

TP-00051

TP-00051

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
THIS MAP EDITION WILL NOT BE FIELD EDITED	
Map No. TP-00051	Edition No. 1
Job No. PH-6905	
Map Classification Class. III (FINAL)	
Type of Survey SHORELINE	
LOCALITY	
State DELAWARE	
General Locality DELAWARE BAY	
Locality GOOSE POINT	
1969 TO 19	
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		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width: 50%;"> SURVEY TP. 00051 MAP EDITION NO. 15 MAP CLASS III Final JOB PH. 6905 </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. 00051 MAP EDITION NO. 15 MAP CLASS III Final JOB PH. 6905		
TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. 00051 MAP EDITION NO. 15 MAP CLASS III Final JOB PH. 6905						
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, AMC Norfolk, Virginia		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> LAST PRECEDING MAP EDITION </td> </tr> <tr> <td style="width: 50%;"> TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width: 50%;"> JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__ </td> </tr> </table>		LAST PRECEDING MAP EDITION		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__
LAST PRECEDING MAP EDITION							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__						
OFFICER-IN-CHARGE Roy Matsushige, CDR							
I. INSTRUCTIONS DATED							
1. OFFICE		2. FIELD					
Aerotriangulation December 10, 1969 Compilaition 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:		OTHER (Specify)					
<input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)					
2. VERTICAL:		OTHER (Specify)					
<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					
METHOD: Analytic LANDMARKS AND AIDS BY		April 1970					
2. CONTROL AND BRIDGE POINTS PLOTTED BY		J. Dempsey					
METHOD: Coradomat CHECKED BY		March 1971					
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY		E. Homick					
COMPILATION CHECKED BY		March 1971					
INSTRUMENT: Wild B-8		R. White					
SCALE: 1:10,000		A. Shands					
CONTOURS BY		June 1972					
CHECKED BY		June 1972					
4. MANUSCRIPT DELINEATION PLANIMETRY BY		NA					
CHECKED BY		NA					
METHOD: Smooth Draft		R. R. White					
SCALE: 1:10,000		A. L. Shands					
HYDRO SUPPORT DATA BY		July 1972					
CHECKED BY		July 1972					
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		A. L. Shands					
CHECKED BY		July 1972					
6. APPLICATION OF FIELD EDIT DATA BY		None					
CHECKED BY		None					
7. COMPILATION SECTION REVIEW CLASS III BY		A. L. Shands					
8. FINAL REVIEW CLASS III BY		July 1972					
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr.					
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		July 1981					
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		L. O. Neterer, Jr.					
CHECKED BY		May 1982					
H. D. White		MAP 10 1983					

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00051
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

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

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
+ 69E(C)-2921 thru 2122	23 Oct., 69	1351	1:20,000	0.2 ft. below MLW
* 69K(I)-4716 thru 4718	26 Oct., 1969	1131	1:20,000	0.0 ft. above MHW
* 69K(I)-4496 thru 4497	23 Oct., 1969	1351	1:20,000	0.2 ft. above MLW

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

REMARKS

*Centers not shown on manuscript
+Tide coordinated photography

2. SOURCE OF MEAN HIGH-WATER LINE:

The MHW Line was compiled from the above-listed tide coordinated infrared mean high water photography.

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

The MLW Line was compiled from the above-listed tide coordinated infrared mean low water photography.

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
No Survey	No Survey	TP-00052	TP-00050

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00051
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 J. K. Wilson	Oct. 1969
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY N.A.	
	ESTABLISHED BY N.A.	
	PRE-MARKED OR IDENTIFIED BY N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <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
None2. VERTICAL CONTROL IDENTIFIED
N.A.

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 ☒ NONE6. 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)

1-form 524

2-forms C & GS 526

RECORD OF SURVEY USE

TP-00051

4

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete pending field edit	July 1972	Class III		
Final Review, Class III	Aug. 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. 76-46 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II; NOAA FORM 76-36C.

ACCOUNT FOR EXCEPTIONS: 1. Form 524, 2. Form CGS 526

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- _____	<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- _____	<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- _____	<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	3
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

JOB PH-6905
DELAWARE BAY, DELAWARE
COASTAL MAPPING
SCALE 1:10,000

FIVE FATHOM BANK
298
H+01 & ev 6m

RBn
DELAWARE
298
H+04 & ev 6m

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-00051

This 1:10,000 shoreline manuscript is one of seventeen maps that comprise Project PH-6905, Delaware Bay, Delaware. This 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. Tide coordinated infrared high and low water photography was taken using the K camera at 1:20,000 scale; the low water infrared photographs were taken in tandem with the hydro support photography.

Analytic aero-triangulation was performed at the Washington Science Center, April 1970.

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

The final review was performed at the Atlantic Marine Center, in August 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 was forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00051

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

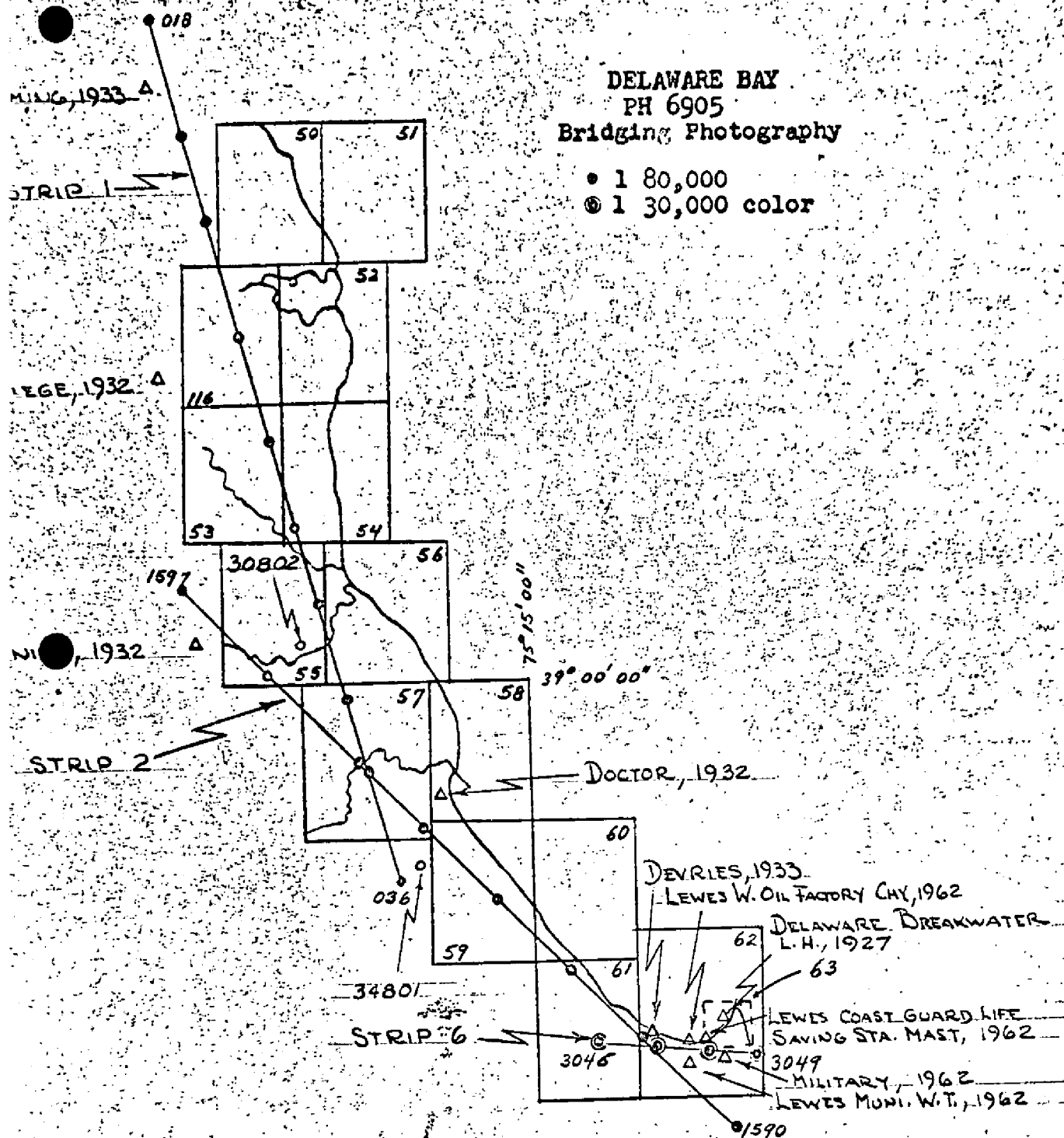
DELAWARE BAY

PH 6905

Bridging Photography

• 1 80,000

⊙ 1 30,000 color



LEGEND

11



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, +2.28)
- ▲ DOCTOR, 1932 RM6 (-4.83, +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 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)

COMPILATION REPORT

TP-00051

31. DELINEATION

Delineation was by the Wild B-8 stereoplotting instrument using 1:40,000 scale, 1969 color photography. Common points were selected and transferred to the 1:20,000 scale 1969 color hydro support and infrared photography, which were used to compile both the mean low and mean high water lines graphically.

32. CONTROL

Refer to the Photogrammetric Plot Report, dated April 3, 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 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 76-40 forms are being submitted with this Descriptive Report.

38. CONTROL FOR FUTURE SURVEYS

None

TP-00051

39. JUNCTIONS

Refer to the Data Record 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: BOMBAY HOOK, DELAWARE-NEW JERSEY, scale 1:24,000, dated 1956.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with the following National Ocean Survey Chart: 1218, scale 1:80,000, 16th edition dated October 25, 1969 (corrected through N.M. 43/69).

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

R R White

R. R. White
Cartographic Technician

Date: July 7, 1972

Approved:

Albert C. Rauck, Jr.

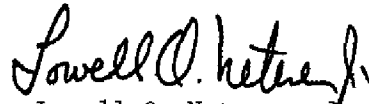
for Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

REVIEW REPORT
SHORELINE

TP-00051

61. GENERAL STATEMENT:
See Summary included with this report for this 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, BOMBAY HOOK, DELAWARE-NEW JERSEY, 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.
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
August 12, 1981

Approved for forwarding



Billy H. Barnes
Chief, Photogrammetric Branch, AMC

July 29, 1981

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6905 (Delaware Bay, Delaware)

TP-00051

Bombay Hook Island

Delaware Bay

Duck Creek

Goose Point

Myrkle Gut

Terripan Gut *RDH*

Hay Ditch *RDH*

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

