DESCRIPTIVE REPORT

THIS MAP WILL NOT BE FIELD EDITED

Map No.  
TP-00055

Edition No.  
1

Job No.  
PH-6905

Map Classification  
Class III (FINAL)

Type of Survey  
SHORELINE

LOCALITY

State  
DELAWARE

General Locality  
DELAWARE BAY

Locality  
FREDERICA

1969 TO 19

REGISTRY IN ARCHIVES

DATE

MAP NOT INSPECTED BY
QUALITY CONTROL OF PHOTOGRAMMETRY DIVISION
PRIOR TO REGISTRATION
### DESCRIPTIVE REPORT - DATA RECORD

**PHOTOGRAVIMETRIC OFFICE**  
Coastal Mapping Division  
Norfolk, VA  

**OFFICER-IN-CHARGE**  
Roy K. Matsushige, CDR

### III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
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</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>D. Norman</td>
<td>April 1970</td>
</tr>
<tr>
<td>METHOD: Analytic LANDMARKS AND AIDS BY</td>
<td></td>
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<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>E. Homick</td>
<td>May 1970</td>
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<tr>
<td>METHOD: Coromat</td>
<td>J. Dempsey</td>
<td>May 1970</td>
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<tr>
<td>SCALE: 1:10,000</td>
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<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>R. White</td>
<td>Nov. 1970</td>
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<tr>
<td>METHOD: Smooth Draft PLANISTRY BY</td>
<td>L. Beugnet</td>
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<tr>
<td>SCALE: 1:10,000 HYDRO SUPPORT DATA BY</td>
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<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
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<td>6. APPLICATION OF FIELD EDIT DATA</td>
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<tr>
<td>7. COMPILATION SECTION REVIEW</td>
<td>L. Beugnet</td>
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<td>CLASS III</td>
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<tr>
<td>9. DATA FORWARDED TO PHOTOGRAVIMETRIC BRANCH</td>
<td>L. O. Neterer, Jr.</td>
<td>May 1982</td>
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<td>10. DATA EXAMINED IN PHOTOGRAVIMETRIC BRANCH</td>
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<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td>H. D. Wolfe</td>
<td>MAR 10, 1980</td>
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U.S. G.P.O. 1972-769382/582 REG.##
1. COMPILE PHOTOGRAPHY

CAMERA(S): Wild RC-8 "E" and "K"
Wild RC-9 "N"

TYPES OF PHOTOGRAPHY

LEGEND

TIME REFERENCE

ZONE
Eastern
STANDARD

MERIDIAN
75th

TIDE STAGE REFERENCE

□ PREDICTED TIDES
□ REFERENCE STATION RECORDS
□ TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE
--- | --- | --- | --- | ---
69E(C) 2979 and 2980 | 23 Oct. 70 | 14:58 | 1:20,000 | 0.0
69E(C) 3012 thru 3014 | 23 Oct. 70 | 15:29 | 1:20,000 | +0.4
*69K(I) 4586 thru 4589 | 23 Oct. 70 | 15:29 | 1:20,000 | +0.4

Camera focal length: E = 152.71 mm, K = 151.77 mm, M = 88.20 mm

REMARKS

*Centers not shown on manuscript.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high-water line was compiled from the above listed photography.

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

The mean low-water line was compiled from the above listed photographs.

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

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<tr>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
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<th>DATE(S)</th>
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5. FINAL JUNCTIONS

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<th>WEST</th>
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<td>TP-00056</td>
<td>TP-00057</td>
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REMARKS
### HISTORY OF FIELD OPERATIONS

#### I. FIELD INSPECTION OPERATION (Premarking)  FIELD EDIT OPERATION.

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<th>OPERATION</th>
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<td>2. HORIZONTAL CONTROL</td>
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<td>3. VERTICAL CONTROL</td>
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<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
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<td>5. GEOGRAPHIC NAMES INVESTIGATION</td>
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<td>6. PHOTO INSPECTION</td>
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<td>7. BOUNDARIES AND LIMITS</td>
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#### II. SOURCE DATA

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<td>STATION DESIGNATION</td>
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<td>PHOTO NUMBER</td>
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<td>5. GEOGRAPHIC NAMES: REPORT</td>
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<td>7. SUPPLEMENTAL MAPS AND PLANS</td>
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*U.S. GOVERNMENT PRINTING OFFICE: 1974 - 768-019*
**RECORD OF SURVEY USE**

### I. MANUSCRIPT COPIES

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<th>Compilation Stages</th>
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<th>Marine Charts</th>
<th>Hydro Support</th>
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<td>Class III</td>
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<td>Oct. 1981</td>
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### II. LANDMARKS AND AIDS TO NAVIGATION

#### 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

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<tr>
<th>Number</th>
<th>Chart Letter</th>
<th>Date Forwarded</th>
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### III. FEDERAL RECORDS CENTER DATA

1. **☑ BRIDGING PHOTOGRAPHS; ☑ DUPLICATE BRIDGING REPORT; ☑ COMPUTER READOUTS.**
2. **☑ CONTROL STATION IDENTIFICATION CARDS; ☑ FORM NO. 108X SUBMITTED BY FIELD PARTIES.**
3. **☑ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.**
4. **☑ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: Nov 1982.**

### IV. SURVEY EDITIONS

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<td>Third</td>
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<tr>
<td>Fourth</td>
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**NOAA FORM 76-36D**

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT

TP-00055

This 1:10,000 shoreline manuscript is one of seventeen maps that comprise project PH-6905, Delaware Bay, Delaware. The project encompasses the western part of Delaware Bay from Woodland Beach, latitude 39°20', south to Indian River Inlet, latitude 38°35'.

Correspondence from the Chief of Photogrammetry dated December 14, 1979, called for the cancellation of field edit on TP-00050 through TP-00058 and TP-00116 and registering these as Class III maps. Maps TP-00059 through TP-00063, TP-00121 and TP-00180 were field edited and are to be registered as Class I maps.

No contemporary hydrographic survey was accomplished in the area common to this Class III map.

Field work prior to compilation was accomplished in October 1969; this involved the establishment of horizontal control by premarking methods in order to meet aerotriangulation requirements.

Photographic coverage was provided in October 1969 for aerotriangulation using panchromatic film with the "K" camera at 1:80,000 scale. Compilation photography was color film with the "P" camera at 1:20,000 scale. Infrared low-water photography was taken using the "K" camera at 1:20,000 scale; this photography was flown in tandem with the hydro support photography covering the Murderkill River.

Analytic aerotriangulation was performed at the Washington Science Center in April 1970.

Compilation was performed at the Atlantic Marine Center in November 1970. No copies of this Class III map were submitted for field edit.

The final review was performed at the Atlantic Marine Center in October 1980. Cancellation of field edit requires this map to be registered as a final Class III map compiled from office interpretation of the 1969 photography.

This descriptive report contains all pertinent information used to compile the final Class III map.

The original base manuscript and all pertinent data was forwarded to the Washington Science Center for final registration.
FIELD INSPECTION

TP-00055

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the aerótriangulation of the project.
Photogrammetric Plot Report
PH-6905
Delaware Bay

April 3, 1970

21. Area Covered

The area covered in this project is the southwest shore of Delaware Bay. The manuscripts are TP-50 through TP-62 and TP-116 at 1:10,000 scale and TP-63 at 1:5,000 scale.

22. Method

Two strips of 1:80,000 scale panchromatic photography and one strip of 1:30,000 scale color photography were bridged by analytic aerotriangulation methods. Points were selected on the 1:80,000 scale photography common to the 1:40,000 and 1:20,000 scales to be used for compilation of the 1:10,000 scale manuscripts and as an aid during hydrography. Similarly, the 1:30,000 scale bridging photography was used to control the 1:10,000 scale photography for compilation of the 1:5,000 scale manuscript. Attached are sketches showing strips bridged and legend with fit to control.

23. Adequacy of Control

The horizontal control was adequate. Nevertheless, the following discrepancy should be noted: a substitute station was established for LEWES COAST GUARD LIFE SAVING STATION MAST, 1962 which appears in two strips. A discrepancy of 6.5 degrees in azimuth was found between the two azimuth stations from which angles were turned to the substitute station. When the position was computed using the azimuth from Delaware Breakwater West End Light, 1933 the discrepancy in both strips was approximately 13 feet. When the position was computed using the azimuth from LEWES WEST OIL FACTORY CHIMNEY, 1962 the fit to control was excellent. This latter position is evidently correct. No reason could be found for the discrepancy.

24. Supplemental Data

Elevations were taken from USGS topographic quadrangles to meet the vertical control requirements.
25. **Photography**

The photography was adequate.

Respectfully submitted,

Don O. Norman

Approved and Forwarded,

Henry P. Eichert, Chief
Aerotriangulation Section
LEGEND

- Control Used in Adjustment
- Closures of Bridge To Control Shown in Parentheses
- Control Used as Check

STRIP 1

- Fleming, 1933 Sub. A (-40, +1.06)
- College, 1932 RM 2 Sub. A (+2.20, -2.51)
- 30802 Tie Point
- Union Sta. A (-6.36, +2.28)
- Doctor, 1932 RM 6 (-4.63, -0.76)
- 34801 Tie Point (+1.92, -0.57)

STRIP 2

- Military, 1962 Sub. A (+.56, +1.26)
- Military, 1962 Sub. B (0.0, 0.0)
- Lewes Coast Guard Life Saving Sta. Sub. A (-96, -77)
- Devries, 1962 RM (+1.66, -1.83)
- Devries, 1933 (+1.86, +.94)
- Doctor, 1932 RM 6 (0.0, 0.0)
- Union, 1932 Sub. A (0.0, 0.0)

STRIP 6

- Devries, 1962 RM (0.0, 0.0)
- Devries, 1933 Sub. A (-.62, -.11)
- Lewes Coast Guard Life Saving Sta. Mast Sub. A (+1.06, 4.06)
- Lewes Mun. Water Tank, 1962 (+.75, -1.22)
- Lewes W. Oil Factory, Cov., 1962 (+2.64, +.38)
- Military, 1962 Sub. A (0.0, 0.0)
- Military, 1962 Sub. B (-.81, +.45)
- Delaware Breakwater L.H., 1927 (-.76, +.39)
## Descriptive Report Control Record

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<th>MAP NO.</th>
<th>JOB NO.</th>
<th>GEODENTIC DATUM</th>
<th>ORIGINATING ACTIVITY</th>
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<tr>
<td>TP-00055</td>
<td>PH-6905</td>
<td>NA 1927</td>
<td>Coastal Mapping Division, AMC</td>
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| | | | LATITUDE | LONGITUDE | |
| | | | | |

| | | | | |

### Remarks

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</tbody>
</table>

Supercedes NOAA Form 76-41, 2-71 Edition Which Is Obsolete.
31. **DELINEATION**

Delineation was by the Wild B-8 stereoplotter using 1:20,000 scale, 1969 color photography. These photographs were also used for hydro support.

32. **CONTROL**

The horizontal control was adequate. Refer to the Photogrammetric Plot Report, dated 3 April 1970.

33. **SUPPLEMENTAL DATA**

None

34. **CONTOURS AND DRAINAGE**

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. **SHORELINE AND ALONGSHORE DETAILS**

The mean high-water line and alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

36. **OFFSHORE DETAILS**

All offshore details were compiled by office interpretation of the photographs. No unusual problems were encountered.

37. **LANDMARKS AND AIDS**

Appropriate copies of the 75-40 forms are being submitted with this Descriptive Report.

38. **CONTROL FOR FUTURE SURVEYS**

None
39. **JUNCTIONS**

   See the attached form 76-36B, Item 5 of the Descriptive Report concerning junctions.

40. **HORIZONTAL AND VERTICAL ACCURACY**

    See Item #32.

46. **COMPARISON WITH EXISTING MAPS**

    A comparison was made with the following U.S. Geological Survey Quadrangle: Frederica, Delaware, scale 1:24,000, dated 1956.

47. **COMPARISON WITH NAUTICAL CHARTS**

    A comparison was made with the following National Ocean Survey chart: No. 1218, scale 1:80,000, 16th edition, dated October 25, 1969 (corrected through Notice to Mariners 43-1969).

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

None

**ITEMS TO BE CARRIED FORWARD**

None

Submitted by:

Richard R. White

Richard R. White
Cartographic Technician

Date: June 23, 1972

Approved:

Albert C. Rauck, Jr.
Chief, Coastal Mapping Section
REVIEW REPORT
SHORELINE
TP-00055

61. GENERAL STATEMENT:
See Summary included with this report for final Class III map.

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: Frederica, Delaware, scale 1:24,000 dated 1956.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:
No contemporary hydrographic survey was conducted in the area pertaining to this final Class III map.

65. COMPARISON WITH NAUTICAL CHARTS:
A comparison was made with N.O.S. chart 12304, 27th edition, March 28, 1981, 1:80,000 scale.

No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEY:
This map complies with the project instructions and the requirements for the National Standards of Map Accuracy.

Submitted by:
Lowell O. Neterer
Final Reviewer
October 23, 1981

Approved for forwarding:
Billy H. Barnes
Chief, Photogrammetric Branch, AMC
GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6905 (Delaware Bay, Delaware)

TP-00055

Frederica
Murderkill River
St. Jones Neck
St. Jones River
Spring Creek
Trunk Ditch

Approved by:

Charles E. Harrington
Chief Geographer, OA/C3x5
Information of Dissemination of Project Material

PH-6905

Delaware Bay

NATIONAL ARCHIVE/FEDERAL RECORD CENTER

Computer Readout
Control Station Identification Cards
Field Edit Ozalids
Field Photographs
NOAA Form 76-41 (Descriptive Report Control Record)

Project Diagrams
Plot Report
Bureau Archives
   Descriptive Report
   Registered Maps
Reproduction Division
   8x Reduction Negative of Each Maps
Office of Staff Geographer
   Geographer Names Standard
# 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 Review.

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