TP-00236

TP-00236

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-00236

*Classification No.* III *Edition No.* 1

## LOCALITY

*State* New Jersey - Pennsylvania

*General Locality* Delaware River

*Locality* Burlington to Roebling

19 75 TO 19 76

## REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

NOAA FORM 76-36A (3-72)

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

# DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY
- [x] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

SURVEY TP-00236
MAP EDITION NO. (1)
MAP CLASS III
JOB PH- CM-7707

PHOTOGRAMMETRIC OFFICE
Coastal Mapping Division (Rockville)

OFFICER-IN-CHARGE
Commander James Collins

LAST PRECEEDING MAP EDITION
TYPE OF SURVEY
- [ ] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

JOB PH-
MAP CLASS
SURVEY DATES:
19__ TO 19__

## I. INSTRUCTIONS DATED

| 1. OFFICE | 2. FIELD |
|---|---|
| Instructions - Aerotriangulation (CM-7508) 2/4/76 | Instructions - Field (CM-7508) 3/4/75 |
| Instructions - Office (CM-7707) 3/18/77 | Instructions - Field (CM-7508) Supplement I - 7/11/75 |

## II. DATUMS

| | | |
|---|---|---|
| 1. HORIZONTAL: | [X] 1927 NORTH AMERICAN | OTHER (Specify) |
| 2. VERTICAL: | [ ] MEAN HIGH-WATER<br>[X] MEAN LOW-WATER<br>[ ] MEAN LOWER LOW-WATER<br>[ ] MEAN SEA LEVEL | OTHER (Specify)<br>National Geodetic Vertical Datum of 1929 |
| 3. MAP PROJECTION<br>Traverse Mercator Projection | | 4. GRID(S)<br>STATE: New Jersey<br>ZONE: |
| 5. SCALE 1:10,000 | | STATE<br>ZONE |

## III. HISTORY OF OFFICE OPERATIONS

| OPERATIONS | | NAME | DATE |
|---|---|---|---|
| 1. AEROTRIANGULATION METHOD: Analytic | BY | R. Kelly | 10-15-76 |
| | LANDMARKS AND AIDS BY | D. Norman | 10-15-76 |
| 2. CONTROL AND BRIDGE POINTS METHOD: Coradomat | PLOTTED BY | H. Jones | 5-20-77 |
| | CHECKED BY | N.A. | |
| 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:10,000 | PLANIMETRY BY | L. Harrod | 5-23-77 |
| | CHECKED BY | G. Vanderhaven | 5-23-77 |
| | CONTOURS BY | N.A. | |
| | CHECKED BY | N.A. | |
| 4. MANUSCRIPT DELINEATION METHOD: Smooth Drafting SCALE: 1:10,000 | PLANIMETRY BY | L. Harrod | 7-15-77 |
| | CHECKED BY | B. Rodkey | 7-22-77 |
| | CONTOURS BY | N.A. | |
| | CHECKED BY | N.A. | |
| | HYDRO SUPPORT DATA BY | N.A. | |
| | CHECKED BY | N.A. | |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT | BY | G. Fromm | 8-77 |
| 6. APPLICATION OF FIELD EDIT DATA | BY | Field Edit canceled | 4/78 |
| | CHECKED BY | | |
| 7. COMPILATION SECTION REVIEW | BY | G. Fromm | 5/78 |
| 8. FINAL REVIEW | BY | J. B. Phillips | 6/78 |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH | BY | | |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH | BY | | |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION | BY | R. T. Cator | 11/78 |

NOAA FORM 76-36A SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

TP-00236

# COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) RC-10(B) Camera
Focal length = 152.74 mm

TIDE STAGE REFERENCE
- [X] PREDICTED TIDES
- [ ] REFERENCE STATION RECORDS
- [ ] TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
- (C) COLOR
- (P) PANCHROMATIC
- (I) INFRARED

TIME REFERENCE
ZONE: Eastern
MERIDIAN: 75th
- [X] STANDARD
- [ ] DAYLIGHT

| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE |
|---|---|---|---|---|
| 75B(C) 4925-4926 | 8-28-75 | 1349-1354 | 1:20,000 | +.60 ft. MLW |
| 75B(C) 4915-4918 | 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 I.

## 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 I.

## 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-00234 | No contemporary surveys | ——— | TP-00235 |

REMARKS

NOAA FORM 76-36B
(3-72)

NOAA FORM 76-36C
(3-72)

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

TP-00236

# HISTORY OF FIELD OPERATIONS

I. [X] 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 [ ] SPECIFIC NAMES ONLY [X] NO INVESTIGATION BY | N.A. | |
| 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

| 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 [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] 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.



☆U.S. Government Printing Office: 1975 — 665-661/1110, Region No. 6

04

NOAA FORM 76-36D
(3-72)

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

# RECORD OF SURVEY USE

TP-00236

## I. MANUSCRIPT COPIES

| COMPILATION STAGES | | | DATE MANUSCRIPT FORWARDED | |
|---|---|---|---|---|
| DATA COMPILED | DATE | REMARKS | MARINE CHARTS | HYDRO SUPPORT |
| Compilation complete pending field edit | 8/12/77 | Class III Map | | 4-18-78 |
| Compilation Office Review | May 1978 | Field Edit ~~postponed~~ canceled | | |
| Final review before registration | June 1978 | Class III 1st Edition | 8-14-78 | |
| | | | | |

## II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER NUMBER ASSIGNED | DATE FORWARDED | REMARKS |
|---|---|---|---|
| 2 | | | LDMKS |
| 1 | | | Aids |
| 1 | | | 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

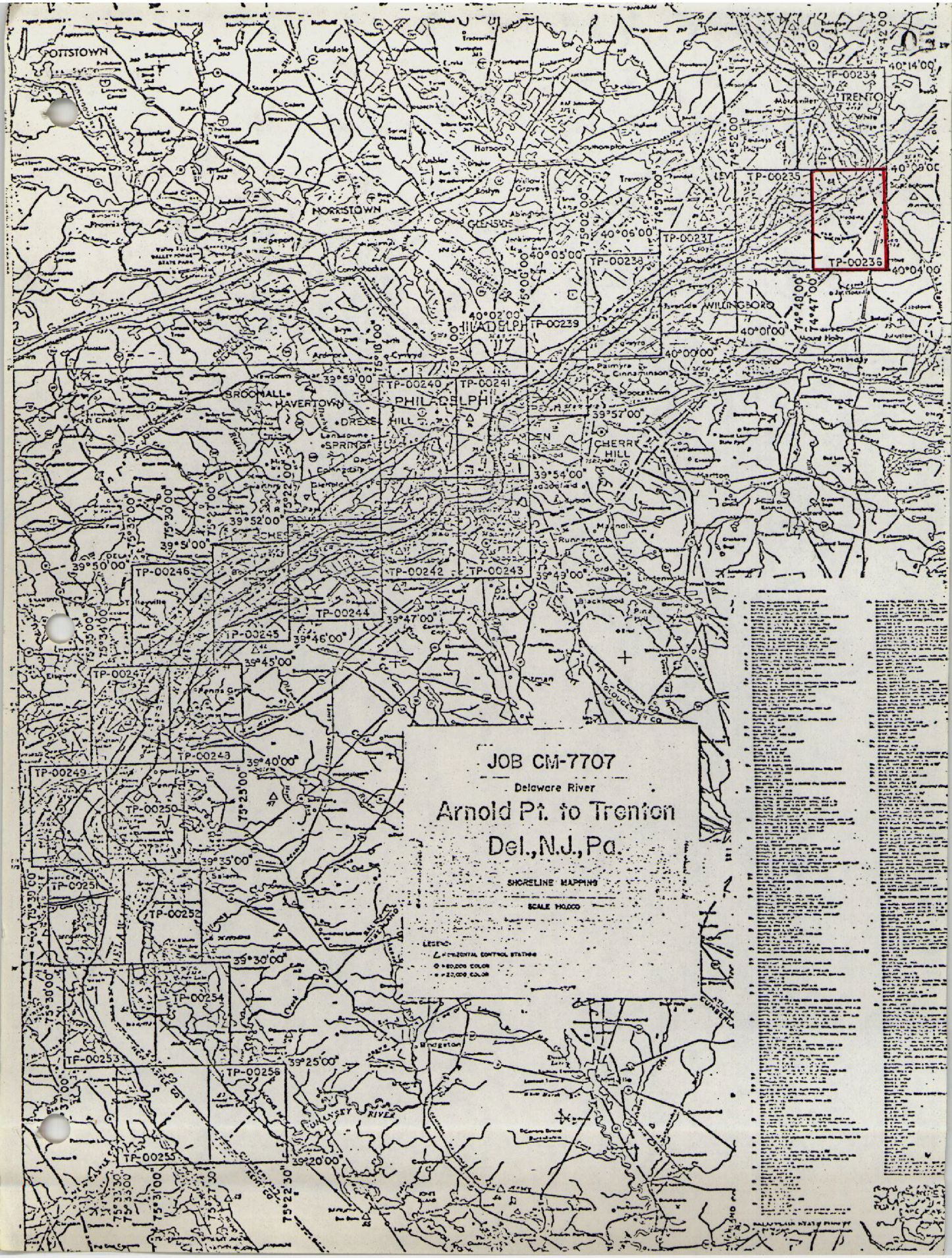
1. ☒ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

| | SURVEY NUMBER | JOB NUMBER | TYPE OF SURVEY / MAP CLASS |
|---|---|---|---|
| SECOND EDITION | TP - _____ (2) | PH - _____ | ☐ REVISED ☐ RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL |
| THIRD EDITION | TP - _____ (3) | PH- _____ | ☐ REVISED ☐ RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL |
| FOURTH EDITION | TP - _____ (4) | PH - _____ | ☐ REVISED ☐ RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL |

NOAA FORM 76-36D

☆U.S. Government Printing Office: 1975 – 665-661/1108, Region No. 6


JOB CM-7707
Delaware River
Arnold Pt. to Trenton
Del., N.J., Pa.
SHORELINE MAPPING
SCALE 1:10,000
LEGEND
POTTSTOWN
NORRISTOWN
GLENSIDE
TRENTON
WILLINGBORO
PHILADELPHIA
BROOMALL
HAVERTOWN
DREXEL HILL
SPRINGFIELD
CHERRY HILL
TP-00234
TP-00235
TP-00236
TP-00237
TP-00238
TP-00239
TP-00240
TP-00241
TP-00242
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TP-00252
TP-00253
TP-00254
TP-00255
TP-00256
40°14'00"
40°09'00"
40°04'00"
40°06'00"
40°05'00"
40°02'00"
40°01'00"
40°00'00"
39°59'00"
39°57'00"
39°54'00"
39°52'00"
39°51'00"
39°50'00"
39°49'00"
39°47'00"
39°46'00"
39°45'00"
39°40'00"
39°35'00"
39°30'00"
39°25'00"
39°20'00"
75°32'30"
75°30'00"
75°25'00"
75°22'30"
74°52'00"
74°47'00"
74°40'00"
TOLLESSEY RIVER

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 Steroplotter 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.

# 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 determind 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 tropographic 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

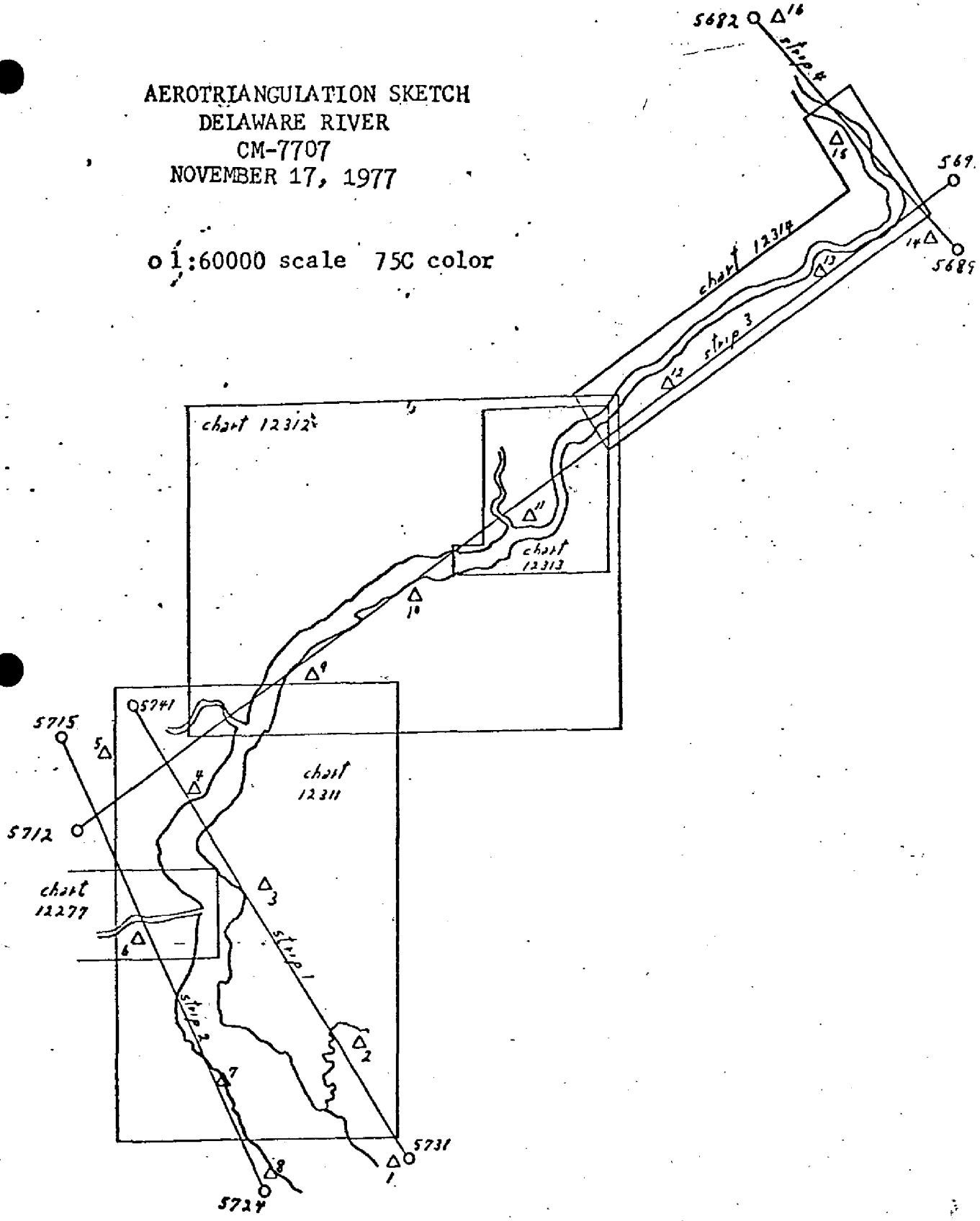
Approved and forwarded:

John D Perrow Jr.

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

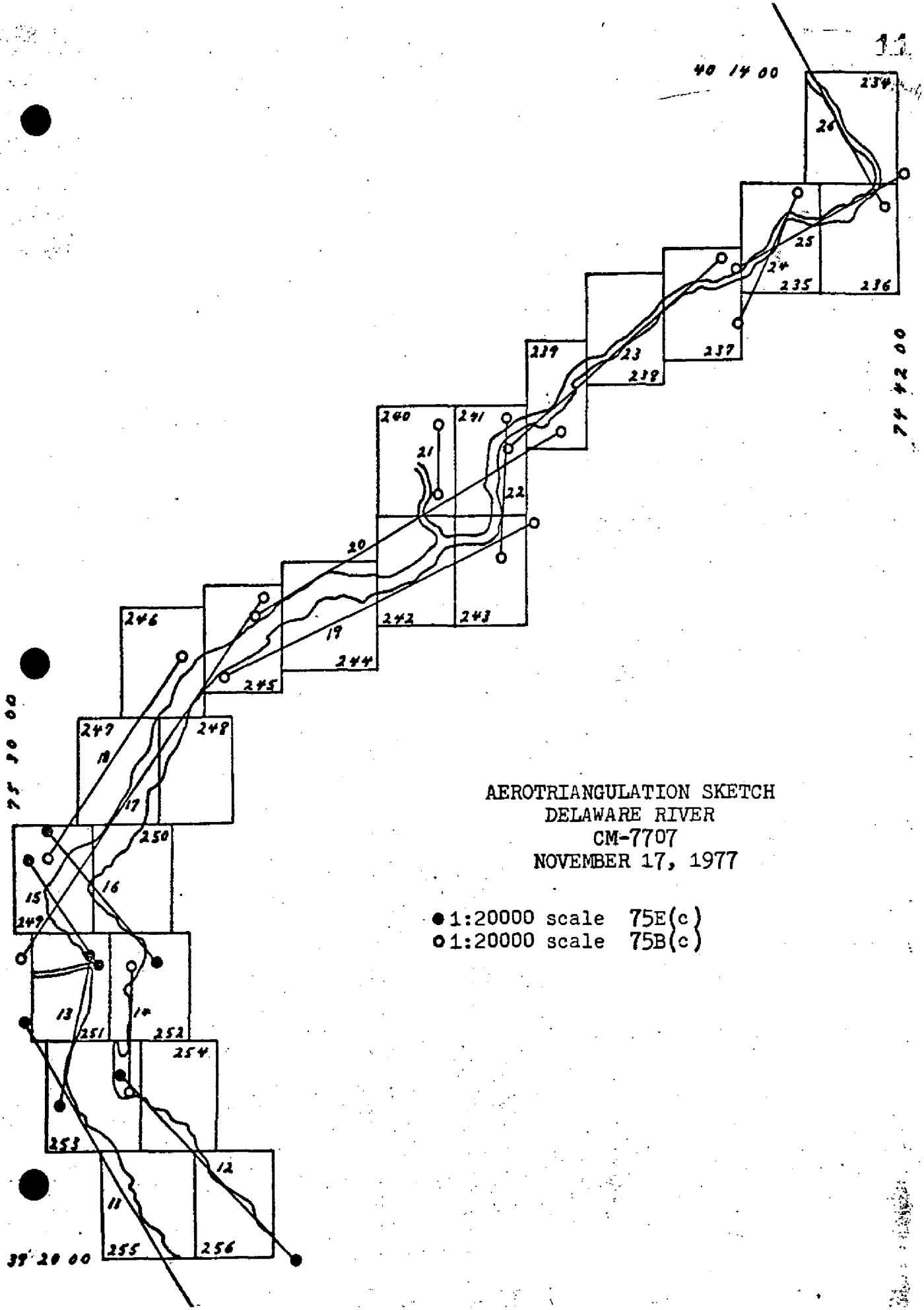
AEROTRIANGULATION SKETCH
DELAWARE RIVER
CM-7707
NOVEMBER 17, 1977

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
CM-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) | 4879-48826 |
| STRIP 23 | 75B(C) | 4894-4907 |
| STRIP 24A | 75E(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 ~~compilation~~ 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:

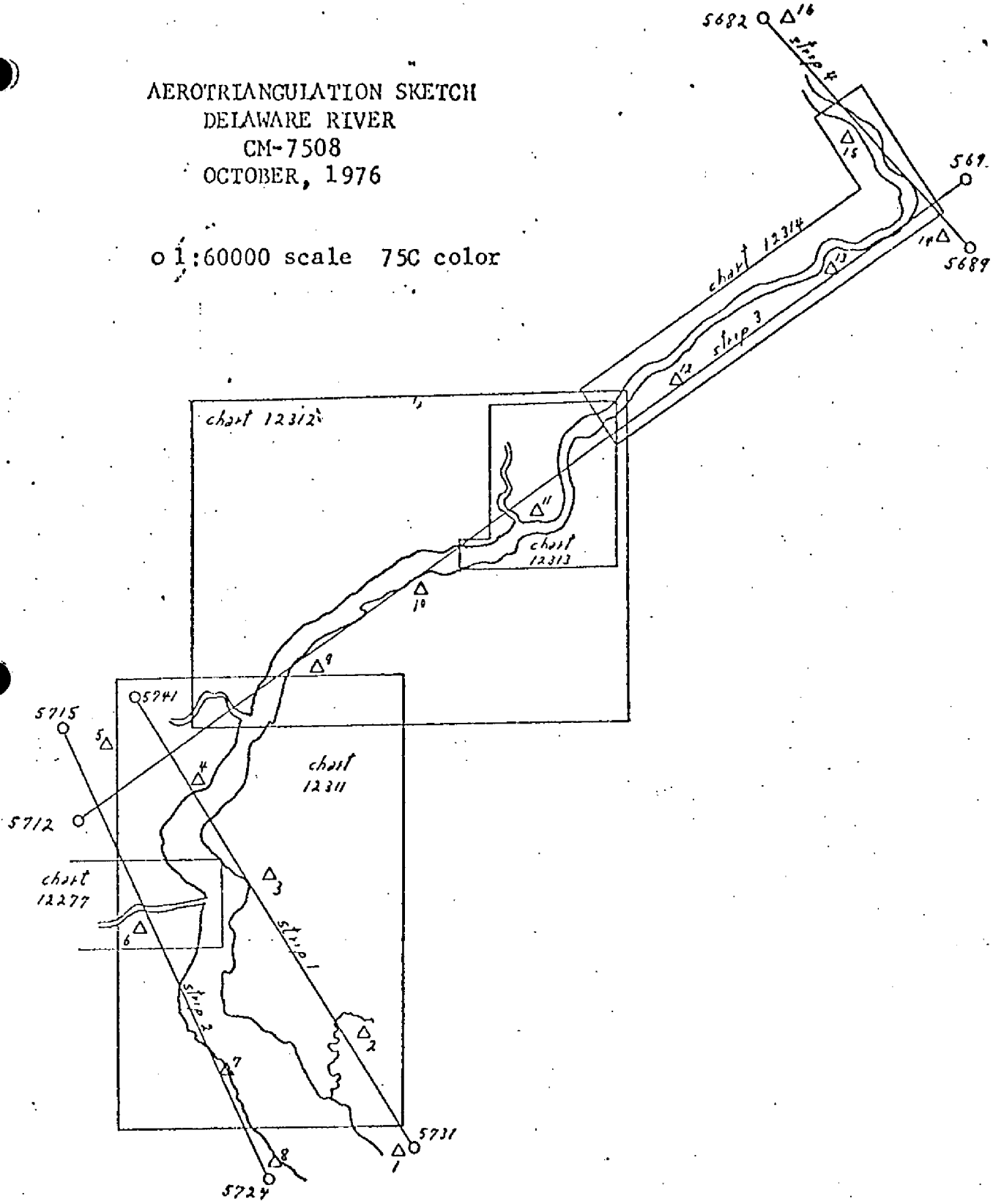
Robert B. Kelly
R. B. Kelly

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

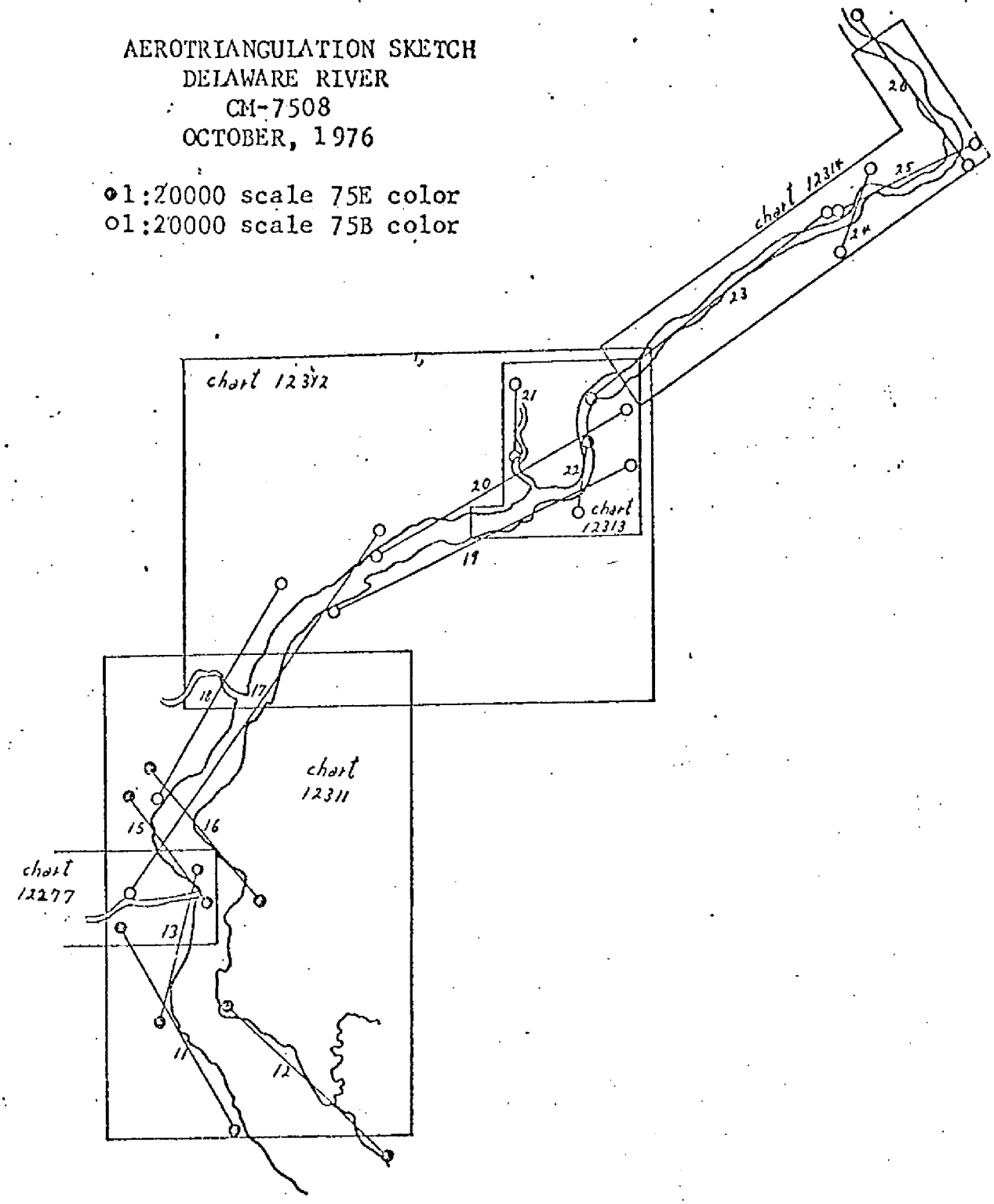


fit to control
(feet)

| | | |
|---|---|---|
| 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 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
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 |
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| " | 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 |

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 photo-identifying 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 1973
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 296, 1:20,000 scale, 21st edition dated 5/31/75.

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-00236

61. General Statement

Since field edit for this map was canceled April 1978, this map is registered as Class III. All landmarks and aids were located in the field for job CM-7508 which covers this same area. 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.

66. Adequacy of Results and Future Surveys

This map meets the National Standards of Map Accuracy and compiles 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-00236

Blacks Creek

Bordentown

Conrail (RR)

Crafts Creek

Crosswicks Creek

Delaware River

Fieldsboro

Kinkora

Newbold Island

Pennsbury Manor State Park

Roebling

Staveout Point

Approved by:

Charles E. Harrington

Charles E. Harrington
Staff Geographer - C51x2

76-40 LISTING

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

TERMINAL VERSION 0[illegible]20/76

SVY TP-00236
JOB CM-7707
PRJ DEL. RIVER
DTM NA 1927

NONFLOATING AIDS FOR CHARTS
TO BE REVISED

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



ORIGINATING ACTIVITY
COMPILATION

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

| CHARTING NAME | DESCRIPTION: RECORD REASON FOR DELETION; PUT TRIANGULATION NAMES IN ( ) | | POSITION: LATITUDE / LONGITUDE | DM / DP | CODES: C-C / SEQ | | METHOD AND DATE OF LOCATION: OFFICE | FIELD | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|---|
| | UPPER DELAWARE RIVER | | | | | | | | |
| REAR LIGHT | FLORENCE UPPER RANGE | ? | 40 07 44.99 | 1387.6 | NOT | TR4 LIST 1935 | P-5 | 1/19/76 | 12314 |
| | | | 74 49 15.01 | 355.4 | DGTZD | | 75BC4915 | | |
| FRONT LIGHT | ROEBLING RANGE | | 40 07 17.35 | 535.1 | NOT | OK (L-1734/74) | P-5 | 1/19/76 | 12314 |
| | | | 74 46 43.69 | 1034.5 | DGTZD | | 75BC4915 | | |
| REAR LIGHT | ROEBLING RANGE | | 40 07 17.55 | 541.3 | NOT | OK (L-1734/74) | P-5 | 1/19/76 | 12314 |
| | | | 74 46 42.14 | 997.8 | DGTZD | | 75BC4915 | | |
| FRONT LIGHT | KINKORA UPPER RANGE | | 40 08 10.94 | 337.4 | NOT | OK (L-1734/74) | P-5 | 1/15/76 | 12314 |
| | | | 74 45 29.91 | 708.1 | DGTZD | | 75BC4917 | | |
| REAR LIGHT | KINKORA UPPER RANGE | | 40 08 13.70 | 422.6 | NOT | OK (L-1734/74) | P-5 | 1/15/76 | 12314 |
| | | | 74 45 25.58 | 605.6 | DGTZD | | 75BC4917 | | |
| LIGHT | NEWBOLD DIRECTIONAL LT | | 40 08 02.33 | 71.9 | NOT | ✓ | P-5 | 1/16/76 | 12314 |
| | | | 74 44 20.28 | 480.1 | DGTZD | | 75BC4918 | | |
| FRONT LIGHT | WHITE HILL RANGE | X | 40 07 55.47 | 1710.9 | NOT | ✓ | P-5 | 1/16/76 | 12314 |
| | | | 74 44 45.93 | 1087.4 | DGTZD | | 75BC4917 | | |
| REAR LIGHT | WHITE HILL RANGE | X | 40 07 49.00 | 1511.3 | NOT | ✓ | P-5 | 1/16/76 | 12314 |
| | | | 74 44 55.91 | 1323.7 | DGTZD | | 75BC4917 | | |

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

76-40 LISTING

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

TERMINAL VERSION 6/20/76

| | | | | |
|---|---|---|---|---|
| SVY TP-00236 | | RPT UNIT | CMD ROCKVILLE, MD. | PAGE 2 OF 4 |
| JOB CM-7707 | LANDMARKS FOR CHARTS | STATE | DEL. N.J. PA. | |
| PRJ DEL. RIVER | TO BE DELETED | LOCALITY | UPPER DELAWARE RIVER | ORIGINATING ACTIVITY |
| DTM NA 1927 | | DATE | 05/04/77 | COMPILATION |

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

| CHARTING NAME | DESCRIPTION<br>RECORD REASON FOR DELETION<br>PUT TRIANGULATION NAMES IN ( ) | POSITION<br>LATITUDE DM<br>LONGITUDE DP | CODES<br>C-C<br>SEQ | | METHOD AND DATE OF LOCATION<br>OFFICE | FIELD | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|
| STAND-PIPE | REMOVED | 40 07 05.00 154.2<br>74 46 36.00 852.5 | NOT<br>DGTZD | ✓ | | 1/19/76 | 12314 |
| BLDG | DELETE SINGLE POINT<br>USE BUILDING OUTLINE | 40 08 21.00 647.7<br>74 45 13.00 307.7 | NOT<br>DGTZD | No Corr. | | 1/15/76 | 12314 |
| STACK | OBSCURED | 40 07 48.00 1480.5<br>74 44 17.00 402.5 | NOT<br>DGTZD | ✓ | | 1/16/76 | 12314 |
| TANK | NOT OF LANDMARK VALUE check | 40 08 08.00 246.7<br>74 44 07.00 165.7 | NOT<br>DGTZD | ✓ | | 1/16/76 | 12314 |
| TOWER | OBSCURED | 40 07 52.00 1603.8<br>74 43 24.00 568.2 | NOT<br>DGTZD | ✓ | | 1/19/76 | 12314 |

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 AND/OR VERIFIED BY FIELD AND OFFICE ACTIVITIES | R. TIBBETTS R. WELLS | FIELD REPRESENTATIVE |
| | D. NORMAN G. FROMM | OFFICE COMPILER |
| | NOT DIGITIZED | DIGITIZER |
| | G. FROMM | DATA PROCESSER |

76-40 LISTING

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

TERMINAL VERSION 7/20/76

| | | | | |
|---|---|---|---|---|
| SVY TP-00236 | LANDMARKS FOR CHARTS TO BE CHARTED | RPT UNIT | CMD ROCKVILLE, MD. | PAGE 3 OF 4 |
| JOB CM-7707 | | STATE | DEL. N.J. PA. | |
| PRJ DEL. RIVER | | LOCALITY | UPPER DELAWARE RIVER | ORIGINATING ACTIVITY |
| DTM NA 1927 | | DATE | 05/04/77 | COMPILATION |

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

| CHARTING NAME | DESCRIPTION: RECORD REASON FOR DELETION; PUT TRIANGULATION NAMES IN ( ) | POSITION: LATITUDE / LONGITUDE | DM / DP | CODES: C-C / SEQ | METHOD AND DATE OF LOCATION: OFFICE | FIELD | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|
| TANK | YELLOW TANK | 40 08 09.94 | 306.6 | NOT | | P-5 | 12314 |
| | | 74 44 09.24 | 218.7 | DGTZD | | 1/16/76 | |
| | | | | | | 75BC4918 | |
| STACK | SOUTHERLY OF NINE STACKS | 40 08 59.85 | 1846.0 | NOT | | P-5 | 12314 |
| | | 74 45 05.76 | 136.3 | DGTZD | | 1/26/76 | |
| | | | | | | 75BC4918 | |
| BELFRY | MANUAL TRAINING SCHOOL | 40 08 37.65 | 1161.2 | NOT | | P-5 | 12314 |
| | | 74 43 24.77 | 586.3 | DGTZD | | 1/26/76 | |
| | | | | | | 75BC4919 | |
| STAND-PIPE | BORDENTOWN STANDPIPE | 40 08 46.82 | 1444.1 | NOT | | P-5 | 12314 |
| | | 74 42 11.63 | 275.3 | DGTZD | | 1/16/76 | |
| | | | | | | 75BC4919 | |

| 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 | FIELD REPRESENTATIVE |
| | D. NORMAN G. FROMM | OFFICE COMPILER |
| | NOT DIGITIZED | DIGITIZER |
| | G. FROMM | DATA PROCESSER |

76-40 LISTING

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

TERMINAL VERSION 20/76

| | | | |
|---|---|---|---|
| SVY TP-00236 | LANDMARKS FOR CHARTS TO BE REVISED | RPT UNIT CMD ROCKVILLE, MD. | PAGE 4 OF 4 |
| JOB CM-7707 | | STATE DEL. N.J. PA. | |
| PRJ DEL. RIVER | | LOCALITY UPPER DELAWARE RIVER | ORIGINATING ACTIVITY |
| DTM NA 1927 | | DATE 05/04/77 | COMPILATION |

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

| CHARTING NAME | DESCRIPTION RECORD REASON FOR DELETION PUT TRIANGULATION NAMES IN ( ) | POSITION LATITUDE LONGITUDE | DM DP | CODES C-C SEQ | | METHOD AND DATE OF LOCATION OFFICE | FIELD | CHARTS AFFECTED |
|---|---|---|---|---|---|---|---|---|
| TANK | (ROEBLING J A ROEBLING CO LETTERD WT 1933) TANK A | 40 07 13.58<br>74 46 23.78 | 418.8<br>563.1 | NOT<br>DGTZD | TRIANG. LIST 1933 | TRIANG REC 1/19/76 | | 12314 |
| TANK | (ROEBLING J A ROEBLING CO UNLETTERED WT 1933) TANK B | 40 07 10.96<br>74 46 02.79 | 338.0<br>66.1 | NOT<br>DGTZD | TRIANG LIST 1933 | TRIANG REC 1/19/76 | | 12314 |
| STACK | NORTH STACK OF SOUTHERLY TWIN STACKS | 40 08 35.84<br>74 45 16.34 | 1105.4<br>386.8 | NOT<br>DGTZD | ✓ | P-5 1/15/76 | 75BC4917 | 12314 |
| STACK | SOUTH STACK OF SOUTHERLY TWIN STACKS | 40 08 29.32<br>74 45 13.65 | 904.3<br>323.1 | NOT<br>DGTZD | ✓ | P-5 1/15/76 | 75BC4917 | 12314 |
| STACK | SOUTH OF FOUR | 40 08 24.90<br>74 45 03.44 | 768.0<br>81.4 | NOT<br>DGTZD | ✓ | P-5 1/15/75 | 75BC4917 | 12314 |
| TANK | (BORDENTOWN MANUAL TRAINING SCH SILVER WT 1933) FIELDSBORO | 40 08 30.61<br>74 43 28.23 | 944.1<br>668.3 | NOT<br>DGTZD | TRIANG LIST 1933 | TRIANG REC 1/16/76 | | 12314 |
| SPIRE | BORDENTOWN SPIRE | 40 08 48.56<br>74 42 51.98 | 1497.7<br>1230.4 | NOT<br>DGTZD | ✓ | P-5 1/16/76 | 75BC4925 | 12314 |
| BELFRY | BORDENTOWN BELFRY | 40 08 48.23<br>74 42 50.04 | 1487.6<br>1184.5 | NOT<br>DGTZD | ✓ | P-5 1/16/76 | 75BC4925 | 12314 |

| 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 | FIELD REPRESENTATIVE |
| | D. NORMAN G. FROMM | OFFICE COMPILER |
| | NOT DIGITIZED | DIGITIZER |
| | G. FROMM | DATA PROCESSER |

FORM C&GS-8352
(3-25-63)

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.

| CHART | DATE | CARTOGRAPHER | REMARKS |
|---|---|---|---|
| 12314 | 7-2-79 | D.C. Harpine | Full A ~~Part~~ ~~Before~~ After Verification Review Inspection Signed Via |
| (296) | | | Drawing No. 28 |
| | | | |
| | | | Full Part Before After Verification Review Inspection Signed Via |
| | | | Drawing No. |
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| | | | Full Part Before After Verification Review Inspection Signed Via |
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ORIGINAL COPY

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63