

TP- 00057

TP- 00057

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-00057	<i>Edition No.</i> 1
<i>Job No.</i> PH-6905	
<i>Map Classification</i> Class III (Final)	
<i>Type of Survey</i> Shoreline	
LOCALITY	
<i>State</i> DELAWARE	
<i>General Locality</i> South Shore Delaware Bay	
<i>Locality</i> Mispillion River	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 19 69 TO 19 </div>	
REGISTRY IN ARCHIVES	
DATE	

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

NOAA FORM 76-36A
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

- ☒ ORIGINAL
- ☐ RESURVEY
- ☐ REVISED

SURVEY TF. 00057

MAP EDITION NO. (1)

MAP CLASS III Final

JOB PH. 6905

PHOTOGRAMMETRIC OFFICE

Coastal Mapping Division
Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

Roy Matsushige, CDR

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

- ☐ ORIGINAL
- ☐ RESURVEY
- ☐ REVISED

JOB PH. _____

MAP CLASS _____

SURVEY DATES:

19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE

Aerotriangulation December 10, 1969

Compilation May 12, 1970

Amendment I April 1, 1971

Memo (Cancel field edit) December 14, 1979

Memo (Completion Schedule) June 22, 1981

2. FIELD

Field September 26, 1969

Amendment I October 7, 1969

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

- ☒ MEAN HIGH-WATER
- ☒ MEAN LOW-WATER
- ☐ MEAN LOWER LOW-WATER
- ☐ 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. O. Norman	April 1970
METHOD: Analytic	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	J. Dempsey	May 1970
METHOD: Coradomat	CHECKED BY	E. Homick	May 1970
3. STEREOSCOPIC INSTRUMENT	PLANIMETRY BY	R. R. White	July 1970
COMPILATION	CHECKED BY	A. L. Shands	July 1970
INSTRUMENT: Wild B-8	CONTOURS BY	NA	
SCALE: 1:10,000	CHECKED BY	NA	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	R. R. White	July 1970
	CHECKED BY	B. Wilson	July 1970
METHOD: Smooth Drafted	CONTOURS BY	NA	
	CHECKED BY	NA	
SCALE: 1:10,000	HYDRO SUPPORT DATA BY	R. R. White	July 1970
	CHECKED BY	B. Wilson	July 1970
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	B. Wilson	July 1970
6. APPLICATION OF FIELD EDIT DATA	BY	None	
	CHECKED BY	None	
7. COMPILATION SECTION REVIEW Class III	BY	B. Wilson	
8. FINAL REVIEW Class III	BY	L. O. Neterer, Jr.	Nov. 1981
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	L. O. Neterer, Jr.	Nov. 1981
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. 1972-769380/547 REG.#6

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00057
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-9 "M" Wild RC-8 "E" and "K"		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	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 75th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
69E(C)2960 thru 2962	23 Oct. 69	14:28	1:20,000	0.1 ft. above MLW	
69E(C)2971 thru 2973	23 Oct. 69	14:43	1:20,000	0.2 ft. above MLW	
69E(C)3020 and 3021	23 Oct. 69	15:37	1:20,000	1.1 ft. above MLW	
* 69K(I)4485 and 4486	23 Oct. 69	13:36	1:20,000	0.1 ft. below MLW	
* 69K(I)4534 and 4535	23 Oct. 69	14:29	1:20,000	0.1 ft. above MLW	
* 69K(I)4545 thru 4548	23 Oct. 69	14:44	1:20,000	0.2 ft. above MLW	
* 69K(I)4594 thru 4597	23 Oct. 69	15:35	1:20,000	1.1 ft. above MLW	
Camera focal length:		E = 152.71, K = 151.77, M = 88.20 mm			

REMARKS

All tides were computed from predicted tides at Murderkill River Entrance

*Centers not shown on manuscript.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high-water line was compiled using the above listed color photographs.

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

The mean low-water line was compiled using the above listed infrared 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-00055 & TP-00056	TP-00058 & TP-00059	No Survey	No Survey

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00057
HISTORY OF FIELD OPERATIONSI. ☒ 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 <u>None</u>	
	ESTABLISHED BY <u>None</u>	
	PRE-MARKED OR IDENTIFIED BY <u>None</u>	
3. VERTICAL CONTROL	RECOVERED BY <u>NA</u>	
	ESTABLISHED BY <u>NA</u>	
	PRE-MARKED OR IDENTIFIED BY <u>NA</u>	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY <u>None</u>	
	LOCATED (Field Methods) BY <u>None</u>	
	IDENTIFIED BY <u>None</u>	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE BY <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY <u>None</u>	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY <u>None</u>	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED <u>None</u>		2. VERTICAL CONTROL IDENTIFIED <u>NA</u>	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
3. PHOTO NUMBERS (Clarification of details) <u>None</u>			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED <u>None</u>			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS <u>None</u>			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) <u>None</u>			

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-00057
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	June 1972	Class III		
Final Review, Class III	July 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: _____

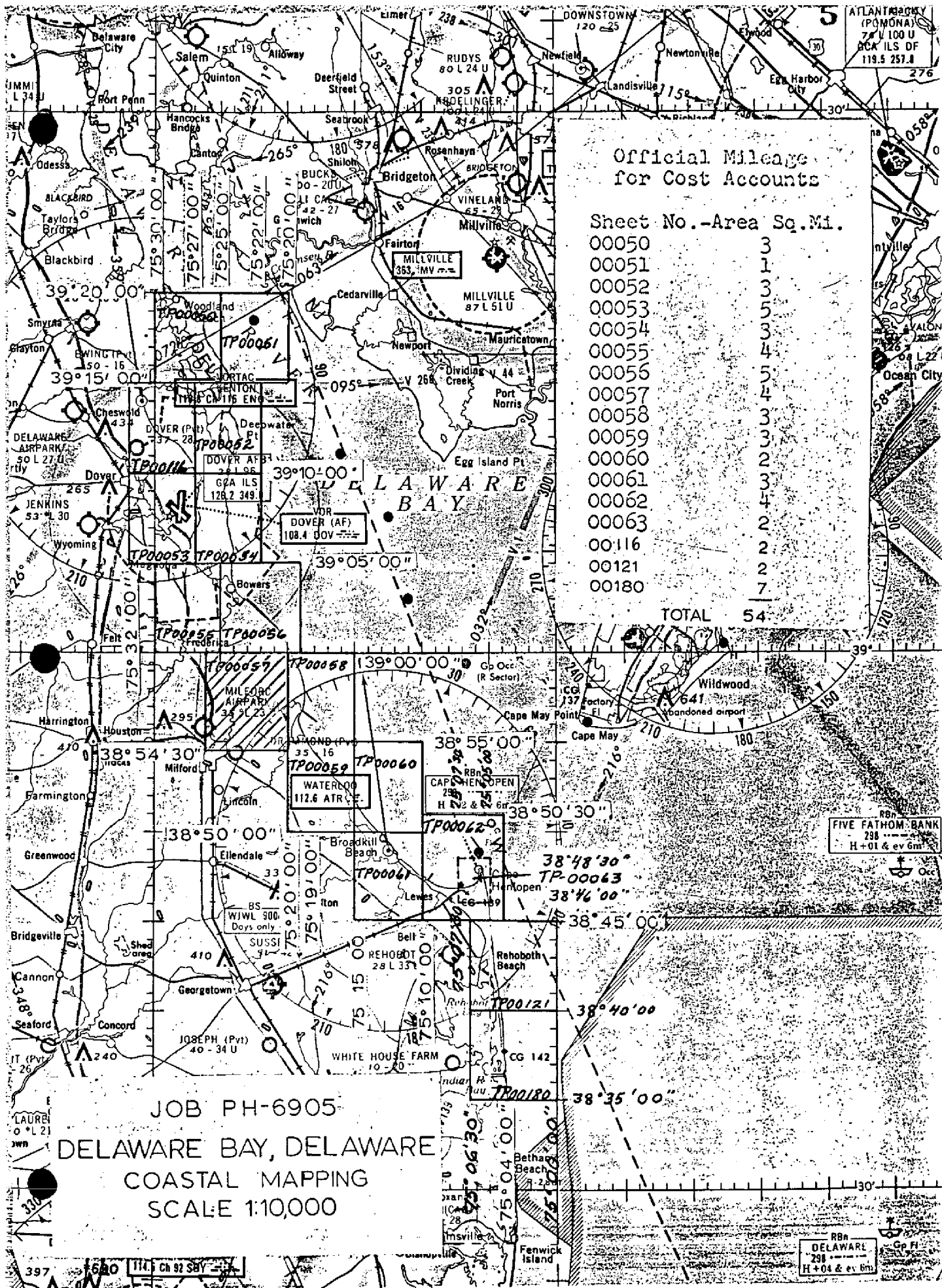
III. FEDERAL RECORDS CENTER DATA

1. ☐ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS ⁷⁶⁻⁴⁰ ~~76-36X~~ 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	



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00057

This 1:10,000 scale 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 Final Class III maps. Maps TP-00059 through TP-00063, TP-00121 and TP-00180 were field edited and are to be registered as Final 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 identification 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 taken using color film in the "E" camera at 1:20,000 scale. Infrared low water photography was taken using the "K" camera at 1:20,000 scale; the low water infrared photographs were taken in tandem with hydro support photography.

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

Compilation was performed at the Atlantic Marine Center in June 1972. No copies of the Class III map were submitted for field edit.

The final review was performed at the Atlantic Marine Center, in November of 1981. 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 were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00057

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 aerotriangulation 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,

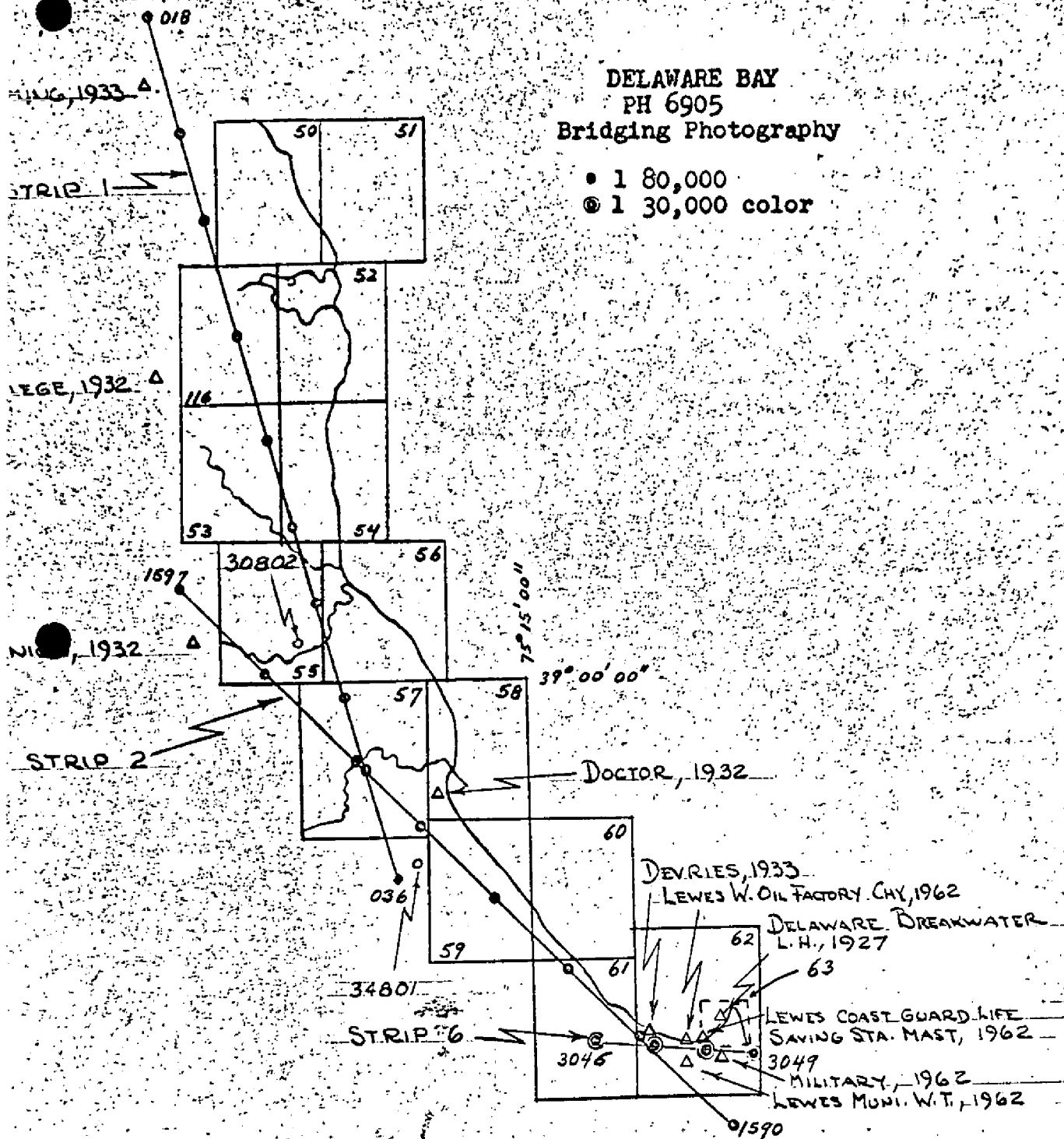
Don O. Norman

Don O. Norman

Approved and Forwarded,

Henry P. Eichert

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)
- ▲ 30502 TIE POINT
- △ UNION STA. A (-6.36, +2.28)
- △ DOCTOR, 1932 RM6 (-4.23, +6.75)
- ▲ 34901 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 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 (-.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 C-7, 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.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODEIC DATUM		ORIGINATING ACTIVITY		
					NA 1927	COASTAL MAPPING DIVISION, AMC			
					COORDINATES IN FEET		GEOGRAPHIC POSITION		REMARKS
					STATE	ZONE	ϕ LATITUDE	λ LONGITUDE	
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		
					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-00057

31. DELINEATION

Delineation was by the Wild B-8 stereoplotting instrument using 1:20,000 scale 1969 color photography. Common detail points were selected for the infrared photography which were used to compile the mean low water line graphically.

32. CONTROL

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

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

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Refer to the Data Record Form 76-36B, Item 5 of the Descriptive Report concerning junctions.

COMPILATION REPORT

TP-00057

40. HORIZONTAL AND VERTICAL ACCURACY

See Item #32.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with the following U.S. Geological Survey
Quadrangles: Mispillion River, Delaware, dated 1955 and Milford,
Delaware, dated 1954, both 1:24,000 scale.

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).

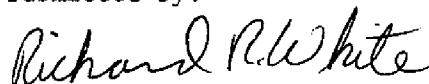
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

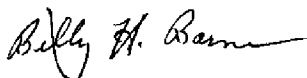
Submitted by:



Richard R. White
Cartographic Technician

Date: 23 June 1972

Approved:



for Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

REVIEW REPORT

SHORELINE

TP-00057

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. quadrangles: Mispillion River, Delaware, dated 1955 and Milford, Delaware, dated 1954, both are 1:24,000 scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No contemporary hydrographic survey was conducted in the area pertaining to this final Class III map.

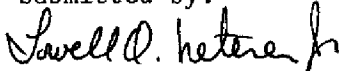
65. COMPARISON WITH NAUTICAL CHARTS:

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

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the project instructions and the requirements of National Standards of Map Accuracy.

Submitted by:



Lowell O. Neterer, Jr.

Final Reviewer

November 24, 1981

Approved for forwarding



Billy H. Barnes

Chief, Photogrammetric Branch, AMC

July 28, 1981

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6905 (Delaware Bay, Delaware)

TP-00057

Beaverdam Branch

Bowen Landing

Cains Landing

Conrail (RR)

Crooked Gut

Deep Branch

Fishing Branch

Kings Causeway Branch

Maloneys Landing

Milford

Misphillion River

Swan Creek

Grecos Creek *LOH*

Approved by:

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

