lens

<table>
<thead>
<tr>
<th>Photographs (III)</th>
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<tbody>
<tr>
<td><strong>Number</strong></td>
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<tr>
<td>54592 and 54593</td>
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### Tide (III)

<table>
<thead>
<tr>
<th>Reference Station:</th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>High Range</th>
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<tbody>
<tr>
<td>Sitka</td>
<td>7.7</td>
<td>9.9</td>
<td></td>
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<table>
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<tr>
<th>Subordinate Station:</th>
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<tr>
<td>Anguilla Island</td>
<td>8.2</td>
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<table>
<thead>
<tr>
<th>Washington Office Review By (IV):</th>
<th>Date:</th>
</tr>
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<tbody>
<tr>
<td>Leo F. Beugnet, AMC</td>
<td>June 1969</td>
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<th>Remarks:</th>
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<tbody>
<tr>
<td>Form 181a, 181b and 181c prepared by the final reviewer. There was no other information available.</td>
</tr>
<tr>
<td>COMPILATION RECORD</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Compiled</td>
</tr>
<tr>
<td>Final Review</td>
</tr>
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</table>
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-10578

Shoreline survey T-10578 is one of 58 similar surveys in project PH-87. It covers part of the Maurelle Islands in the area of Turtle Island. See page 5 of this report for the area within the project.

The only field work prior to compilation consisted of identification of horizontal control.

Compilation was at 1:10,000 scale by graphic methods using the nine-lens photography of August 1956. The survey was not field edited and there is no contemporary hydrography within the limits of the map.

The manuscript is a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude which was drafted and reproduced on cronaflex. One cronaflex positive and a negative are provided for record and registry.
PHOTOGRAMMETRIC PLOT REPORT
Project Ph-87
Surveys T-10570 through T-10583

21. AREA COVERED

This radial plot covers the area of surveys T-10570 through T-10583.

These surveys cover that part of southeastern Alaska encompassing the southern half of Heceta Island, the Maurella Islands, a western portion of Prince of Wales Island, and the most northern tip of Noyes Island.

22. METHOD-RADIAL PLOT

Map Manuscripts:
Vinylite sheets with polyconic projections in black and U. T. M. Alaska grid in red at a scale of 1:10,000 were furnished by the Washington office.

All control stations and substitute stations were plotted on the map manuscripts using the meter bar and beam compass.

Base sheets were prepared in this office.

A sketch showing a layout of surveys and the distribution of control and photograph centers is attached to this report.

Photographs:
All photographs used in this plot were nine-lens unmounted photographs at a scale of 1:10,000.

Seventy-three (73) photographs were used, numbered as follows:

41728 through 41732
51994 and 51995
52004 through 52008
52026 through 52030
52039 through 52043
54580 through 54630

Closure and Adjustment to Control:
The radial plot is an extension to the south of the plot for surveys T-10405 through T-10409. The radial plot was assembled in two sections. The first section covered surveys T-10570 thru T-10574, T-10577 through T-10579, and T-10582 and T-10583. The second section, comprised of the remaining surveys, is essentially a separate radial plot in that the large expanse of Tonowek Bay divides the two sections. Although, only a relatively few pass-points tie the two sections together, there is sufficient control to ensure the required horizontal accuracy.
Transfer of Points:
The map manuscripts were placed over the finished plot, oriented, and the positions of all pass-points and photograph centers pricked on the manuscript.

23. ADEQUACY OF CONTROL

The density and distribution of control was adequate.

The following control could not be held in the radial plots.

TURF, 1907. The radially plotted position of the station is 0.5 mm (5 meters) to the south of the plotted position. The identification is apparently in error.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The photographic coverage and definition of photographs used in the plot were good.

Respectfully submitted
20 January 1958

E. L. Williams
Carto. (Photo.)
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y COORDINATE</th>
<th>LONGITUDE OR X COORDINATE</th>
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<tbody>
<tr>
<td>W.W. 1 (OLD), 1922</td>
<td>G609 pg 277</td>
<td>NA 1927</td>
<td>55° 41'</td>
<td>01.661&quot;</td>
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<tr>
<td>W.W. 2 (FAR), 1922</td>
<td>&quot; &quot; &quot;</td>
<td>&quot;</td>
<td>133 36</td>
<td>31.449</td>
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<td>W.W. 10, 1922</td>
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<td>40.788</td>
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<td>W.W. 9 (WAT), 1922</td>
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<td>W.W. 6 (LONE), 1922</td>
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<td>133 41</td>
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<td>W.W. 8 (SOLE), 1922</td>
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<td>W.W. 3 (BEE), 1922</td>
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<td>HOH, 1922</td>
<td>&quot; &quot; 274</td>
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<td>133 37</td>
<td>50.194</td>
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</table>
GEOGRAPHIC NAMES

FINAL NAME SHEET

Ph-87 (Maurelle Islands, Alaska)

T-10578

Anguilla Bay
Anguilla Island
Bocas de Finas
Esquibel Island
Hacha Island
Maurelle Islands
Pesquera Island
Princesa Island
Trasera Island
Turtle Island
Twin Islands

Approved by:
A. Joseph Wright
Chief Geographer

Prepared by:
Frank W. Pickett
Cartographic Technician
The shoreline delineated on these surveys was interpreted using photographs taken at a fairly high stage of tide (except in Nossuk Bay). A foul line symbol was used to indicate the extent of reefs, ledges, rocks, kelp, etc., which was visible on the high tide photography. In some areas no attempt was made to show the limits because of the indefinite appearance.

In Nossuk Bay (T-10575 and T-10576), photographs were taken near low tide and office interpretation of MHW line was difficult, especially in the coves and mouth of streams. However, the forshore features could be more completely delineated than on most of the other surveys.

T-10573 - Desconocida Reef was delineated from high tide photographs. The outline shown is only the approximate limits of the kelp visible on photographs. Careful development during hydrography is needed.

T-10574 - Elevations of rocks on which SKP, 191h and ECO (ECH), 191h are located is desired to assist in verifying office interpreted shorelines which was taken from low tide photography at the entrance to Warm Chuck Inlet.

T-10575 - Verify pier shown 820 meters southeast of SIAM, 191h. (also see note for T-10576).

T-10576 - Shoreline in Nossuk Bay should be carefully verified. Many areas were in deep shadows, and delineation of shoreline was from low tide photography, making interpretation of the MHW line difficult.

T-10577 and T-10578 - Interpretation of MHW line on small islets, rocks and rough shoreline was difficult because of wave action and surf, especially in the Woods Islands area. These areas, such as the small area just west of Epsilon Rock, delineated as ledge, should be inspected for completeness and accuracy of shoreline. Limits of ledges, reefs, rocks awash, and other forshore and offshore features could not be delineated.

T-10579 - Verify existence of pier in Nagasay Cove. Also see note for T-10577.

T-10581 - Verify MHW line in Salt Lake Bay. Much was delineated from low tide photography and deep shadows caused interpretation problems. The higher tide photography was used as a guide in interpretation but the area is at the edge of the photographs and not suitable for delineation on these.

T-10582 and T-10583 - Same difficulty as for T-10577.

No attempt was made to delineate bluffs during office interpretation of shoreline. The heights, character, and extent of any bluffs of importance for charting should be indicated on field photographs during verification of shoreline delineation.
# Photogrammetric Office Review

**T. 10578**

|------------------------|----------|-----------------------|-------------------|

**Control Stations**

<table>
<thead>
<tr>
<th>5. Horizontal Control Stations of Third-Order or Higher Accuracy</th>
<th>6. Recoverable Horizontal Stations of Less Than Third-Order Accuracy (Topographic stations)</th>
<th>7. Photo Hydro Stations</th>
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|---------------|------------------------------|-----------------------------|----------------|

**Alongshore Areas (Nautical Chart Date)**

|---------------|--------------------|-------------------------|------------|

|------------------------|--------------|--------------------------------------|--------------------------------------|

**Physical Features**

|--------------------|--------------------------|-------------------------|

|-------------------------------------|------------------------|-------------------|-----------------------------|

**Cultural Features**

|-----------|---------------|---------------|-----------------------------|

**Boundaries**

<table>
<thead>
<tr>
<th>31. Boundary Lines</th>
<th>32. Public Land Lines</th>
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**Miscellaneous**

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<tr>
<th>33. Geographic Names</th>
<th>34. Junctions</th>
<th>35. Legibility of the Manuscript</th>
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|-------------------------|------------------------|-------------------------------|---------|

<table>
<thead>
<tr>
<th>40. Reviewer</th>
<th>Supervisor, Review Section or Unit</th>
</tr>
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41. **Remarks** (See attached sheet)

**Field Completion Additions and Corrections to the Manuscript**

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

<table>
<thead>
<tr>
<th>Compiler</th>
<th>Supervisor</th>
</tr>
</thead>
</table>

43. **Remarks**

*This form prepared by the final reviewer.*
61. GENERAL STATEMENT

See Summary which is page 6 of this report.

This is an incomplete manuscript. Most of the data for this survey had become lost prior to final review. Data available at the time of final review consisted of the vinylite manuscript, office photographs and field photographs which contained no information other than identification of horizontal control. The identification of horizontal control is believed to have been accomplished during the 1957 field season. The radial plot was run in the Baltimore office in 1958 and the manuscript compiled in the Washington office. The survey was not field edited and there is no contemporary hydrography within the limits of the map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with a copy of registered survey No. 3407, 1:20,000 scale, made in 1913. The shoreline of that survey is not in good agreement with that of this survey. Nearly the same difference that existed between chart 8157 and T-10578, shown in red on the comparison print, also existed between survey No. 3407 and T-10578.

The high stage of the tide at the time of photography and large areas of kelp obscured all but a few of the rocks as shown on survey No. 3407.

The shoreline of the older survey is superseded by that of T-10578 for nautical chart construction purposes. Refer to preceding paragraph.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS CRAIG (C-5) ALASKA, 15 x 20 minute quadrangle, 1:63,360 scale edition of 1951. The two surveys are in fair agreement, the USGS quadrangle is somewhat generalized because of its scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

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

* The Plot Report and "Notes to the Hydrographer" are bound with this report. No field inspection or field edits were accomplished for this map.
65. **COMPARISON WITH NAUTICAL CHARTS**

Comparison was made with Chart 8157, 6th edition, February 21, 1966. The shoreline of the chart is not in good agreement with that of T-10578. All differences in the shoreline of the two surveys has been shown on the comparison print in red.

As stated in item 62, the stage of the tide at the time of photography and large areas of kelp obscured all but a few of the rocks within the limits of the survey. Rocks not visible on the photographs have been indicated on the comparison print in red.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS**

This survey complies with instructions and meets the National Standards of Map Accuracy.

Approved by: 
For 
Allen L. Powell, RADM, USESSA 
Director, Atlantic Marine Center

Reviewed by: 
Leo F. Beugnet

Approved by: 
Evan D. Ramsey 
Chief, Photogrammetric Branch

Chief, Photogrammetry Division

Chief, Nautical Chart Division

(*) THIS SURVEY IS INCOMPLETE (REFER TO PAGE 14, HEADING 61). A NEW BASIC SURVEY IS RECOMMENDED FOR USE IN CHARTING & HYDROGRAPHIC SURVEYING OPERATIONS DUE TO THE LACK OF FIELD CLARIFICATION AND VERIFICATION OF DETAILS.

* BAY MAP ACCURACY - HORIZONTAL CONTROL WAS FIELD IDENTIFIED, AND THE RADIAL PLOT WAS CONSIDERED ADEQUATE TO SERVE AS CONTROL FOR MAPPING TO MEET THE NATIONAL STANDARDS OF MAP ACCURACY.
All rocks visible on the photos have been mapped.
Red from chart 8157

All rocks visible on the photos have been mapped
Red from Chart 8157

All rocks visible on the photographs have been mapped.
Red from Chart 8157

All rocks visible on the photo have been mapped.
Red - from chart 8157

All rocks visible on the photos have been mapped.
BOCAS DE FINAS

(OLD) 1922

AGUILLAR

Red from chart 8157
Blue from survey 3407

All rocks visible on the photos have been mapped

T-10578
Red from chart 8157
Blue from Survey 3407

All rocks visible on the photos have been mapped.
Red from chart 8157
Blue from Survey 3407

All rocks visible on the photos have been mapped.

T-10578