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-10577

LOCALITY

State: Alaska
General locality: Maurelle Islands
Locality: Wood Islands

1956

CHIEF OF PARTY:
William F. Deane, Baltimore District

LIBRARY & ARCHIVES

DATE

* This survey is incomplete. Refer to pages 14 and 15.
DESCRIPTIVE REPORT - DATA RECORD

T-10577

FIELD OFFICE (III):
USGS Ship HODGSON

PHOTOMETRIC OFFICE (III):
Baltimore, Maryland

CHIEF OF PARTY

OFFICER-IN-CHARGE
William F. Deane

INSTRUCTIONS DATED (I) (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):
WOOD, 1922

LAT.: 55° 39' 38.865"

LONG.: 133° 43' 32.214"

VERTICAL DATUM (III):
NEW

EXCEPT AS FOLLOWS:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

PLANE COORDINATES (IV):

Y =

X =

STATE
Alaska

ZONE
U.T.M. 8

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (I) FIELD PARTY, (III) PHOTOMETRIC OFFICE,
OR (IV) WASHINGTON OFFICE.
WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.
**DESCRIPTIVE REPORT - DATA RECORD**

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

Office interpretation of August 1956 nine-lens photography.

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<th>DATE</th>
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RADIAL PLOT AND/OR CONTROL EXTENSION BY (III):  

E. L. Williams  
January 1958

<table>
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<th>STEREOSCOPIC INSTRUMENT COMPILATION (III):</th>
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<td>CONTOURS</td>
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<table>
<thead>
<tr>
<th>PHOTOGRAMMETRIC OFFICE REVIEW BY (III):</th>
<th>DATE</th>
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| REMARKS: | |
|----------|
**CAMERA (KIND OR SOURCE) (III):**

Nine-lens

**PHOTOGRAPHS (III):**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
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<tbody>
<tr>
<td>54590 and 54591</td>
<td>8-12-56</td>
<td>1500</td>
<td>1:10,000</td>
<td>6.3' above MLLW</td>
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**TIDE (III):**

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<tr>
<th>REFERENCE STATION:</th>
<th>Sitka, Alaska</th>
<th>RATIO OF RANGES</th>
<th>MEAN RANGE</th>
<th>SPRING RANGE</th>
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<tr>
<td></td>
<td></td>
<td>7.7</td>
<td>9.9</td>
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**SUBORDINATE STATION:**

Anguilla Island

<table>
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<tr>
<th>WASHINGTON OFFICE REVIEW BY (IV):</th>
<th>Leo F. Beugnet, AMC</th>
<th>DATE:</th>
<th>June 1969</th>
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<td>PROOF EDIT BY (IV):</td>
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<td></td>
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<td>RECOVERED:</td>
<td>IDENTIFIED:</td>
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<td>NUMBER OF BM(S) SEARCHED FOR (II):</td>
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<td>NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):</td>
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<tr>
<td>NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (II):</td>
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**REMARKS:**

Form 181a, 181b and 181c prepared by the final reviewer. There was no other information available.
<table>
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<th>COMPILATION RECORD</th>
<th>COMPLETION DATE</th>
<th>REMARKS</th>
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<tr>
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<td>1958</td>
<td></td>
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<tr>
<td>Final Review</td>
<td>June 1969</td>
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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-10577

Shoreline survey T-10577 is one of 58 similar surveys in project PH-87. It covers Wood Islands and Twin Islands which are part of the Maurell Islands. 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 nothing to indicate that the survey was ever provided for photo-hydro support use.

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 Maurelle 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:

41726 through 41732
51994 and 51995
52004 through 52008
52026 through 52030
52039 through 52043
54580 through 54583

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 Tonowak 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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<td>W.W.II (NIC), 1922</td>
<td>G609, pg 276</td>
<td>NA 1927</td>
<td>133 40</td>
<td>59.588&quot;</td>
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<td>W.W. 12 (Gold), 1922</td>
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<td>W.W. 16, 1922</td>
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<td>W.W. 18 (TREE), 1922</td>
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<td>W.W. 19 (SPOT), 1922</td>
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<td>W.W. 20 (PETE), 1922</td>
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<td>WOOD, 1922</td>
<td>&quot; &quot; 266</td>
<td>&quot;</td>
<td>133 43</td>
<td>32.214</td>
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<td>MID, 1922</td>
<td>&quot; &quot;</td>
<td>&quot;</td>
<td>133 40</td>
<td>02.235</td>
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GEOGRAPHIC NAMES

FINAL NAME SHEET

Ph-87 (Maurelle Islands, Alaska)

T-10577

Epsilon Rock
Favorita Rock
Hendida Island
Iphigenia Bay
Lambda Rock
Maurelle Islands
Pacific Ocean
Princesa Island
Twin Islands
Wood Islands

Approved by:

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician
SURVEYS T-10573 thru T-10583
NOTES FOR THE HYDROGRAPHER

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 foreshore 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 SKIP, 1914 and ECO (ECHO), 1914 are located is desired to assist in verifying office interpreted shoreline which was taken from low tide photography at the entrance to Warm Chuck Inlet.

T-10575 - Verify pier shown 820 meters southeast of SIAM, 1914. (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 foreshore 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

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<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
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<th>4. MANUSCRIPT SIZE</th>
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### CONTROL STATIONS

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<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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### BENCH MARKS

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<th>8. BENCH MARKS</th>
<th>9. PLOTTING OF Sextant FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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### ALONGSHORE AREAS (Nautical Chart Data)

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<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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### AID TO NAVIGATION

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<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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### PHYSICAL FEATURES

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<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
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### CULTURAL FEATURES

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<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
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### CULTURAL FEATURES

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<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
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### BOUNDARIES

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<th>32. PUBLIC LAND LINES</th>
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### MISCELLANEOUS

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<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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### DISCREPANCY OVERLAY

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<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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### REVIEWER

[Signature]

### SUPERVISOR, REVIEW SECTION OR UNIT

[Signature]

### REMARKS

**FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT**

- 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.

### REMARKS

*This form prepared by 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 this time consisted of the vinylite manuscript, office photographs and field photographs which contained no information other than the identification of horizontal control. 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 January 1958 and the manuscript then compiled in the Washington office. The survey was not field edited and there is no contemporary hydrography within the area of the survey.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with a copy of registered survey No. 3407, 1:20,000 scale, made in 1914. The shoreline of that survey is not in good agreement with that of T-10577. The difference has been shown on the comparison print in blue.

Because of the stage of the tide at the time of photography and heavy kelp only a few of the rocks shown on survey 3407 were visible on the photographs. Those rocks that appear on neither the chart or T-10577 have also been indicated on the comparison print in blue.

The shoreline of T-10577 supersedes that of survey No. 3407 for nautical chart construction purposes. See preceding paragraph.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS CRAIG (C-6) ALASKA, 15 x 20 minute 1:63,360 scale quadrangle, edition of 1951. Because of its scale the shoreline of the USGS quadrangle has been generalized and is not as intricate as that of T-10577.

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 edit was 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-10577. The difference has been shown on the comparison print in red.

Because of the stage of the tide at the time of photography and vast areas of kelp, only a few of the rocks shown on the chart are visible on the photographs. Those that are not visible 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: 

Allen L. Powell, RADM, USESSA
Director, Atlantic Marine Center

Reviewed by: 

Leo F. Beugnet

Approved by:

Everett V. Okun
Chief, Photogrammetric Branch

Chief, Photogrammetry Division

Chief, Nautical Chart Division

*This survey is incomplete (refer to page 14, heading C1). A new basic survey is recommended for use in charting and hydrographic surveying operations due to the lack of field clarification and verification of details.*

Basic map accuracy - horizontal control was field identified on the photography & the radial plot was considered adequate to serve as control for mapping to meet the National Standards of Map Accuracy. JVB
Not on chart

Shoreline in red from Chart 1927

From Survey 3407

All rocks visible on the photos have been mapped

55° 40' 00" E

55° 39' 00" W

T-10577
All rocks visible on chart have been avoided.