

TP-00235

TP-00235

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey ... Shoreline Mapping

Job No. ... CM-7707 Map No. TP-00235

Classification No. III Edition No. ... 1

LOCALITY

State ... New Jersey - Pennsylvania

General Locality ... Delaware River

Locality ... Roebling to Bordentown

19 75 TO 19 76

REGISTRY IN ARCHIVES

DATE

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	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division (Rockville)		SURVEY TP. <u>00235</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III</u> JOB <u>PH-CM-7707</u>	
OFFICER-IN-CHARGE Commander James Collins		LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19 <u></u> TO 19 <u></u>	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Instructions - Aerotriangulation (CM-7508) 2/4/76 Instructions - Office (CM-7707) 3/18/77		Instructions - Field (CM-7508) 3/4/75 Instructions - Field (CM-7508) Supplement I - 7/11/75	
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) National Geodetic Vertical Datum of 1929	
3. MAP PROJECTION Traverse Mercator Projection		4. GRID(S) STATE <u>New Jersey</u> ZONE <u></u>	
5. SCALE <u>1:10,000</u>		STATE <u></u> ZONE <u></u>	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: <u>Analytic</u>		BY <u>R. Kelly</u>	<u>10-15-76</u>
LANDMARKS AND AIDS BY		BY <u>D. Norman</u>	<u>10-15-76</u>
2. CONTROL AND BRIDGE POINTS METHOD: <u>Coradomat</u>		PLOTTED BY <u>H. Jones</u>	<u>5-20-77</u>
CHECKED BY <u>N.A.</u>			
3. STEREOSCOPIC INSTRUMENT COMPILATION		PLANIMETRY BY <u>L. Harrod</u>	<u>6-2-77</u>
INSTRUMENT: <u>Wild B-8</u>		CHECKED BY <u>G. Vanderhaven</u>	<u>6-2-77</u>
SCALE: <u>1:10,000</u>		CONTOURS BY <u>N.A.</u>	
CHECKED BY <u>N.A.</u>			
4. MANUSCRIPT DELINEATION		PLANIMETRY BY <u>L. Harrod</u>	<u>7-11-77</u>
METHOD: <u>Smooth Drafting</u>		CHECKED BY <u>B. Rodkey</u>	<u>5-26-77</u>
SCALE: <u>1:10,000</u>		CONTOURS BY <u>N.A.</u>	
HYDRO SUPPORT DATA BY <u>N.A.</u>		CHECKED BY <u>N.A.</u>	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT		BY <u>G. Fromm</u>	<u>8/77</u>
6. APPLICATION OF FIELD EDIT DATA		BY <u>Field Edit canceled</u>	<u>4/78</u>
CHECKED BY			
7. COMPILATION SECTION REVIEW		BY <u>G. Fromm</u>	<u>5/78</u>
8. FINAL REVIEW		BY <u>J.B. Phillips</u>	<u>7/78</u>
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH			
11. MAP REGISTERED - COASTAL SURVEY SECTION		BY <u>R.T. Cafer</u>	<u>11/78</u>

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

COMPILATION SOURCES

TP-00235

1. COMPILATION PHOTOGRAPHY

CAMERA(S) RC-10(B) Camera
Focal length = 152.74 mmTYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

TIDE STAGE REFERENCE

- ☒ PREDICTED TIDES
☐ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

- (C) COLOR
(P) PANCHROMATIC
(I) INFRARED

ZONE

Eastern

☒ STANDARD

MERIDIAN

75th

☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
75B(C) 4942-4943, 4946-4947	8-28-75	1302-1308	1:20,000	+ .57 ft. MLW
75B(C) 4911-4916	8-28-75	1337-1341	1:20,000	+ .54 ft. MLW

REMARKS

All the above photography was ratioed to 1:10,000 scale.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the mean high-water line is the photography listed under Item 1.

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

The source of the mean low-water line is the photography listed under Item 1.

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 contemporary	TP-00236	No contemporary	TP-00237
REMARKS survey		survey	

TP-00235

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.S. Tibbetts	1975-1976
2. HORIZONTAL CONTROL	RECOVERED BY R.S. Tibbetts	3/75
	ESTABLISHED BY L.H. Davis	3/75
	PRE-MARKED OR IDENTIFIED BY L.H. Davis	3/75
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 R.S. Tibbetts	1/76
	LOCATED (Field Methods) BY R.S. Tibbetts	1/76
	IDENTIFIED BY R.S. Tibbetts	1/76
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	☐ COMPLETE BY	
	☐ SPECIFIC NAMES ONLY	
	☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N.A.	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
All field operations were performed under CM-7508.			

3. PHOTO NUMBERS (Clarification of details)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Refer to 76-40 listing bound with this Descriptive Report.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

N.A.

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

All field records are on file under Project CM-7508.

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

TP-00235

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	8/12/76	Class III Map		4-18-78
Compilation office review	May 1978	Field Edit postponed <i>cancel</i>		
Final review before registration	July 1978	Class III 1st Edition	Aug. 14, 1978	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
4			LDMKS
2			Aids
2			To be deleted

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

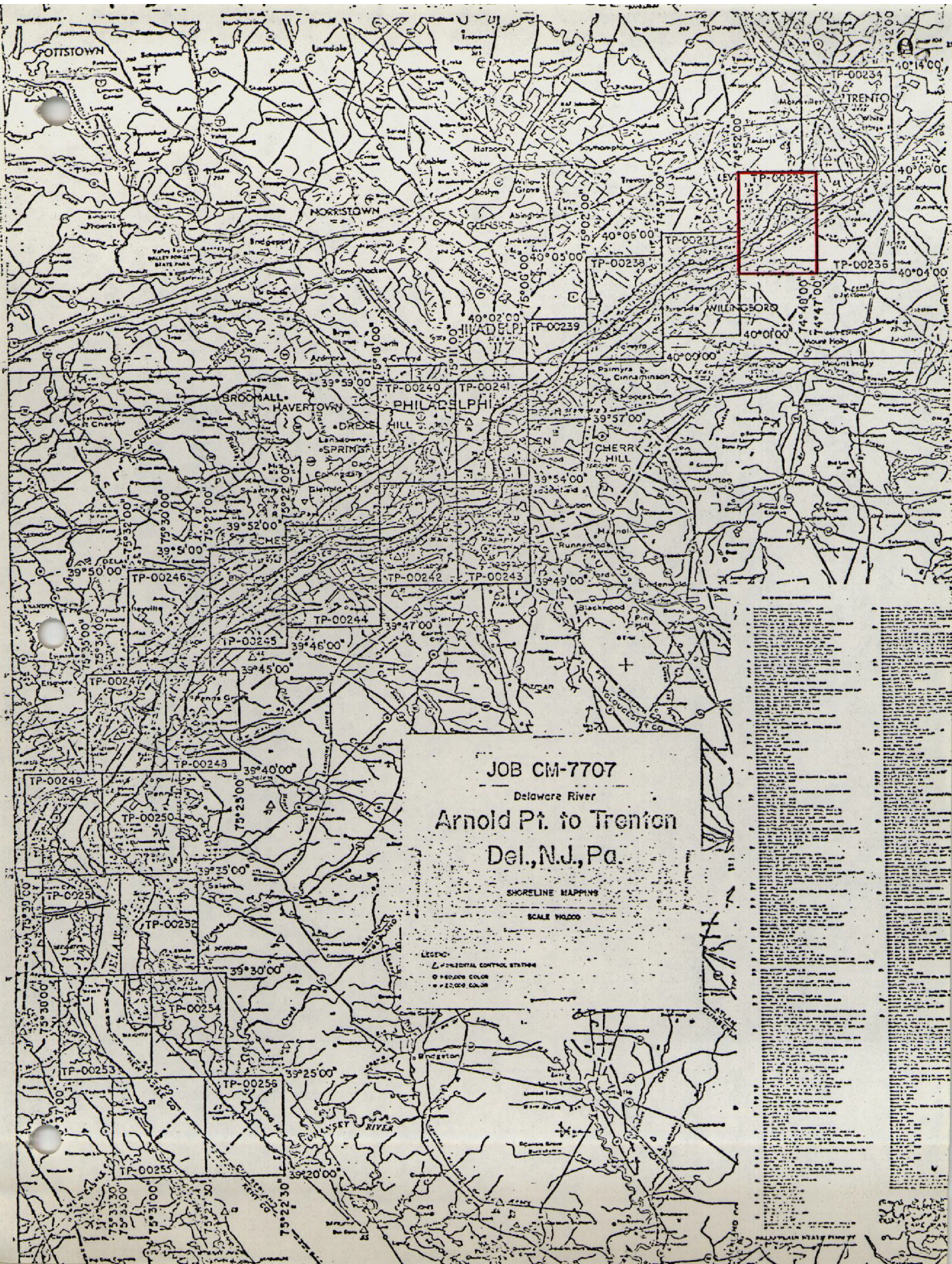
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 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: _____

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 ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

NOAA FORM 76-36D



Summary CM-7707
Maps TP-00234 thru TP-00239

This summary covers the initial portion of this job. Field edit for these maps was canceled April 24, 1978. They are final reviewed and registered as Class III.

This area was originally scheduled for landmark and aid location under job CM-7508. The job was completed in March 1977. All information obtained for that job was applied to the compiled maps in CM-7707. The forms 76-40 for landmarks and aids is part of each Descriptive Report. However, they are not furnished to charts with this project. Duplicate forms were furnished with job CM-7508 in April 1977.

The purpose of this project is to furnish a base for new hydrographic surveys and nautical chart updating.

The manuscripts were compiled using the Wild B-8 Stereoplotter with 1:20,000 scale natural color photography taken in 1975.

Final review was done in the Rockville, Maryland office in July 1978.

A stable base positive copy of each map with its Descriptive Report is registered in the NOS Archives.

FIELD INSPECTION

There was no field inspection performed under Job CM-7707. Field work prior to compilation was accomplished under Job CM-7508. This field work consisted of the recovery and identification of horizontal control and the locating or photoidentifying of landmarks, non-floating aids, and supplement objects.

03

Photogrammetric Plot Report
Delaware River
Arnold Pt. to Trenton, New Jersey
CM-7707
November 17, 1977

Project CM-7707 is a continuation of CM-7508. Briefly, in CM-7508, positions of landmarks, aids to navigation, and supplemental objects were determined by photogrammetric methods. In CM-7707, shoreline maps are to be compiled. The photography and control are the same for both projects. Additional photos were bridged for CM-7707 to give complete shoreline coverage.

21. Area Covered

The area covered is the Delaware River from Arnold Point, near the mouth of the Cohansey River to Trenton, New Jersey. This area is covered by 23 1:10,000 scale sheets. They are numbered TP-00234 thru TP-00256.

22. Method

Twenty strips of photography were bridged by analytic aerotriangulation methods and adjusted to ground on the New Jersey State Plane Coordinate system. Four strips of 1:60,000 scale photography were bridged to control sixteen strips of 1:20,000 scale photography. (see attached aerotriangulation sketch for photos).

23. Adequacy of Control

The horizontal control was adequate. However, the panel for Navy, 1925 would not fit in the adjustment. No reason could be determined and the station was dropped from the adjustment.

24. Supplemental Data

USGS topographic quadrangles were used to provide vertical control requirements for strip adjustments.

25. Photography

The photography was adequate.

Submitted by,

Don O. Norman

Don O. Norman

Approved and forwarded:

John D. Perrow, Jr.

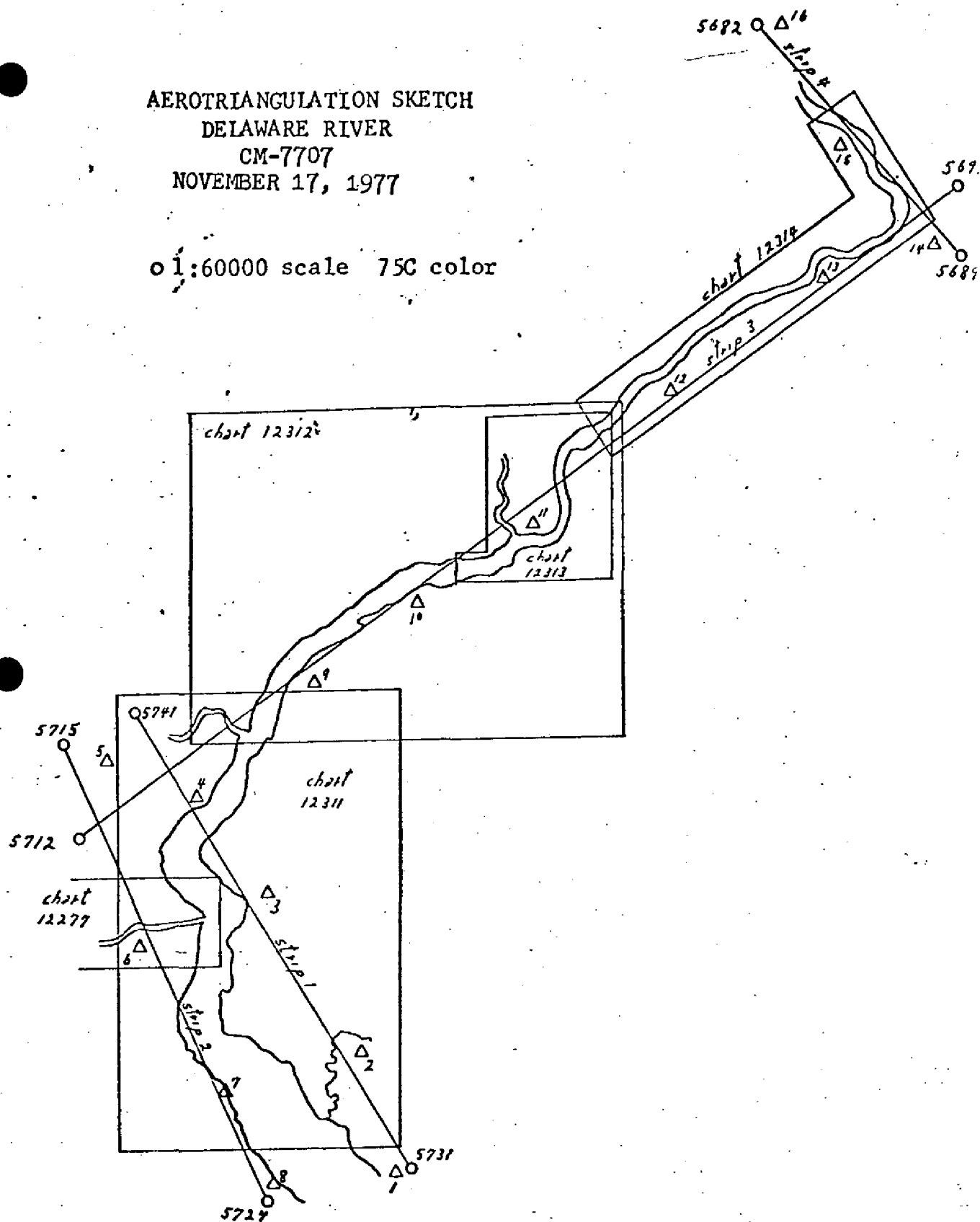
John D. Perrow, Jr., Chief,
Aerotriangulation Section

AEROTRIANGULATION SKETCH DELAWARE RIVER

CM-7707

NOVEMBER 17, 1977

1:60000 scale 75C color



fit to control
(feet)

strip 1

1 WELLS, 1975	(0.5, 0.3)
2 WILLIS, 1933	(0.6, 0.5)
3 SALEM, 1933	(0.9, 1.5)
4 NEW CASTLE BELLANCA AIRPORT SQUAT W.T., 1933	(0.2, 4.5)
5 CHRIS 2, 1962	(0.8, 2.8)

strip 2

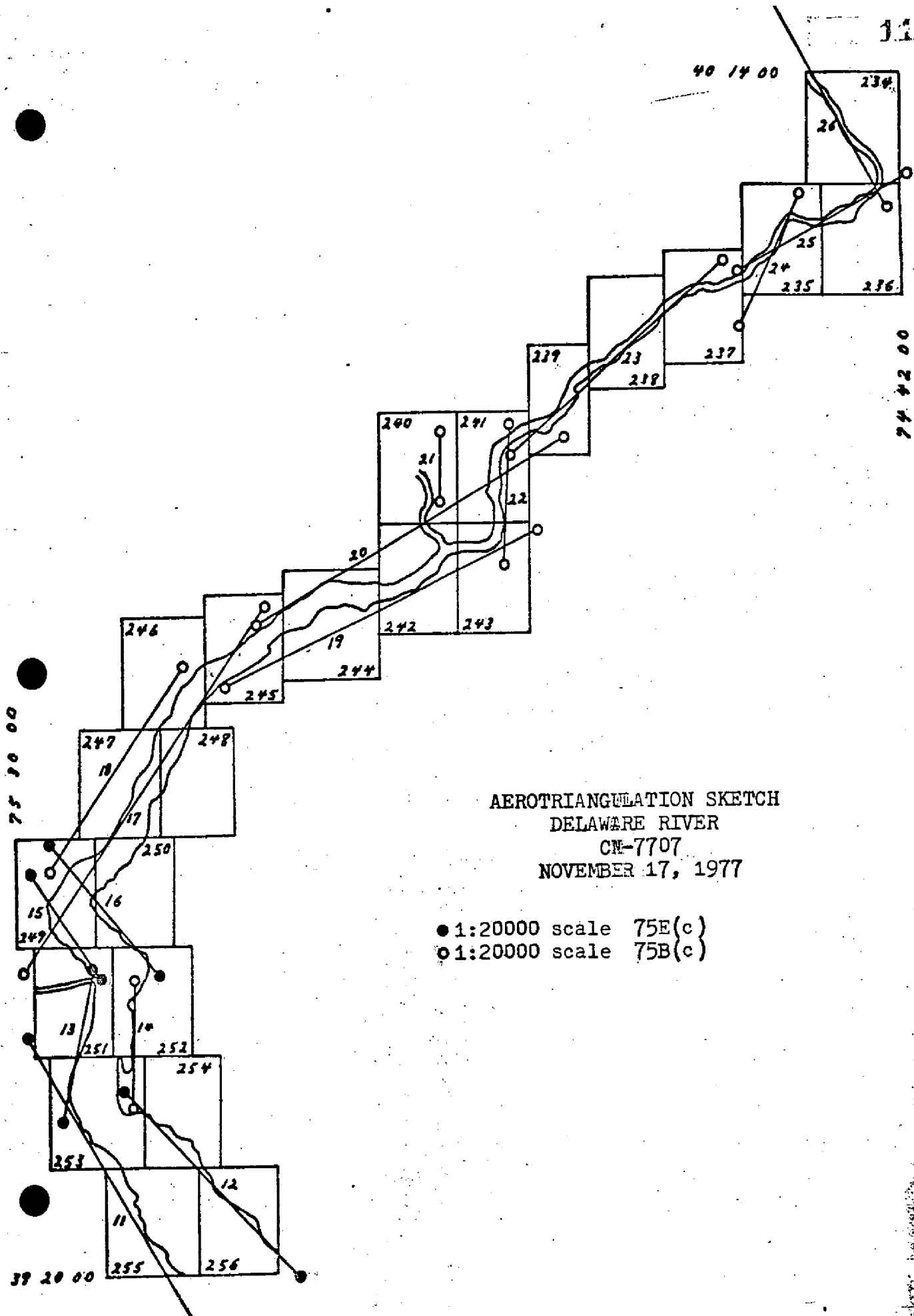
5 CHRIS 2, 1962	(0.1, 0.3)
6 CARROW, 1933	(0.0, 0.8)
7 DELAWARE (USE) 1932	(0.3, 1.0)
8 BOMBAY (USE) 1933	(0.2, 0.5)

strip 3

14 FAIRVIEW, 1933	(0.3, 0.9)
13 STAND RM1, 1933	(0.2, 0.8)
12 PALMYRA RIVERTON-PALMYRA WATER CO. STANDPIPE, 1933	(1.7, 1.8)
11 PHILA NAVY YARD POWER PLANT WATER TANK, 1933	(1.5, 1.4)
10 GIBBSTOWN MUNICIPAL WATER TANK, 1933	(1.3, 0.9)
9 DEPOT, 1933	(2.2, 0.3)
5 CHRIS 2, 1962	(0.6, 0.2)

strip 4

16 GOAT HILL, 1876	(0.0, 0.0)
15 YARDLEY MUNICIPAL STANDPIPE, 1933	(0.0, 0.0)
14 FAIRVIEW, 1933	(0.0, 0.0)



AEROTRIANGULATION SKETCH
DELAWARE RIVER
CN-7707
NOVEMBER 17, 1977

- 1:20000 scale 75E(c)
- 1:20000 scale 75B(c)

INDEX TO 1:20,000 PHOTOGRAPHS
DELAWARE RIVER
CM-7707

STRIP 11	75E(C)	8674-8691
STRIP 12A	75E(C)	8713-8721
STRIP 12B	75E(C)	8722-8725
STRIP 13	75E(C)	8777-8784
STRIP 14	75B(C)	4730-4736
STRIP 15	75E(C)	8735-8741
STRIP 16A	75E(C)	8746-8751
STRIP 16B	75E(C)	8753-8755
STRIP 17A	75B(C)	4742-4745
STRIP 17B	75B(C)	4746-4763
STRIP 18	75B(C)	4772-4784
STRIP 19A	75B(C)	4792-4795
STRIP 19B	75B(C)	4797-4809
STRIP 20A	75B(C)	4812-4814
STRIP 20B	75B(C)	4818-4830
STRIP 21	75B(C)	4843-4846
STRIP 22	75B(C)	4879-4882 6
STRIP 23	75B(C)	4894-4907
STRIP 24A	75B(C)	4942-4944
STRIP 24B	75B(C)	4946-4948
STRIP 25	75B(C)	4911-4920
STRIP 26	75B(C)	4925-4937

Photogrammetric Plot Report
Delaware River
Arnold Point to Trenton, Delaware, New Jersey
Job CM-7805 7508
October 15, 1976

21. Area Covered

This report covers Delaware River from Arnold Point to Trenton, Delaware, New Jersey.

22. Method

Nineteen strips of photography were bridged by analytic aerotriangulation methods and adjusted to ground on the New Jersey State Plane Coordinate System. Four strips of 1:60,000 photography were bridged to establish control for the bridging of 1:20,000 photography. Fifteen strips of 1:20,000 were bridged to determine positions of field identified landmarks, aids to navigation, and supplemental objects. This data was processed on 76-40 forms. Overlay sheets of these positions were plotted on the Coradomat using the same scale of published nautical charts, 12311 (C&GS 294), 12312 (C&GS 295), 12313 (C&GS 280) and inset, 12314 (C&GS 296), and 12277 (C&GS 570) eastern half only, west to longitude 38'.

Overlay sheets, 76-40 forms, and output cards of the 76-40 program were forwarded to the Special Projects Section for final preparation, which on completion will be routed to the Marine Chart Division.

23. Adequacy of Control

The horizontal control provided was adequate except for Navy, 1925 paneled station which did not hold in the adjustment. No apparent reason was determined and the station was dropped from the adjustment.

24. Supplemental Data

Local shoreline and U.S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

25. Photography

RC-8 and RC-10 color positives were adequate as to coverage, overlay, and definition.

Submitted by:

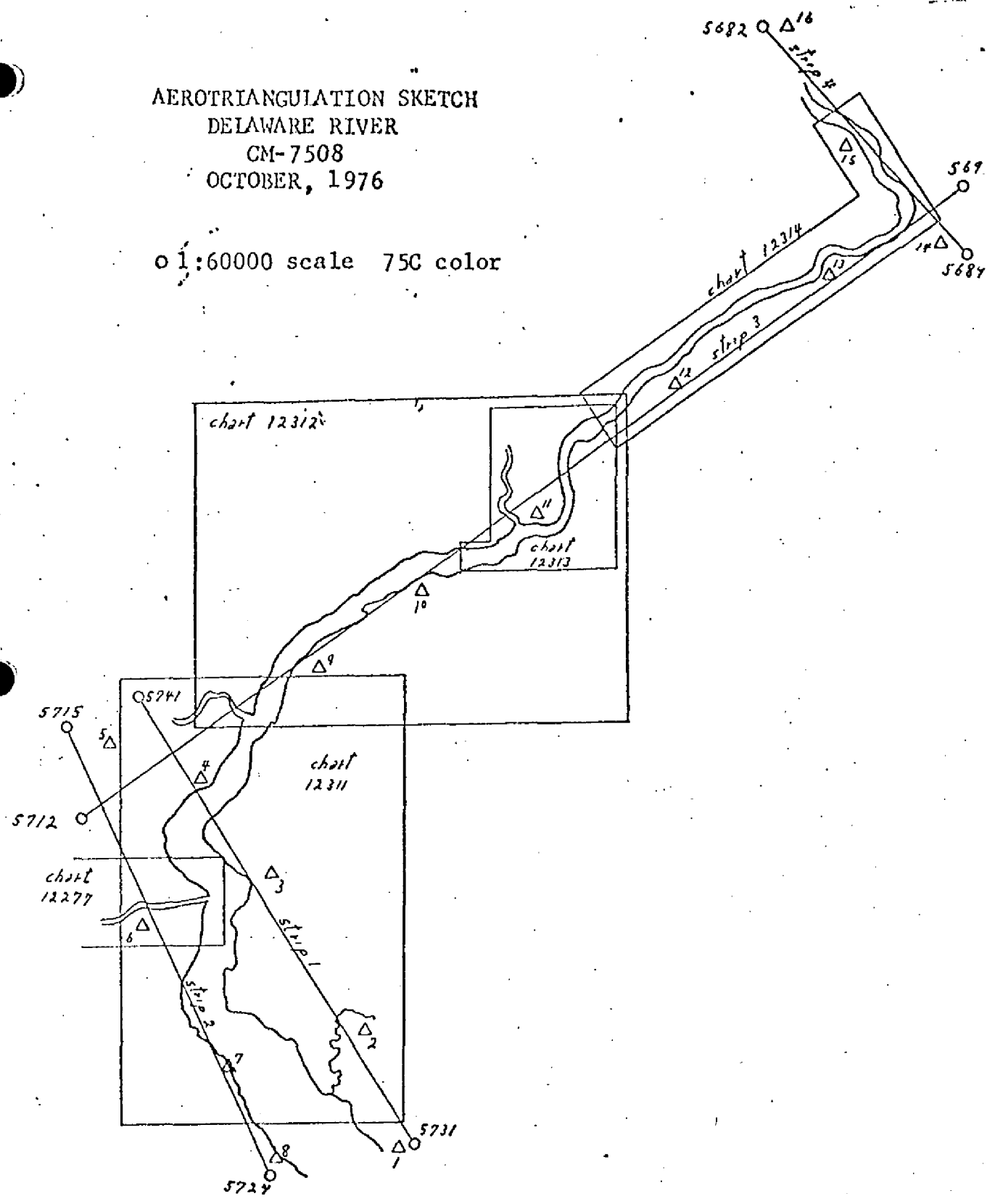
Robert B. Kelly
R. B. Kelly

Approved and Forwarded:

John D. Perrow Jr.
J. D. Perrow, Jr.

AEROTRIANGULATION SKETCH
 DELAWARE RIVER
 CM-7508
 OCTOBER, 1976

o 1:60000 scale 75C color



fit to control
(feet)

strip 1

1 WELLS, 1975	(0.5, 0.3)
2 WILLIS, 1933	(0.6, 0.5)
3 SALEM, 1933	(0.9, 1.5)
4 NEW CASTLE BELLANCA AIRPORT SQUAT W.T., 1933	(0.2, 4.5)
5 CHRIS 2, 1962	(0.8, 2.8)

strip 2

5 CHRIS 2, 1962	(0.1, 0.3)
6 CARROW, 1933	(0.0, 0.8)
7 DELAWARE (USE) 1932	(0.3, 1.0)
8 BOMBAY (USE) 1933	(0.2, 0.5)

strip 3

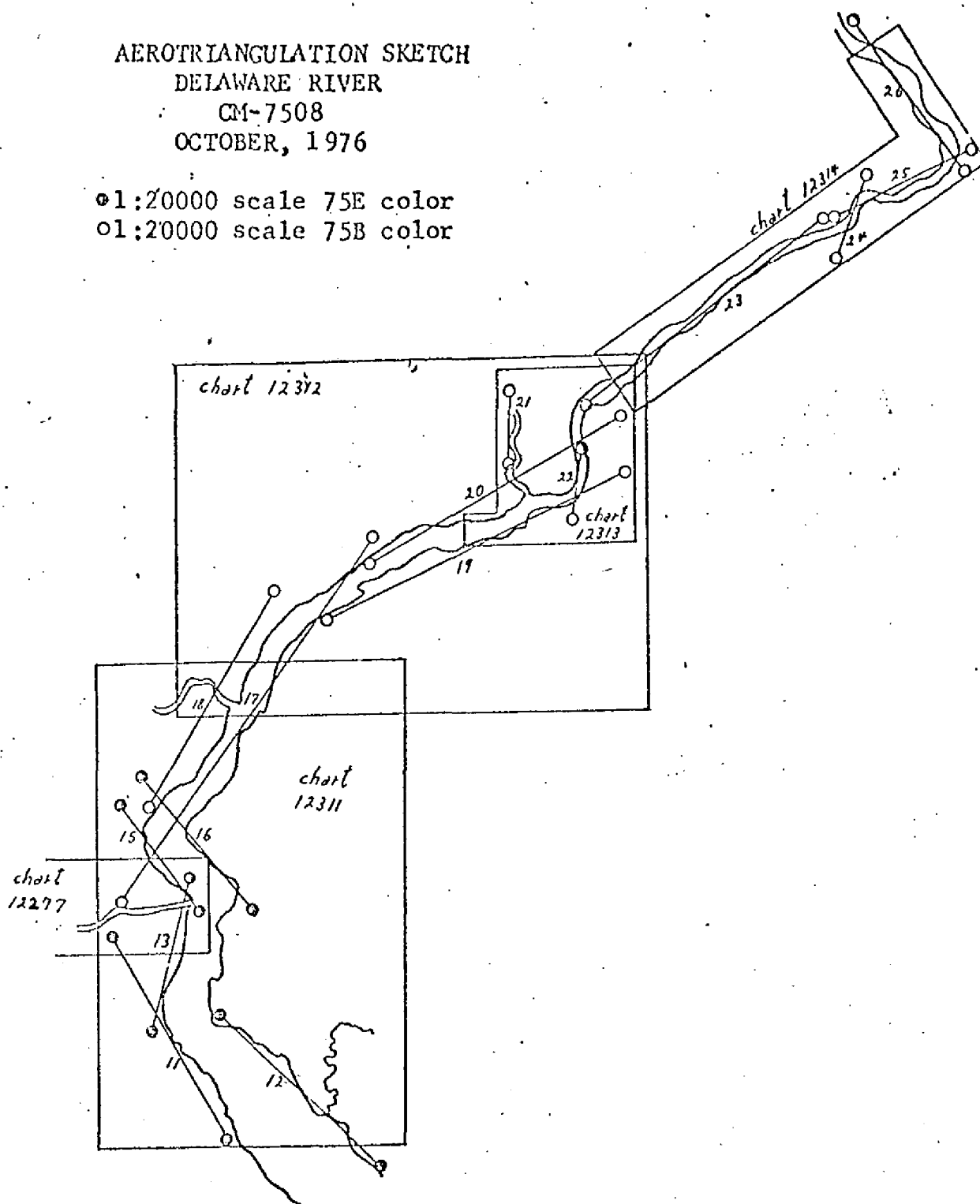
14 FAIRVIEW, 1933	(0.3, 0.9)
13 STAND RM, 1933	(0.2, 0.8)
12 PALMYRA RIVERTON-PALMYRA WATER CO. STANDPIPE, 1933	(1.7, 1.8)
11 PHILA NAVY YARD POWER PLANT WATER TANK, 1933	(1.5, 1.4)
10 GIBBSTOWN MUNICIPAL WATER TANK, 1933	(1.3, 0.9)
9 DEPOT, 1933	(2.2, 0.3)
5 CHRIS 2, 1962	(0.6, 0.2)

strip 4

16 GOAT HILL, 1876	(0.0, 0.0)
15 YARDLEY MUNICIPAL STANDPIPE, 1933	(0.0, 0.0)
14 FAIRVIEW, 1933	(0.0, 0.0)

AEROTRIANGULATION SKETCH
DELAWARE RIVER
CM-7508
OCTOBER, 1976

● 1:20000 scale 75E color
○ 1:20000 scale 75B color



INDEX TO 1:20,000 PHOTOGRAPHS
DELAWARE RIVER
CM-7508

STRIP 11A 75E(C) 8679-8681
" 11B 75E(C) 8684-8686
" 11C 75E(C) 8689-8691

STRIP 12A 75E(C) 8713-8715
" 12B 75E(C) 8719-8721
" 12C 75E(C) 8722-8725

STRIP 13 75E(C) 8777-8784

STRIP 15 75E(C) 8735-8741

STRIP 16A 75E(C) 8746-8748
" 16B 75E(C) 8753-8755

STRIP 17A 75B(C) 4742-4745
" 17B 75B(C) 4746-4763

STRIP 18 75B(C) 4772-4784

STRIP 19A 75B(C) 4792-4795
" 19B 75B(C) 4797-4809

STRIP 20A 75B(C) 4812-4814
" 20B 75B(C) 4818-4830

STRIP 21 75B(C) 4843-4846

STRIP 22 75B(C) 4879-4882

STRIP 23 75B(C) 4894-4907

STRIP 24A 75B(C) 4942-4944
" 24B 75B(C) 4946-4948

STRIP 25 75B(C) 4911-4920

STRIP 26 75B(C) 4925-4937

TP-00235
Compilation Report

Field and Aerotriangulation work used to complete this map was performed under Job CM-7508 (Delaware River). Field operations consisted of aerial photography, premarking of control, and the location or photoidentifying of landmarks and aids. During bridging operations positions were determined for the field identified objects and those located by photogrammetric field methods. A duplicate copy of the Photogrammetric Plot Report for Job CM-7508 is bound with this Descriptive Report. Field records and reports are on file in the National Archives under CM-7508.

31. Delineation

This map was compiled on the Wild B-8 stereoplotter using 1:20,000 scale natural color photography taken in 1975.

32. Control

Refer to the Photogrammetric Plot Report bound with this Descriptive Report.

The identification, density, and placement of horizontal and vertical control was adequate.

33. Supplemental Data

None

34. Contours and Drainage

All drainage is from office interpretation of the color photography.

35. Shoreline and Alongshore Details

The mean-high and mean-low water lines were compiled by office interpretation of the color photography.

Alongshore and foreshore features were delineated by office interpretation of the same photography.

There was no preliminary field inspection of the shoreline.

36. Offshore Detail

No unusual problems were encountered in compiling details offshore.

37. Landmarks and Aids

Positions of landmarks and nonfloating aids were determined under Project CM-7508. Refer to the Photogrammetric Plot Report (CM-7508) submitted with this Descriptive Report.

Landmarks were Field inspected to determine their values.

Refer to the 76-40 listings prepared for the date and method of location of each object.

38. Control for Future Surveys

No form 524 was submitted.

39. Junctions

Refer to form 76-36B, item #5, of the Descriptive Report.

40. Horizontal and Vertical Accuracy

No comment.

41. thru 45.

Inapplicable

46. Comparison with Existing Maps

A comparison was made with the following USGS quadrangle(s):

Trenton West, N.J.-Pa., 1:24,000 scale, 1955 edition, photorevised 1970
Bristol, N.J.-Pa., 1:24,000 scale, 1955 edition, photorevised 1970

No significant differences were noted.

47. Comparison with Nautical Charts

A comparison was made with the following charts:

12314, formerly C&GS 296, 1:20,000 scale, 21st edition dated 3/31/75.

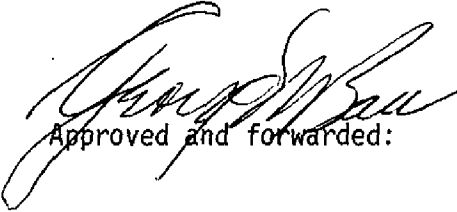
Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by,



L. Harrod



Approved and forwarded:

Final Review Report
CM-7707
Shoreline Survey TP-00235

61. General Statement

This map is registered as Class III since field edit was canceled April 1978.

All landmarks and aids were located in the field for job CM-7508 which covers this same are. The compilation for that project was canceled December 1975 and all landmark and aid information has been applied to this project.

The forms 76-40 are not furnished to charts with this job. Duplicate forms were furnished April 1977 with job CM-7508.

62. - 64. Inapplicable

65. Comparison with Nautical Charts

This map was compared with the following:

Chart 12314, pub. 7/30/77, 22nd Edition, 1:20,000 scale.

Within the limits of this map two (2) landmarks are shown on this chart plotted from information obtained from job CM-7508. These positions were furnished the Coast Guard for re-positioning buoys. They were not inspected from seaward to determine value as a landmark, and are not shown on this map or listed on the 76-40 form.

66. Adequacy of Results and Future Surveys

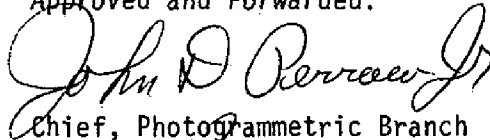
This map meets the National Standards of Map Accuracy and complies with Bureau requirements.

Submitted by,

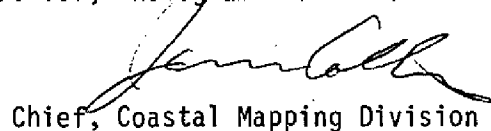


J. B. Phillips

Approved and Forwarded:



Chief, Photogrammetric Branch



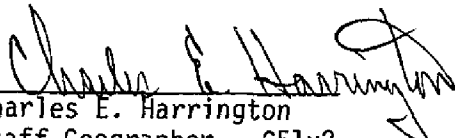
Chief, Coastal Mapping Division

September 13, 1977

GEOGRAPHIC NAMES
FINAL NAME SHEET
CM-7508 (Delaware River)
TP-00235

Assiscunk Creek
Bristol
Burlington
Burlington Island
Bustleton Creek
Conrail (RR)
Delaware River
East Burlington
Edgely
Florence
Maple Beach (locality)
Money Island
Otter Creek
Roebling
Tullytown

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
POSITIONS DETERMINED	R. TIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

76-40

76-40
LISTING
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COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

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VERSION
Y20/76

**	SVY	TP-00235	**
**	JOB	CM-7707	**
**	PRJ	DEL. RIVER	**
**	DTM	NA 1927	**

* SVY	TP-00235	*
* JOB	CM-7707	*
* PRJ	DEL. RIVER	*

NONFLOATING AIDS FOR CHARTS
TO BE REVISED

* RPT UNIT CMD ROCKVILLE, MD.
* STATE DEL. N.J. PA.
* LOCALITY DELAWARE RIVER
* DATE 05/04/77

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INATING ACTIVITY*

COMPILATION *

* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

* * *	DESCRIPTION	* * *	POSITION	* * *	CODES*	METHOD AND DATE	* * *
* CHARTING*	RECORD REASON FOR DELETION	* *	LATITUDE	DM	C-C	OF LOCATION	* CHARTS
* NAME	PUT TRIANGULATION NAMES IN ()	* *	LONGITUDE	DP	SEQ	OFFICE * FIELD	* AFFECTED*

[illegible][illegible]

* REAR	* LANDRETH RANGE	* 40	05	52.04	1605.1	NOT	* ✓	* P-5	* 12314	* 75BC4912	* ---
--------	------------------	------	----	-------	--------	-----	-----	-------	---------	------------	-------

[illegible][illegible]

* * *	LIGHT	* *	* 74 49 24.05	569.4	DGIZD*	* 1/14/76	* *
* * *						75BC4914	---

[illegible]

* LIGHT	* SAME AS KINKORA	LOWER RGE F LT *	74 47 08.54	202.2	DGIZD*	* 1/19/76
*-----						
						75804915

[illegible]

* REAR	*	KINKORA	LOWER RANGE
* LIGHT	*		
	*	40	07 05.35
	*	40	07 05.35
	*	74	47 12.14
	*	74	47 12.14
	*	287.5	DGTZD*
	*	165.0	NOT *
	*	P-5	
	*	1/19/76	
	*		12314.

2

100

TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
POSITIONS DETERMINED	R. TIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

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PRJ	DEL. RIVER	*
DTM	NA 1927	*

LANDMARKS FOR CHARTS
TO BE DELETED

* RPT UNIT CMD ROCKVILLE, MD.
* STATE DEL. N.J. PA.
* LOCALITY DELAWARE RIVER
* DATE 05/04/77

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ORIGINATING ACTIVITY: *
*
COMPILATION

THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

[illegible]

TANK * DESTROYED
* NOT VISIBLE ON PHOTOGRAPHY

STACK * REMOVED

0	05	12.00	370.1	NOT *	*	12314
4	50	24.00	568.6	DGTZD**	*	1/13/76

TANK * REMOVED

+	0	5	51.00	1573.0	NOT *	*	12314
4	51	25.00	582.2	OGT0*	*	1/14/76	*

TANK * REMOVED

40	06	03.00	92.5	NOT *	*	12314
41	06	03.00	92.5	NOT *	*	12314
42	06	03.00	92.5	NOT *	*	12314
43	06	03.00	92.5	NOT *	*	12314
44	06	03.00	92.5	NOT *	*	12314
45	06	03.00	92.5	NOT *	*	12314
46	06	03.00	92.5	NOT *	*	12314
47	06	03.00	92.5	NOT *	*	12314
48	06	03.00	92.5	NOT *	*	12314
49	06	03.00	92.5	NOT *	*	12314
50	06	03.00	92.5	NOT *	*	12314
51	06	03.00	92.5	NOT *	*	12314
52	06	03.00	92.5	NOT *	*	12314
53	06	03.00	92.5	NOT *	*	12314
54	06	03.00	92.5	NOT *	*	12314
55	06	03.00	92.5	NOT *	*	12314
56	06	03.00	92.5	NOT *	*	12314
57	06	03.00	92.5	NOT *	*	12314
58	06	03.00	92.5	NOT *	*	12314
59	06	03.00	92.5	NOT *	*	12314
60	06	03.00	92.5	NOT *	*	12314
61	06	03.00	92.5	NOT *	*	12314
62	06	03.00	92.5	NOT *	*	12314
63	06	03.00	92.5	NOT *	*	12314
64	06	03.00	92.5	NOT *	*	12314
65	06	03.00	92.5	NOT *	*	12314
66	06	03.00	92.5	NOT *	*	12314
67	06	03.00	92.5	NOT *	*	12314
68	06	03.00	92.5	NOT *	*	12314
69	06	03.00	92.5	NOT *	*	12314
70	06	03.00	92.5	NOT *	*	12314
71	06	03.00	92.5	NOT *	*	12314
72	06	03.00	92.5	NOT *	*	12314
73	06	03.00	92.5	NOT *	*	12314
74	06	03.00	92.5	NOT *	*	12314
75	06	03.00	92.5	NOT *	*	12314
76	06	03.00	92.5	NOT *	*	12314
77	06	03.00	92.5	NOT *	*	12314
78	06	03.00	92.5	NOT *	*	12314
79	06	03.00	92.5	NOT *	*	12314
80	06	03.00	92.5	NOT *	*	12314
81	06	03.00	92.5	NOT *	*	12314
82	06	03.00	92.5	NOT *	*	12314
83	06	03.00	92.5	NOT *	*	12314
84	06	03.00	92.5	NOT *	*	12314
85	06	03.00	92.5	NOT *	*	12314
86	06	03.00	92.5	NOT *	*	12314
87	06	03.00	92.5	NOT *	*	12314
88	06	03.00	92.5	NOT *	*	12314
89	06	03.00	92.5	NOT *	*	12314
90	06	03.00	92.5	NOT *	*	12314
91	06	03.00	92.5	NOT *	*	12314
92	06	03.00	92.5	NOT *	*	12314
93	06	03.00	92.5	NOT *	*	12314
94	06	03.00	92.5	NOT *	*	12314
95	06	03.00	92.5	NOT *	*	12314
96	06	03.00	92.5	NOT *	*	12314
97	06	03.00	92.5	NOT *	*	12314
98	06	03.00	92.5	NOT *	*	12314
99	06	03.00	92.5	NOT *	*	12314
100	06	03.00	92.5	NOT *	*	12314

STACK * NOT OF LANDMARK VALUE

+0	06	06.00	185.1 ✓	* NOT *	*		12314
-4	50	30.00	710.6	DGIZD*	*	1/14/76	*

STACK * REMOVED

06	11.00	339.3	NOT	*	*	12314
06	11.00	339.3	NOT	*	*	12314
50	24.00	568.5	OGI70	*	*	1/14/76
50	24.00	568.5	OGI70	*	*	1/14/76

STACK * REMOVED

+0	05	32.00	987.0	NOT *	*	12314
+0	05	32.00	1231.8	OCTRD*	*	12314

TWIN * REMOVED

	* * *	678.5	NOT *	*	12314
	* * *	378.9	DG17D*	*	
	* * *	16.00		*	
	* * *	4.0		*	
	* * *	22.00		*	

TANK * NOT OF

+0	07	52.00	1603.8	NOT *	*	* 12314
-4	48	14.00	331.5	OCTO*	*	* 1/15/76 *

THE ABOVE POSITIONS ARE APPROXIMATE.

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TYPE OF ACTION	*	NAMES OF RESPONSIBLE PERSONNEL	*	ORIGINATOR	*
OBJECTS INSPECTED FROM SEAWARD	*	PHOTO FIELD PARTY 62	*	PHOTO FIELD PARTY	*
POSITIONS DETERMINED AND/OR VERIFIED BY FIELD AND OFFICE ACTIVITIES	*	R. TIBBETTS R. WELLS D. NORMAN G. FROMM NOT DIGITIZED G. FROMM	*	FIELD REPRESENTATIVE OFFICE COMPILER DIGITIZER DATA PROCESSER	*
	*		*		*

76-40
LISTING

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NATIONAL OCEAN SURVEY NOAA
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1/20/76

* SVY TP-00235 *
* JOB CM-7707 *
* PRJ DEL. RIVER *
* DTM NA 1927 *

LANDMARKS FOR CHARTS
TO BE DELETED

* RPT UNIT CMD ROCKVILLE, MD. *
* STATE DEL. N.J. PA. *
* LOCALITY DELAWARE RIVER *
* DATE 05/04/77 *

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* ORIGINATING ACTIVITY *
* COMPILATION *

* THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *

CHARTING	RECORD REASON FOR DELETION	DESCRIPTION	POSITION		CODES	METHOD AND DATE		CHARTS
			LATITUDE	LONGITUDE		DM	DP	
TANK	NOT OF LANDMARK VALUE		40 08 09.00	277.6	NOT			12314
			74 49 02.00	47.3	DGTZD		1/15/76	
TANK	NOT OF LANDMARK VALUE		40 08 09.00	277.6	NOT			12314
			74 49 04.00	94.7	DGTZD		1/15/76	
TANK	NOT OF LANDMARK VALUE		40 08 11.00	339.3	NOT			12314
			74 49 03.00	71.0	DGTZD		1/15/76	

THE ABOVE POSITIONS ARE APPROXIMATE.

TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	PHOTO FIELD PARTY 62	PHOTO FIELD PARTY
POSITIONS DETERMINED	R. TIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

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* JOB CM-7707 *
* PRJ DEL. RIVER *
* DTM NA 1927 *LANDMARKS FOR CHARTS
TO BE CHARTED* RPT UNIT CMD ROCKVILLE, MD. *
* STATE DEL. N.J. PA. *
* LOCALITY DELAWARE RIVER *
* DATE 05/04/77 *

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* ORIGINATING ACTIVITY *
* COMPILATION *

* THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *

DESCRIPTION

* RECORD REASON FOR DELETION *

* NAME * PUT TRIANGULATION NAMES IN () *

POSITION

* LATITUDE DM *
* LONGITUDE DP *

CODES

* C-C *
* SEQ *

METHOD AND DATE

* OF LOCATION *
* FIELD *
* AFFECTED *

* TANK * BURLINGTON TOWNSHIP TANK *

* 40 05 07.69 237.2 NOT *
* 74 49 28.20 668.1 DGTZD **get
writing
of** P-5 * 12314 *
* 1/13/76 *
* 758C4912 ** STACK * (BRISTOL SUPERIOR ZINC CORP
* NORTH STACK 1933) ** 40 06 09.83 303.2 NOT *
* 74 50 27.02 640.0 DGTZD **OL** TRIANG REC * 12314 *
* 1/14/76 *

* STACK * SUPERIOR ZINC CORP SOUTH STACK *

* 40 06 09.35 288.4 NOT *
* 74 50 26.16 619.6 DGTZD **✓** P-5 * 12314 *
* 1/14/76 *
* 758C4912 **Not on chart*

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TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	PHOTO FIELD PARTY 62	PHOTO FIELD PARTY
POSITIONS DETERMINED	R. FIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

76-40
LISTIN

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VERSION
20/76

* SVY	TP-00235	*
* JOB	CM-7707	*
* PRJ	DEL. RIVER	*
* DTM	NA 1927	*

LANDMARKS FOR CHARTS
TO BE REVISED

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* RPT UNIT      CMD ROCKVILLE, MD.
* STATE         DEL.  N.J.  PA.
* LOCALITY      DELAWARE RIVER
* DATE          05/04/77
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ORIGINATING ACTIVITY COMPILATION

THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

DESCRIPTION

POSITION

METHOD AND DATE

RECORD REASON FOR DELETION

OF LOCATION

C-C	* OF LOCATION	* CHARTS
SEQ	* OFFICE * FIELD	* AFFECTED

OFFICE * FIELD

FIELD *AFFECTED

100

100

* SPIRE * (BURLINGTON ST MARYS CHURCH
* SPIRE 1933)

TRIANG REC 12314
* 1/13/76 *

* STAND- * (BURLINGTON MUNICIPAL
* PIPE * STANDPIPE 1933)

TRIANG REC	12314
* 1/13/76 *	

* BELFRY * (BURLINGTON ST PAULS CHURCH
* * SPIRE 1933)

* TRIANG REC * 12314
* 1/13/76 *

STACK * GRUNDY STACK

**	P-5	*	12314
**	1/14/76	*	

* TOWER * (BRISTOL GRUNDY WORSTED MILLS
* CLOCK TOWER 1933)

TRIANG REC 12314
* 1/14/76 *

* TANK * (BRISTOL WARNER J STEEL CO
* TANK 1935) FIDELITY FIBER TANK

TRIANG REC 12314
* 1/14/76 *

* TOWER * BURLINGTON ISLAND TOWER D

**	P-5	*	12314
**	1/13/76	*	

* TOWER * BURI INGTON ISI AND TOWER C

*	P-5	*	12314
*	1/13/76	*	

* TOWER * BURLINGTON ISLAND TOWER B

12314	*	P-5	*
12314	*	1/13/76	*

* POWER * BURLINGTON ISI AND TOWER A

12314	*	P-5	*
12314	*	1/13/76	*

758C4911

* TYPE OF ACTION *	* NAMES OF RESPONSIBLE PERSONNEL *	* ORIGINATOR *
* OBJECTS INSPECTED FROM SEAWARD *	* PHOTO FIELD PARTY 62 *	* PHOTO FIELD PARTY *
* POSITIONS DETERMINED *	* R. TIBBETTS R. WELLS *	* FIELD REPRESENTATIVE *
* AND/OR VERIFIED BY *	* D. NORMAN G. FROMM *	* OFFICE COMPILER *
* FIELD AND OFFICE *	* NOT DIGITIZED *	* DIGITIZER *
* ACTIVITIES *	* G. FROMM *	* DATA PROCESSER *

76-40
LISTING

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LANDMARKS FOR CHARTS
TO BE REVISED

* RPT UNIT CMD ROCKVILLE, MD.
* STATE DEL. N.J. PA.
* LOCALITY DELAWARE RIVER
* DATE 05/04/77

* PAGE 7 OF 8

* ORIGINATING ACTIVITY
* COMPILATION

* THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS

DESCRIPTION

* POSITION
* LATITUDE DM
* LONGITUDE DP

* CODES * METHOD AND DATE
* C-C * OF LOCATION
* SEQ * OFFICE * FIELD * AFFECTED

* TANK * (BURLINGTON US PIPE AND
* FOUNDRY CO TANK 1935)

* TRIANG REC* 12314
* 1/13/76 *

* STACK * US PIPE CO STACK

* P-5 * 12314
* 1/13/76 *

* TANK * (BRISTOL WATER WORKS SOUTHEAST
* TANK 1958)

* TRIANG REC* 12314
* 1/14/76 *

* TANK * (BURLINGTON NATL GYPSUM CO
* WATER TANK 1958)

* TRIANG REC* 12314
* 1/14/76 *

* TANK * (BURLINGTON HERCULES WATER
* TANK 1958)

* TRIANG REC* 12314
* 1/13/76 *

* STACK * (EDGELY PATTERSON PAPER CO
* STACK 1933)

* TRIANG REC* 12314
* 1/14/76 *

* TANK * (PATTERSON PARCHMENT PAPER
* CO WATER TANK 1933)

* TRIANG REC* 12314
* 1/14/76 *

* TANK * BRISTOL WORKS TANK
* WATER POLLUTION CONTROL

* P-5 * 12314
* 1/15/76 *

* STACK * (ABANDONED PLANT STACK 1933)

* TRIANG REC* 12314
* 1/15/76 *

* SPIRE * (FLORENCE ST CLARES CATHOLIC
* CHURCH SPIRE 1935)

* TRIANG REC* 12314
* 1/19/76 *

TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	PHOTO FIELD PARTY 62	PHOTO FIELD PARTY
POSITIONS DETERMINED	R. TIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

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* DTM NA 1927 *

LANDMARKS FOR CHARTS
TO BE REVISED

* RPT UNIT CMD ROCKVILLE, MD. *
* STATE DEL. N.J. PA. *
* LOCALITY DELAWARE RIVER *
* DATE 05/04/77 *

* PAGE 8 OF 8 *
* ORIGINATING ACTIVITY *
* COMPILATION *

* THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *

CHARTING	DESCRIPTION	RECORD REASON FOR DELETION	POSITION	CODES	METHOD AND DATE	CHARTS
NAME	PUT TRIANGULATION NAMES IN ()		LATITUDE LONGITUDE	C-C SEQ	OF LOCATION OFFICE	FIELD AFFECTED

* STAND- * (FLORENCE STANDPIPE 1933) *

* 40 06 57.24	1765.5	NOT	* TRIANG REC	12314
* 74 47 41.76	988.9	DGTZD	* 1/19/76	*

* SPIRE * (ROEBLING ASSUMPTION CHURCH
SPIRE 1933) *

* 40 06 56.22	1734.0	NOT	* TRIANG REC	12314
* 74 47 07.00	165.8	DGTZD	* 1/19/76	*

TYPE OF ACTION	NAMES OF RESPONSIBLE PERSONNEL	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	PHOTO FIELD PARTY 62	PHOTO FIELD PARTY
POSITIONS DETERMINED	R. TIBBETTS R. WELLS	FIELD REPRESENTATIVE
AND/OR VERIFIED BY	D. NORMAN G. FROMM	OFFICE COMPILER
FIELD AND OFFICE	NOT DIGITIZED	DIGITIZER
ACTIVITIES	G. FROMM	DATA PROCESSER

