

TP-00055

TP-00055

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h2 style="text-align: center;">DESCRIPTIVE REPORT</h2>	
THIS MAP WILL NOT BE FIELD EDITED	
<i>Map No.</i> TP-00055	<i>Edition No.</i> 1
<i>Job No.</i> PH-6905	
<i>Map Classification</i> Class III (FINAL)	
<i>Type of Survey</i> SHORELINE	
<h3 style="text-align: center;">LOCALITY</h3>	
<i>State</i> DELAWARE	
<i>General Locality</i> DELAWARE BAY	
<i>Locality</i> FREDERICA	
<div style="border: 1px solid black; padding: 5px; text-align: center;"> 1969 TO 19 </div>	
<h3 style="text-align: center;">REGISTRY IN ARCHIVES</h3>	
<i>DATE</i>	

MAP NOT INSPECTED BY
QUALITY CONTROL OF PHOTOGRAMMETRY DIVISION
PRIOR TO REGISTRATION

10615

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. 00055	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. (1)	
				<input type="checkbox"/> RESURVEY		MAP CLASS III (FINAL)	
				<input type="checkbox"/> REVISED		JOB PH. 6905	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Norfolk, VA				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE Roy K. Matsushige, CDR				TYPE OF SURVEY		JOB PH. _____	
				<input type="checkbox"/> ORIGINAL		MAP CLASS _____	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation Decmeber 10, 1969 Compilation May 12, 1970 Amendment I April 1, 1971 Memo (Cancel field edit) December 14, 1979 Memo (Completion schedule) June 22, 1981				Field September 26, 1969 Amendment I October 7, 1969			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Polyconic				4. GRID(S)			
				STATE Delaware		ZONE	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				D. Norman		April 1970	
METHOD: Analytic LANDMARKS AND AIDS BY							
2. CONTROL AND BRIDGE POINTS PLOTTED BY				E. Homick		May 1970	
METHOD: Coradomat CHECKED BY				J. Dempsey		May 1970	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				R. White		Oct. 1970	
COMPILATION CHECKED BY				L. Graves		Oct. 1970	
INSTRUMENT: Wild B-8				CONTOURS BY		NA	
SCALE: 1:10,000				CHECKED BY		NA	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				R. White		Nov. 1970	
				CHECKED BY		L. Beugnet	
METHOD: Smooth Draft				CONTOURS BY		NA	
				CHECKED BY		NA	
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				R. White		Nov. 1970	
				CHECKED BY		L. Beugnet	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				L. Beugnet		Nov. 1970	
6. APPLICATION OF FIELD EDIT DATA BY				None			
				CHECKED BY		None	
7. COMPILATION SECTION REVIEW Class III BY				L. Beugnet		Nov. 1970	
8. FINAL REVIEW Class III BY				L. O. Neterer, Jr.		Oct. 1981	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				L. O. Neterer, Jr.		May 1982	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY							
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				H. D. Wolfe		MAR 10 1983	

NOAA FORM 76-36A

SUPERSEDES FORM C&GS 181 SERIES

Chief, Photo Map and
Imagery Unit
* U.S. G.P.O. 1972-769382/582 REG.#6

TP-00055
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" and "K" Wild RC-9 "M"		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR X (P) PANCHROMATIC (I) INFRARED X	TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY			ZONE Eastern MERIDIAN 75th	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT

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.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00053 & TP-00054	TP-00056	TP-00057	No Survey

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00055

HISTORY OF FIELD OPERATIONS.

I. ☒ FIELD INSPECTION OPERATION (Premarking) ☐ FIELD EDIT OPERATION.

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. K. Wilson	Oct. 1969
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER

STATION NAME

PHOTO NUMBER

STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

5. GEOGRAPHIC NAMES:

☐ REPORT☒ NONE

6. BOUNDARY AND LIMITS:

☐ REPORT☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

None

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TP-00055
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	Nov. 1970	Class III		
Final Review, Class III	Oct. 1981	Final, Class III map No field edit performed		

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____

3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

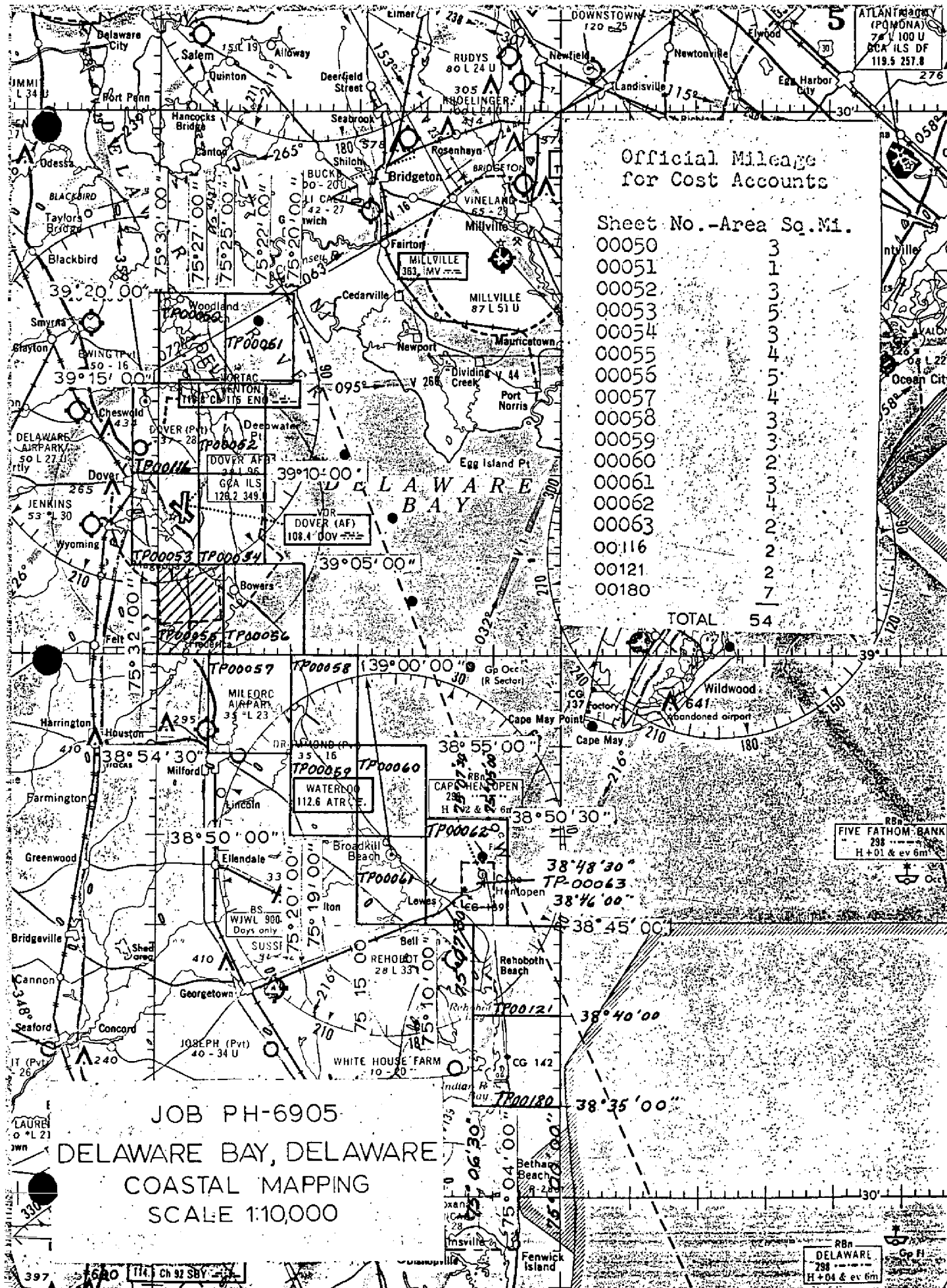
III. FEDERAL RECORDS CENTER DATA

1. ☐ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS ⁷⁶⁻⁴⁰ ~~76-40~~ SUBMITTED BY FIELD PARTIES.
 3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

4. ☒ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: Nov 1982

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



Official Mileage for Cost Accounts

Sheet No.-Area Sq.Mi.

00050	3
00051	1
00052	3
00053	5
00054	3
00055	4
00056	5
00057	4
00058	3
00059	3
00060	2
00061	3
00062	4
00063	2
00116	2
00121	2
00180	7

TOTAL 54

FIVE FATHOM BANK
298
H+01 & ev 6m

DELAWARE
298
H+04 & ev 6m

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 "M" camera at 1:80,000 scale. Compilation photography was color film with the "E" 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

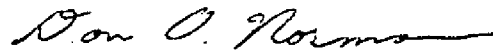
Elevations were taken from USGS topographic quadrangles to meet the vertical control requirements.

-2-

25. Photography

The photography was adequate.

Respectfully submitted,

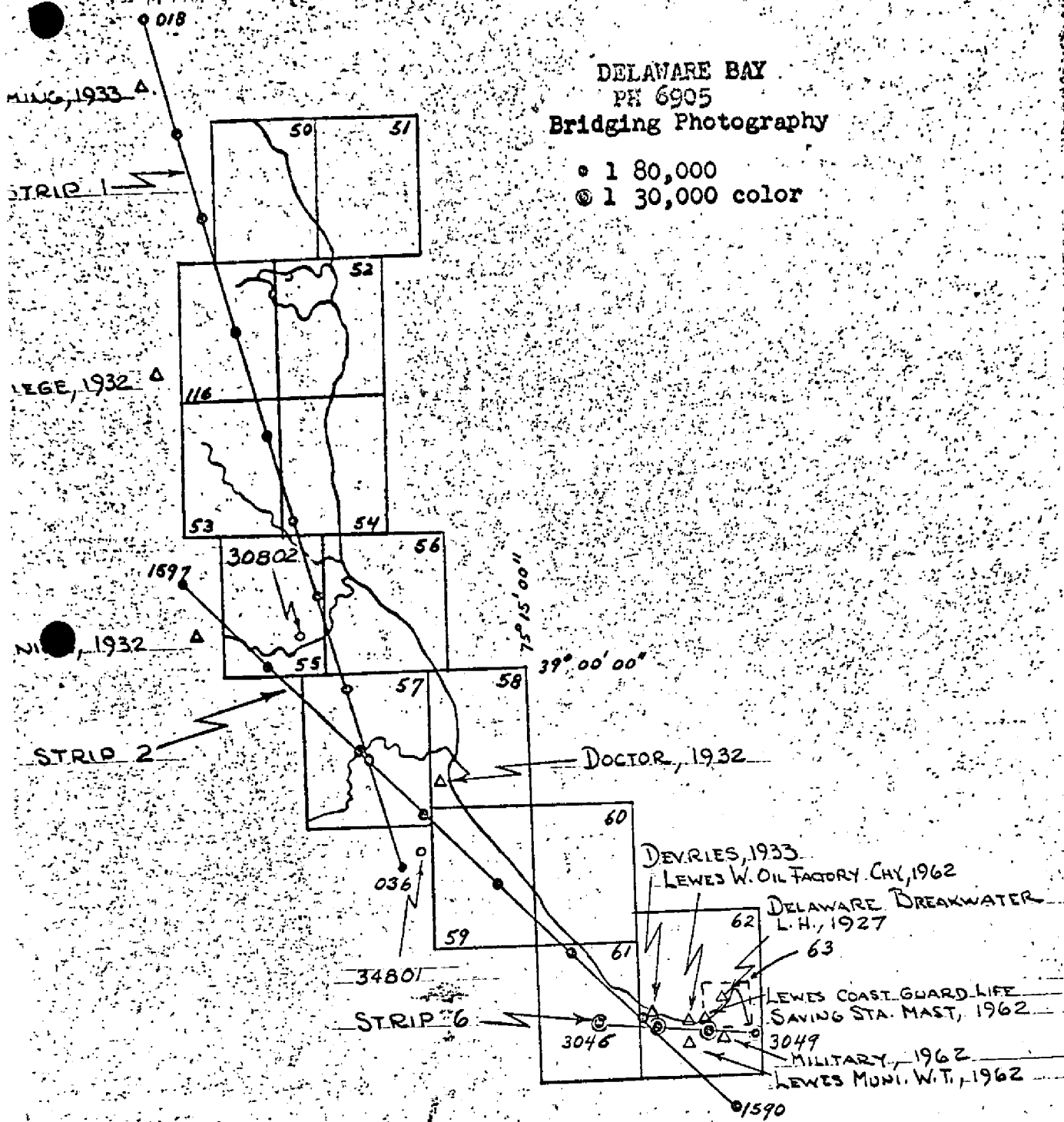


Don O. Norman

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 RM2 SUB. A (+2.20, -2.51)
- ▲ 30802 TIE POINT
- △ UNION STA. A (-6.36, +2.20)
- △ DOCTOR, 1932 RM6 (-4.03, +6.75)
- ▲ 34501 TIE POINT (+1.92, -.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 RM6 (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 (-.02, -.11)
- ▲ LEWES COAST GUARD LIFE SAVING STA. MAST SUB. A (+1.05, 4.06)
- ▲ LEWES MUNI. WATER TANK, 1962 (+.75, -1.22)
- ▲ LEWES W. OIL FACTORY CHY., 1962 (+2.54, +.36)
- ▲ 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

MAP NO. TP-00055	JOB NO. PH-6905	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM NA 1927		COORDINATES IN FEET STATE _____ ZONE _____	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE		REMARKS
None					X=			ϕ		
					Y=			λ		
					X=			ϕ		
					Y=			λ		
					X=			ϕ		
					Y=			λ		
					X=			ϕ		
					Y=			λ		
					X=			ϕ		
					Y=			λ		
					X=			ϕ		
					Y=			λ		
COMPUTED BY					COMPUTATION CHECKED BY				DATE	
LISTED BY					LISTING CHECKED BY				DATE	
HAND PLOTTING BY					HAND PLOTTING CHECKED BY				DATE	

COMPILATION REPORT

TP-00055

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 76-40 forms are being submitted with this Descriptive Report.

38. CONTROL FOR FUTURE SURVEYS

None

TP-00055

39. JUNCTIONS

See the attached form 76-36B, Items 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:

for *Albert C. Rauck, Jr.*

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
Lowell O. Neterer

Final Reviewer
October 23, 1981

Approved for forwarding:

Billy H. Barnes

Billy H. Barnes
Chief, Photogrammetric Branch, AMC

July 28, 1981

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6905 (Delaware Bay, Delaware)

TP-00055

Frederica

Murderkill River

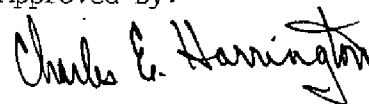
St. Jones Neck

St. Jones River

Spring Creek

Trunk Ditch

Approved by:

A handwritten signature in cursive script, reading "Charles E. Harrington".

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

