

8770

Diag. Cht. No. 295-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRIC SHORELINE

Field No. PH-7(1.6)D Office No. T-8770

LOCALITY

State PENNSYLVANIA - NEW JERSEY

General locality DELAWARE RIVER

Locality CHESTER, PENNSYLVANIA

1946

CHIEF OF PARTY

E. L. Jones, Chief of Field Party.

T. B. Reed, Balti. Photogrammetric Office

LIBRARY & ARCHIVES

DATE March 14, 1952

02.8

DATA RECORD

T- 8770

Quadrangle (II): Chester, Pa. •

Project No. (II): PH-7(46)D

Field Office: Camden, N.J.

Chief of Party: E.L. Jones

Compilation Office:

Chief of Party:

Baltimore Photogrammetric Office

Thos. B. Reed

Instructions dated (II III): 25 March 1946
14 June 1946Copy filed in Descriptive
Report No. T- (VI)Completed survey received in office: *January 1949*

Reported to Nautical Chart Section:

Reviewed: *April 4, 1950* Applied to chart No.

Date:

Redrafting Completed:

*May 15, 1951*Registered: *January 3, 1951*

Published:

Compilation Scale: 1:10,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): ~~N.S.L.~~ MHW

Reference Station (III): DYNAMITE, 1933

Lat.: 39° 51' 31.727" (978.5) Long.: 75° 18' 26.769 (636.5) . Adjusted
~~Adjusted~~State Plane Coordinates (VI): N. J. State Grid
Pa. State Grid

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

75th meridian

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
D 1619 to 1621	3-3-46	1120	1:10,000	5.4 above MLW
D 1861 to 1868	3-10-46	1433	1:10,000	0.2 above MLW
D 1869 to 1872	3-10-46	1436	"	0.2 above "
D 1879 to 1885	3-10-46	1451	"	1.0 " "
D 1903 to 1907	3-10-46	1505	"	1.4 " "
D 2113	3-12-46	1459	"	1.5 " "

Tide from (III): Actual tide observations at Philadelphia corrected to
"Billingsport to S. Chester"

Mean Range: 5.3' Spring Range: 5.7'

Camera: (Kind or source) U.S. Coast and Geodetic Survey single lens
camera. Wide angle, type "D" - focal length 12".

Field Inspection by: Ben O. Bryant, Sr. Photo Aid (N.J.) date: Aug-Sept. 1946
and I.Y. Fitzgerald, Engr. Aid. (Del. and Pa.)

Field Edit by: J. D. Weiler date: January 20, 1949

Date of Mean High-Water Line Location (III): Same as date of photographs supplemented with field inspection obtained during August and September 1946.

Projection and Grids ruled by (III) T.L.Janson date: 11 Oct. 1946

" " " checked by: T.L.Janson date: 11 Oct. 1946

Control plotted by: J.C. Richter date: 4 Sept. 1947

Control checked by: W.J. Hughes date: 5 Sept. 1947

Radial Plot by: F.J. Tarcza date: 14 Oct. 1947
L.A. Senasack 11 Feb. 1948

Detailed by: D.A. Maskell date: 19 Feb. 1948 -
26 May 1948

Reviewed in compilation office by: J.W. Vonasek date: 27 May to 4 June 1948

Elevations on Field Edit Sheet
checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 12

Shoreline (More than 200 meters to opposite shore): 26.2 miles (statute)

Shoreline (Less than 200 meters to opposite shore): 10.1 miles (statute)

Number of Recoverable Topographic Stations established: 11

Number of Temporary Hydrographic Stations located by radial
plot: none

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

Summary T-8770

partially
This is one of a series of 24 shoreline maps in Project Ph-7(46), covering both sides of the Delaware River from Trenton, New Jersey and extending southward to Lower Delaware Bay.

These shoreline sheets at a scale of 1:10,000 furnish material for revision of the nautical charts, and, for a series of 18 topographic compilations at a scale of 1:20,000 which are to be published by the U. S. Geological Survey. Since no topographic compilation covers this sheet this shoreline survey furnishes material for the revision of Nautical Chart 295 only.

*This summary to be rewritten
and copies thereof inserted
in each of these 24 Descriptive
Reports when the Project Report
is prepared.*

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FIELD INSPECTION REPORT
 Sheets T-8770, T-8771, T-8772
 Project Ph-7(46)
 Sub-Project C & D
 E. L. Jones, Chief of Party

All phases of field work was completed in accordance with the Director's Instructions Project PH-7(46), dated 25 March 1946, and Supplemental Instructions No. 1, dated 14 June 1946, except for deviations herein noted.

The field work on this quadrangle was completed by the following personnel.

Name & Title	Field Work	1946 Dates	Area
Ben O. Bryant	Shoreline inspection	Aug-Sept	New Jersey
Sr. Photo Aid	Horizontal recovery	" "	" "
	Field inspection	" "	" "
I. Y. Fitzgerald	Shoreline inspection	Aug-Sept	Delaware & Pennsylvania
Engr. Aid	Horizontal recovery	" "	" "
	Field inspection	" "	" "
Lowell I. Bass	Geographic names	Aug-Sept	Project
Harland R. Cravat	Supervisor	April-Oct	Delaware & Pennsylvania
Photogrammetrist			
George E. Varnadoe	Supervisor	April-Oct	New Jersey
Photogrammetrist			

1. Description of the Area:

A. Delaware & Pennsylvania

The Southern part of this area, just North of Wilmington, Delaware is a residential section. From Claymont, Delaware North to Essington, Pennsylvania is an industrial area. This industrial area is composed of Steel Plants, Locomotives Works, Oil Refineries and numerous smaller manufacturing plants. From Essington, Pennsylvania North the area is marshland.

B. New Jersey

For the most part this area is composed of marshland with a few small communities scattered along the shore and highway. The Dupont Company operates Chemical and Powder plants which are scattered along the shore.

2. Completeness of Field Inspection: (cont'd)

Field inspection was done on 1:10,000 scale single lens Photographs in August and September, 1946. It is believed to be adequate.

3. Interpretation of the Photographs:

No difficulty was encountered in interpretation of the photographic details for various phases of the work.

4. Horizontal Control:

73 horizontal control stations were searched for or recovered. Of these 17 were identified on the photographs, either by pricking direct, substitute station method or swinging arcs.

5. Vertical Control:

Not applicable.

6. Contours & Drainage:

Not applicable.

7. Mean High Water Line:

The average range of tide is 5.3 feet. There are notes on the photographs clarifying the interpretation of the shoreline where symbols were not considered adequate. Only that part of the M.H.W.L. requiring clarification was delineated on the photographs.

8. Mean Low Water Line:

From field investigation it was found that the photographs were taken at the time of low water. No special attempt was made in the field to identify all of the low water line.

9. Wharves and Shoreline Structures:

Adequately noted on photographs

10. Detail Offshore from High Water Line:

Adequately noted on photographs.

11. Landmarks and Aids to Navigation:

The following are separately reported on form 567 along with form 524 where necessary.

1. Landmarks to be deleted
2. Recommended name change
3. Continuation of existing landmarks
4. New landmarks
5. Existing aids to navigation

11. Landmarks and Aids to Navigation:(Cont'd)

The azimuth of navigational ranges were carefully determined by two three point sextant fixes taken from a skiff held on range. It being impractical to identify a point on range on the photographs.

12. Hydrographic Control:

24 recoverable topographic stations were established, pricked on the photographs and described on form 524.

There are numerous existing horizontal control stations in the area that can be used for hydrographic signals.

13. Landing Fields and Aeronautical Aids:

None

14. Roads:

Classified

15. Bridges:

All bridges over navigable streams in this area were inspected and necessary measurements taken with steel tape. Some discrepancies were found with the U.S. Engineer's List of Bridges.

16. Buildings:

No Comment.

17. Boundaries:

Boundary investigation on this quadrangle consisted of searching state files for legal descriptions and field investigation.

The following legal boundary descriptions and maps are attached to this report and should be plotted on the map manuscript:

Delaware-New Jersey-Description & Map	
Delaware-Maryland-	" only
Delaware-Pennsylvania	" only

18. Geographic Names: 2014 ✓

Geographic name information was obtained during field work by the topographer. These names were incorporated in a special geographic name report to be submitted at a later date by Lowell I. Bass, Engineering Aid.

Submitted
11 Oct. 1946

I. Y. Fitzgerald
I. Y. Fitzgerald
Engineering Aid

Field Review
7-10 Oct. 1946

James E. Hundley
James E. Hundley
Sr. Photo Aid

Ben O. Bryant
Ben O. Bryant
Sr. Photo Aid

Approved
11 Oct. 1946

E. L. Jones
by
Harland R. Curat
E. L. Jones
Chief of Party

RADIAL PLOT REPORT

PROJECT NO. PH-7(46)D

SURVEYS NOS. T-8770 and T-8771

1. GENERAL DESCRIPTION:

Surveys T-8770 and T-8771

This radial plot covers the area of ~~both maps~~ in Project Ph-7(46)D located along the Delaware River and lying between Oldman Point and Paulsboro, New Jersey. These surveys are to be compiled in accordance with instructions.

2. LAYOUT:

A sketch showing the layout of the maps, the horizontal ground control and the photograph centers, is attached to this report.

3. PHOTOGRAPHS:

Single lens photographs taken with the U. S. Coast and Geodetic Survey wide angle, type D camera, focal length 12 inches at a contact scale of 1:16,000 and ratioed to a scale of 1:10,000, were used in this plot.

4. MANUSCRIPTS:

The projection sheets for these surveys were ruled with polyconic projections, scale 1:10,000, New Jersey State Grid and Pennsylvania State Grids (5000 foot intervals). In addition, Survey No. T-8771 was also ruled with Delaware State Grid (5000 foot intervals). The projection and grid lines were ruled on acetate with the ruling machine and checked in the Washington Office.

5. CONTROL:

The field inspection party recovered 47 previously established horizontal control stations within the area of this plot, 20 of which were identified. In addition, the field party recovered 8 horizontal control stations just outside the detail limits, four of which were identified. Six previously established horizontal control stations within the detail limits of this survey were not recovered. No new horizontal control stations were established.

6. FIELD INSPECTION:

The field identification of the horizontal control was very good inasmuch as 23 of the 24 stations that were identified could be "held to" in the radial plot. However, there was a scarcity of control in the southeastern area of the plot.

7. SUMMARY

Substitute points for some of the unidentified control stations in the southeastern area of the plot would have increased the accuracy of the plot.

The distribution of control was poor. There was an abundance of control in the area north of the Delaware River while the control in the area south of the Delaware River was sparse.

The number and distribution of photographs was good.

DETAILS OF RADIAL PLOTTING

8. The scale of the projection sheets was determined in the Washington Office. The plot was made with vinylite templets.

9. In order to supplement the horizontal control plotted on the projection sheets and to insure an accurate junction between this plot and the plot previously run on Survey No. T-8772 to the southwest, pass points and photograph centers previously established on Survey No. T-8772 which were common to Survey No. T-8771 were transferred thereto. In addition, several horizontal control points to the north, east, and southeast of the detail limits of Surveys Nos. T-8770 and T-8771 were plotted outside the detail limits of these surveys.

10. Twelve horizontal control stations, which were recovered but not identified by the field party and one which was not recovered were identified on the photographs in the compilation office. See the attached "List of Control" for those stations identified in the compilation office.

11. The radial plot was then made by laying the templets on the base grid sheets. All templets containing three or more control points were "laid" first in order to establish radially plotted pass points for use in the uncontrolled areas. The templets containing two control points, one, and those containing none were then laid, holding to the radial intersections of pass points determined by previously laid templets. Satisfactory results were obtained.

12. The projection sheets were then oriented over the templets as laid on the base sheets and all photograph centers and pass points were pricked on the projection sheets.

13. The positions of all pass points and photograph centers are within 0.5 millimeters of their correct geographic positions.

14. The following horizontal control station could not be "held to" in the radial plot:

CHESTER SCOTT PAPER CO. SILVER WATER TANK, 1933. Recovered and identified

with pricking "Positive". The radially plotted position falls 9.5 mm. ENE of the geographic position. Either the "water tank" has been moved from its location or the position of this station is in error because there is no image of a "water tank" visible on the photographs in the immediate vicinity of its geographic position. *See enclosed Form 567 dated Mar 31, 1950. Also see field photo 46 D 1884. L.M.G.*

All other control was "held to" tangentially or better.

REMARKS

15. The identification of the horizontal control was very good. However, the identification of some of the stations south of the Delaware River or the establishment of a few new stations would have been desirable.

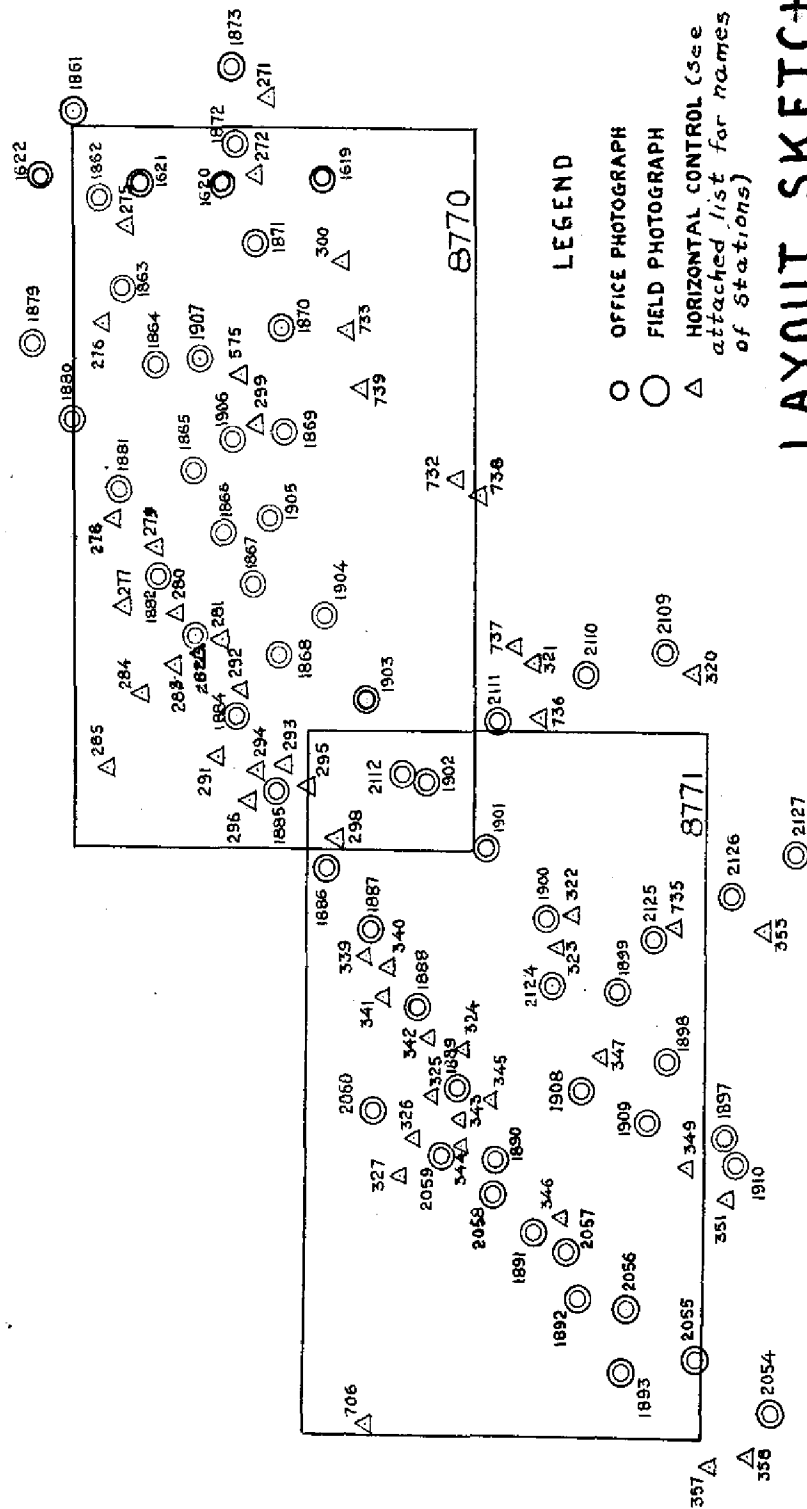
Respectfully submitted
20 October 1947

Harry R. Rudolph
Harry R. Rudolph
Supervisor

Approved and Forwarded
21 October 1947

Thos Baird

Officer in Charge
Baltimore Photogrammetric Office



LIST OF CONTROL
PROJECT PH-7(46)-D
SURVEYS NOS. T-8770 & T-8771

No.	Name of Station	Method of Identification
271	PAULSBORO MUNICIPAL WATER TANK, 1933	Pricked direct (positive)
272	PAULSBORO VACUUM OIL CO., NORTHERLY BRICK STACK, 1933	Identified in compilation office
272	PAULSBORO VACUUM OIL CO., EASTERLY CONCRETE STACK, 1933	Pricked direct (positive)
275	FOUNDATION, 1933	Not identified
276	ESSINGTON WESTINGHOUSE ELECTRIC CO. STACK, 1933	Pricked direct (positive)
276	ESSINGTON WESTINGHOUSE ELECTRIC CO. WATER TANK, 1933	Not identified
277	EDDYSTONE BALDWIN LOCOMOTIVE WORKS WATER TANK, 1933	Pricked direct (positive)
277	EDDYSTONE BALDWIN LOCOMOTIVE WORKS TALL STACK, 1933	Not identified
278	EDDYSTONE GENERAL STEEL CASTING CORP. WATER TANK, 1933	Pricked direct (positive)
279	EDDYSTONE FEDERAL ALLOY STEEL, SQUAT SILVER WATER TANK, 1933	Identified in compilation office.
280	EDDYSTONE MANUFACTURING CO., SQUARE BRICK STACK, 1933	Identified in compilation office.
281	SUN 2, 1941	Not identified
281	SUN, 1933	No recovery card
282	CHESTER, SUN SHIPBUILDING & DRYDOCK CO., STACK, 1933	Identified in compilation office.
283	CHESTER, ABERFOYLE MANUFACTURING CO., WATER TANK, 1933	Not identified
284	MILITARY, 1933	Azimuth mark pricked direct. No position.
284	PENN MILITARY COLLEGE, 1933	No recovery. Identified in compilation office.

No.	Name of Station	Method of Identification
285	CHESTER, FIRST PRESBYTERIAN CHURCH SPIRE, 1933	Not identified.
291	CHESTER HIGH SCHOOL BELFREY, 1933	Identified in compilation office.
292	CHESTER, SCOTT PAPER CO. SILVER WATER TANK, 1933	Pricked direct. (Positive) <i>WRONG TANK SEE FIELD PHOTO 46 D 1884 & REVIEW REPORT.</i>
293✓	CHESTER, FORD MOTOR CO. SILVER WATER TANK, 1933	Pricked direct. (Positive)
294	CHESTER, AMERICAN DYE WOOD CO. STACK, 1933	Identified in compilation office.
295	CHESTER, PHILA. GAS CO., STACK, 1933	Identified in compilation office.
296	CHESTER, IMMACULATE HEART CHURCH SPIRE, 1933	Identified in compilation office.
298	CHESTER, PHILA. ELECTRIC COKE PLANT STACK, 1933.	Pricked direct. Positive
299	DYNAMITE, 1937	Not identified.
300	GIBBSTOWN MUNICIPAL WATER TANK, 1933	Pricked direct (Positive)
320	SPRINGER, 1933	Not identified
321	BRIDGEPORT MUNICIPAL WATER TANK, 1933	Pricked direct (Positive)
322✓	<i>BORELL</i> BARELLI , 1933 <i>BORELL AZIMUTH 1933 (PHOTO-TOPO STA.)</i>	<i>Not identified</i> Azimuth mark. Pricked direct. No position <i>Pricked direct (position on FORM 524)</i>
323✓	FILL, 1934	Not identified.
323	BOUNDARY MON. NO. 1, 1934	Not identified
324✓	MARCUS, 1932 1933	Substitute station. Pricked direct (positive)
325	BOUNDARY MON. NO. 22, 1935	No recovery; not identified.
326	BOUNDARY MON. NO. 21½, 1935	No recovery. Not identified.
327	BOUNDARY MON. No. 21, 1935	No recovery. Not identified.

No.	Name of Station	Method of Identification
• 339 ✓	MARCUS HOOK SINCLAIR REF. CO. MOST SOUTHEASTERLY STACK, 1933	Identified in compilation office.
• 340 ✓	MARCUS HOOK VISCOSE CO. EAST STACK, 1933	Pricked direct. (Positive)
• 341 ✓	MARCUS HOOK VISCOSE CO. WEST STACK, 1933	Pricked direct. (Positive)
• 342 ✓	MARCUS HOOK PURE OIL CO. TALLEST STACK, 1933	Identified in compilation office.
343 ✓	CLAYMONT GENERAL CHEM. CO. TALLEST STACK, 1933	Pricked direct. (Positive)
344 ✓	CLAYMONT, WORTH STEEL CO. NORTH-WESTERLY STACK, 1933	Not identified
344 ✓	CLAYMONT, WORTH STEEL CO. SOUTH-EASTERLY STACK, 1933	Pricked direct (Positive)
345 ✓	CLAYMONT, GENERAL CHEMICAL CO. LOW BROAD STACK, 1933	Identified in compilation office
346 ✓	RUINS, 1934	By arcs (positive)
347 ✓	MALLOW SEXT (USE) 1933 <i>also = Mallow U.S. ARMY ENGINEERS, 1933; also = Mallow (U.S.E.) 1933</i>	Pricked direct (positive)
349 ✓	SOUTH, 1934	Not identified
351 ✓	DEPOT, 1933	Substitute station. Pricked direct (positive).
353	PEDRICKTOWN, 1933	Substitute station. Pricked direct. (Positive)
357	GREEN, 1933	RM No. 1 pricked direct as substitute station (Positive)
358	MARCUS HOOK REAR RANGE 1933	Pricked direct (positive)
575	GIBBSTOWN DUPONT REPAUNO WORKS NORTHEAST STACK, 1933	Pricked direct (positive)
575	GIBBSTOWN DUPONT REPAUNO WORKS SOUTHWEST STACK, 1933	Pricked direct (Positive)
732	N. J. LOCAL CONTROL SURVEY MON. NO. 1043	Recovered as vertical control, not identified.

No.	Name of Station	Method of Identification
733	N. J. LOCAL CONTROL SURVEY MON. NO. 1045	Identified in compilation office.
735✓	U.S.C.& G.S. B.M. E 10, 1930	Pricked direct (positive)
736·	U.S.C.& G.S. B.M. F 10, 1930	Not identified
737·	U.S.C.& G.S. B.M. G 10, 1930	Not identified
738·	U.S.C. & G.S. B.M. H 10, 1930	Not identified
739·	U.S.C. & G.S. B.M. J 10, 1930	Not identified
· 706 ✓	W-O 25, 1934	No recovery and not identified.

MAP T. 8770

PROJECT NO. PH-7(46)D

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS "FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
✓ FOUNDATION, 1933	G-1664 Pg. 71	N. A. 1927	39° 51' 42.078"			1297.8 (552.7)	
ESSINGTON, WESTING- HOUSE ELECTRIC CO. STACK, 1933	G-1751 Pg. 105	"	75 16 04.498			106.9 (1319.2)	
EDDYSTONE, GENERAL STEEL CASTING CORP. WATER TANK, 1933	" "	"	39 51 52.793			1659.1 (191.4)	
CHESTER, FIRST PRESBYTERIAN CHURCH SPIRE, 1933	G-1751 Pg. 109	"	75 17 11.320			269.1 (1157.0)	
✓ MILITARY, 1933	G-1664 Pg. 71	"	39 51 45.572			1405.5 (445.0)	
PENNSYLVANIA MILI- TARY COLLEGE, 1933	G-1664 Pg. 71	"	75 19 26.429			528.2 (798.0)	
EDDYSTONE, BALDWIN LOCOMOTIVE WORKS WATER TANK, 1933	G-1751 Pg. 109	"	39 51 51.821			1598.3 (252.2)	
EDDYSTONE, FEDERAL ALLOY STEEL CORP. SQUAT W.T.K. 1933	G-1751 Pg. 109	"	75 22 15.058			357.9 (1068.2)	
EDDYSTONE MFG. CO., SQUARE BRICK STACK, 1933	G-1751 Pg. 109	"	39 51 43.981			1356.5 (494.0)	
CHESTER ABERFOYLE MFG. CO., WATER TANK, 1933	G-1751 Pg. 109	"	75 21 18.517			440.1 (986.0)	
CHESTER, SUN SHIP- BUILDING & DRYDOCK CO. STACK, 1933	G-1751 Pg. 109	"	39 51 41.616			1283.5 (567.0)	
SUN, 2, 1941	G-1664 Pg. 34A	"	75 21 20.520			487.7 (938.4)	
			39 51 37.836			1166.9 (683.6)	
			75 20 25.076			596.0 (830.1)	
			39 51 26.197			808.0 (1042.5)	
			75 19 43.904			1043.6 (382.7)	
			39 51 11.026			340.1 (1510.4)	
			75 20 32.650			776.2 (650.1)	
			39 51 04.848			149.5 (1701.0)	
			75 21 06.769			160.9 (1265.5)	
			39 50 58.349			1799.6 (50.9)	
			75 20 57.714			1372.0 (54.4)	
			39 50 52.294			1612.9 (237.6)	
			75 20 50.628			1203.6 (222.8)	

M-2388-12

COMPUTED BY: J.C. Richter

DATE 7-25-47

CHECKED BY: W.J. Hughes

DATE 8-1-47

MAP T. 8770

PROJECT NO. PH-7(46)D

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
SUN, 1933	G-1664 Pg. 71	N.A. 1927	39° 50'	52.249"				1612.5 (239.0)			
			75 20	50.992				1212.3 (214.1)			
CHESTER, HIGH SCHOOL BELFRY, 1933	G-1751 Pg. 110	"	39 50	55.061				1698.2 (152.3)			
			75 22	12.154				288.9 (1137.5)			
CHESTER, SCOTT PAPER CO., SILVER WATER TANK, 1933	"	"	39 50	39.614				1221.8 (628.7)			
			75 21	23.002				546.9 (879.6)			
PAULSBORO MUNICI-PAL WATER TANK, 1933 <i>not west</i>	G-1751 Pg. 107	"	39 50	23.386				721.3 (1129.2)			
			75 14	41.129				977.9 (448.7)			
PAULSBORO, VACUUM OIL CO. NORTHERLY BRICK STACK, 1933	G-1751 Pg. 106	"	39 50	31.794				980.6 (869.9)			
			75 15	26.918				640.0 (786.6)			
PAULSBORO VACUUM OIL CO. EASTERLY CONC. STACK, 1933	"	"	39 50	29.306				903.9 (946.6)			
			75 15	28.485				677.3 (749.3)			
GIBBSTOWN, DUPONT REPAIRO WORKS, NEELY STACK, 1933	"	"	39 50	37.109				1144.5 (706.0)			
			75 17	48.569				1154.7 (271.8)			
DYNAMITE, 1933	G-1664 Pg. 71	"	39 50	31.727				978.5 (872.0)			
			75 18	26.769				636.5 (790.1)			
CHESTER, IMMACULATE HEART CHURCH, SPIRE, 1933	G-1751 Pg. 110	"	39 50	18.323				565.1 (1285.4)			
			75 22	33.635				799.7 (626.9)			
CHESTER, AMERICAN DYEWOOD CO., STACK 1933	G-1751 Pg. 110	"	39 50	12.222				377.0 (1473.5)			
			75 22	20.326				483.3 (943.3)			
CHESTER, FORD MOTOR CO. SILVER WATER TANK 1933	"	"	39 50	13.919				429.3 (1421.2)			
			75 22	11.048				262.7 (1163.9)			
CHESTER, PHILA. GAS & ELECTRIC CO., STACK, 1933	"	"	39 50	06.433				198.4 (1652.1)			
			75 22	28.472				677.0 (749.7)			

1 FT. = 3048006 METER

COMPUTED BY: J.C. Richter

J. C. Richter

DATE 7-25-47

CHECKED BY: W. J. Hughes

DATE 8/1/47

M-2388-12

MAP T-8770

PROJECT NO. PH-7(46)-D

SCALE OF MAP

1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			°	'			FORWARD	(BACK)	
PAULSBORO, SANDURA WILD CORP. SQUAT BLACK W. TANK, 1933	G-1751 Pg. 107	N.A. 1927	39	50	07.154		220.6	(1629.9)	
			75	14	17.629		417.2	(1607.5)	
L-10, 1930	U.S.G.S. Phila. Qd. Pg. 2	"	39	50	03.71		114.4	(1736.1)	
			75	14	41.59		989.0	(427.7)	
M-10 1930	"	"	39	50	03.95		121.8	(1728.7)	
			75	14	21.50		511.2	(915.5)	
PAULSBORO, 1933	G-1664 Pg. 70	"	39	49	52.561		1621.1	(229.4)	
			75	14	12.584		299.2	(1127.5)	
GIBBSTOWN, MUNICI- PAL W. TANK, 1933	G-1751 Pg. 107	"	39	49	38.220		1178.8	(671.7)	
			75	16	31.507		749.3	(677.6)	
MON. 1045	N.J. State Control	"	361,921.88				585.8	(938.2)	
			1,826,059.03				322.8	(1201.2)	
J-10 1930	U.S.G.S. Chester Qd. Pg. 7	"	39	49	26.36		813.0	(1037.5)	
			75	17	56.62		1346.5	(80.4)	
MON. 1043	N.J. State Control	"	356,570.64				478.7	(1045.3)	
			1,817,595.77				791.2	(732.8)	
H-10 1930	U.S.G.S. Chester Qd. Pg. 6	"	39	48	22.16		683.4	(1167.1)	
			75	19	15.53		369.4	(1057.9)	
G-10 1930	U.S.G.S. Chester Qd. Pg. 6	"	39	47	55.62		1715.4	(135.1)	
			75	21	08.55		203.4	(1224.0)	
BRIDGEPORT, MUNICI- PAL W.T. 1933	G-1751 Pg. 112	"	39	47	54.900		1693.2	(157.3)	
			75	21	07.714		183.5	(1243.9)	
F-10, 1930	U.S.G.S. Chester Qd. Pg. 5	"	39	47	46.41		1431.3	(419.1)	
			75	21	42.05		1000.4	(427.1)	

1 FT. = 3048006 METER

COMPUTED BY: J.C. Richter

DATE 7-25-47

CHECKED BY: H.R. Richter

DATE 9-2-47

M-2388-12

SCALE FACTOR 1.000

STATION	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FORWARD (BACK)
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100		

1	100
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251

107

[illegible]

1620.0

1625.0 (171.0)

DATE.....9-2-47

M-2388-12

COMPILATION REPORT

SHORELINE MANUSCRIPT, SURVEY NO. T-8770

T-8770 is one of two shoreline manuscripts in Project No. PH-7 (46)D located along the Delaware River. These surveys are to be compiled in accordance with instructions dated 25 March 1946 and 19 July 1946 by graphic photogrammetric methods.

26. CONTROL:

See layout of control submitted to the Washington Office 20 October 1947. A list of stations on Form No. M 2388-12 is included in this report.

27. RADIAL PLOT

Refer to the report for the combined radial plot covering the area of Surveys No. T-8770 and T-8771, which was submitted to the Washington Office on 20 October 1947.

28. DELINEATION

The compilation is in accordance with the written instructions pertaining to Project NO. PH-7(46) dated 19 July 1946, and in accordance with Photogrammetry Instructions No. 17, dated 9-15-47. The photographs were satisfactory for delineation.

29. SUPPLEMENTAL DATA

Blueprints of the Pennsylvania Railroad Valuation Maps, sheets numbered $\frac{V204}{4}$; $\frac{V2,0}{9}$; $\frac{V2}{10}$; $\frac{V2}{11}$ were used for the delineation of the main lines of the railroad shown on the manuscript.

30. MEAN HIGH WATER LINE

The shoreline was delineated from single lens photographs (1:10,000 scale) in accordance with the field inspection data. Shoreline for which no field inspection was furnished was delineated in the compilation office after careful stereoscopic examination of the photographs.

31. MEAN LOW WATER LINE

A small percentage of the approximate mean low water line was identified by the field party. As the photographs were taken at the time of low water some additional low water line was delineated in the compilation office after careful stereoscopic examination of the photographs. About 50% of the approximate mean low water line is delineated on the manuscript.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

Delineated in accordance with the field identification.

33. WHARVES AND SHORELINE STRUCTURES

Delineated in accordance with field identification.

34. LANDMARKS AND AIDS TO NAVIGATION

See form 567 attached to the report for Surveys No. T-8770, T-8771, and T-8772 and also the Form 567 attached to this report.

One of the two fixes on Billingsport Range furnished by the field party, plotted approximately 220 meters off the range. *The range was then verified by only one point (fix) on range. L.M.G.*
Also one of the two fixes on Tinicum Range plotted approximately 10 meters off the range. *The range was then verified by only one point on range. L.M.G.*

All fixes located by the field inspection party have been plotted on the map manuscript.

Sextant fixes for points on the Eddystone Range were not furnished by the field inspection party.

35. HYDROGRAPHIC CONTROL

None.

36. LANDING FIELDS AND AERONAUTICAL AIDS

~~None.~~ *See Review Report included herein.*

38. GEOGRAPHIC NAMES

Geographic names were taken from the final name standards dated 12-19-46, furnished by the Washington Office. A list of geographic names is attached to this report. The name "Hog Island Shipyard (Abandoned)" has been omitted because the whole area has been changed to an ammunition storage area.

39. JUNCTIONS

Junctions to the southwest with Survey T-8771 and to the east with Survey No. T-8769 have been made and are in agreement. The project limits are to the northwest, north, and south.

41. BRIDGES

All bridge information for the area covered by this report as listed in the U. S. Engineers "List of Bridges Over Navigable Waters in the U. S. ", dated 1 July 1941, was verified in the field; all clearances were carefully measured with a steel tape, and the published descriptions and clearances were found to be correct except for the following discrepancies which were not reported to the Local District Engineer:

See list of bridge discrepancies contained in "Notes to Compiler" submitted with the field report. Additional discrepancies noted by the compiler are listed as follows:

Miles above mouth	Bridge at	Field Information	Listed Information
<u>Chester Creek</u>			
1.60	Kerlin Ave. Chester	Hor. cl both spans 66.0'	68.1

This bridge is listed in the "Notes to Compiler" in the field report but is not covered by photographs and has not been delineated on the manuscript.

Crum Creek

Correct →

The field party has identified the Delaware County Hwy Bridge as being closer to the mouth of Crum Cr than the Phila Trans.Co. Trolley bridge.

In the "List of Bridges" the Trolley bridge is listed as being closer to the mouth of the creek.

.4	Eddystone Pa Baldwin Loco Works	Hor cl 75.0'	40.0'
1.3	Eddystone Pa Pa Hwy 2 span fixed	This bridge is listed in the "Notes to Compiler" but was not delineated on the manuscript because apparently the creek is no longer navigable at that point.	

RIDLEY CREEK

.1	Hwy Bridge	None furnished. Apparently there is a bridge at this point that appears on all photographs.	Not listed
----	------------	---	------------

1.0	Chester B&O RR	None furnished ↑	Hor cl 130' Ver cl MHW 12'
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*Not necessary, Creek Nav. for skiffs only at this point.
Field Editor*

see field edit sheet

42. DISCREPANCY OVERLAY

Descriptive and explanatory notes concerning doubtful topographic features have been shown on the discrepancy overlay.

~~46.~~
46. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS

Survey No. T-8770 has been compared in detail with the U. S. Geological Survey Bridgeport, N.J.-Pa. Quadrangle, scale 1:31,680, and found to be in good agreement. Shoreline changes need no special discussion.

~~47.~~
47. COMPARISON WITH NAUTICAL CHARTS

Survey No. T-877 has been compared with Nautical Chart No. 295, scale 1:40,000, and found to be in good agreement.

~~There is no~~
The following topographic information shown on T-8770 ~~is~~ of sufficient importance to warrant immediate application to the chart:

~~None~~

~~There are no~~
omitted from this manuscript which should be carried forward on the chart:
~~The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:~~

~~None~~

Low water features are shown in part and should be completed by the hydrographic party.

Minor changes in cultural and shoreline details need no special discussion.

Respectfully submitted
28 May 1948

Louis C. D. Skell
Engineering Draftsman

Joseph W. Vornauk
Photogrammetric Engineer
Photogrammetric Office Review

Harry R. Rudolph
Supervisor

Approved and forwarded
June 1948

Thos B. Bland
Officer in Charge
Baltimore Photogrammetric Office

FIELD EDIT REPORT
Shoreline Survey T-8770
Project Ph-7(46)
Riley J. Sipe, Chief of Party

Field edit of this shoreline manuscript was completed during January 1949 by John D. Weiler, Photogrammetrist.

46. METHODS

The field edit of this manuscript was done by driving to the shoreline at every available place, and walking along the inaccessible reaches. All data added to the map manuscript were either plotted from topographic features or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The original field work on this sheet was very poorly done. On the New Jersey side of the river the original shoreline inspection was incorrect in almost its entirety. It is believed that ~~that~~ adequate notations have been made on the field edit sheet for the correction of this delineation. It is interesting to note that the compiler did not follow the original field notations throughout, and therefore did a better interpretation of the shoreline than the shoreline inspector!

The Hog Island Ammunition Storage Area has been completely demolished, and railroad spurs and roads removed. It should be shown only as open land.

A number of marine railways at Essington, Pa. were missed by the original field party. They have been located, and their capacities noted.

Measurements were obtained for the bridge at the mouth of Ridley Creek; and this, along with other bridge discrepancies, were reported to the District Engineer of the U.S.E.D.

The map manuscript was reviewed by Mr. William H. Baum, Gloucester County Engineer for fifteen years. Highly familiar with the area, he found no errors.

Respectfully submitted
20 January 1949

John D. Weiler
John D. Weiler
Photogrammetrist

TO BE DELETED
TO BE DELETED

STRIKE OUT ONE

MONTECATINO.COM FOR LANDMARKS FOR CHARTS

Camden, New Jersey.

6 September, 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be ~~checked~~ ~~checked~~ (deleted from) the charts indicated. *E. L. Jones, Chief of Party*
~~checked~~ ~~checked~~ I. Y. Fitzgerald, Engr. Aid -- *E. L. Jones, Chief of Party*
 The positions given have been checked after listing by _____

The positions given have been checked after listing by

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

RECOMMEND NAME CHANGES IN NONNEGATING AND/OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO COVER DELIVERIES

STRIKE OUT ONE

Camden, New Jersey

6 September, 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated. *S. J. Fitzgerald, Engr. Aid - E. L. Jones, Chief of Party*

The positions given have been checked after listing by _____

The positions given have been checked after listing by

STATE Delaware & Pennsylvania										Chief of Party		
CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	CHARTS AFFECTED			
			LATITUDE		LONGITUDE				HARBOR CHART	INSHORE CHART	OFFSHORE CHART	
			° ' "	D. M. METERS	° ' "	D. P. METERS	DATUM					
STACK (S. E. of TWO), brick, (100 ft. high) Co. S. E. Stack	Worhn Steel		39 48	936.9	75 26	955.5	NA 1927	Tri. 8771	1933	X	295	
STACK (TALLEST) brick, (325 ft. high)	General Chemical Co. Tallest Stack		39 48	909.9	75 26	36.7	NA 1927	Tri. 8771	1933	X	295	
TANK (ELEV) (FORD) Steel, (100 ft. high) Motor. Co. Water Tank	Chester, Ford Motor. Co. Water Tank		39 50	429.3	75 23	262.7	NA 1927	Tri. 8770	1933	X	295	
* TANK (ELEV) (Scott Tissue) steel, (100 ft. Hi.) Scott Paper Co. Water Tank	Chester (100 ft. Hi.) Scott Paper Co. Water Tank		39 50	1221.8	75 21	546.9	NA 1927	Tri. 8770	1933	X	295	
TANK (ELEV) steel (100 ft. high)	Edlystone Baldwin Loco. Works Water Tank		39 51	1166.9	75 20	596.0	NA 1927	Tri. 8770	1933	X	295	
* Position in error - see Form 567 dated March 31, 1950 - L.M.G.												
RECOMMENDED NAME CHANGES												

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NONFLOATING AIDS GRIDLANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Camden, New Jersey

6 September, 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated. I.Y. Fitzgerald, Engr. Aid - E.L. Jones, Chief of Party

The positions given have been checked after listing by _____

The positions given have been checked after listing by

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

TO BE CHARTED

STRIKE OUT ONE

NON-CONVEX LANDMARKS FOR CHARTS

Camden, New Jersey

6 September, 1946.

I recommend that the following objects which have ~~(XXXXXX)~~ been inspected from seaward ^{to determine their value as landmarks, be} charted on ~~(XXXXXX)~~ the charts indicated. *S.g. Fitzgerald, Engr. Aid - E.J. Jones, Chief of Party*

The positions given have been checked after listing by -

The positions given have been checked after listing by

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NONFLOATING AIDS OR BRAND MARKS FOR CHAIRS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Camden, New Jersey

24 September, 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated. Ben. O. Bryant, Sr. Photo. Aid - E. L. Jones, Chief of Party

The positions given have been checked after listing by Ben O. Bryant, Sr. Photo. Aid - E.L. Jones, Chief of Party
Ben O. Bryant

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

24 September, 1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by Bureau Agent

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

The positions given have been checked after listing by L. Martin Gazdek

Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

GEOGRAPHIC NAMES

- Aunt Debs Ditch •
- Bramell Point •
- Cedar Swamp •
- Chester •
- Chester Creek •
- Chester Island •
- Clonmell Creek •
- Crab Creek •
- Crab Point •
- Crum Creek •
- Darby Creek •
- Darby Creek (station) •
- Delaware River •
- Eddystone •
- Essington •
- Excelsior Bar (taken from Chart No. 295) •
- Gov. Printz Park •
- Little Tinicum Island •
- Monds Island •
- Old Canal •
- Pennsylvania RR •
- Philadelphia Seaplane Base •
- Raccoon Creek •
- Raccoon Island •
- Reading RR •
- Penna. - Reading Seashore Lines •
- Repaupo Road •
- Ridley Creek •
- Sand Ditch •
- Thompson Point •
- White Sluice Race •

• Bridgeport •

U.S. 130 - N.J. 44 •

U.S. 322 •

• Repaupo Creek •
• Hog Island •
• Island Road •
• Little Timber Creek •

Names preceded by • are
approved. 11/17/48. L. Heck

REVIEW REPORT T-8770
Shoreline Survey
April 3, 1950

62. Comparison with Registered Topographic Surveys:

T-161	1:10,000	1841
164	"	1842
1484a	1:5,000	1880
1484b	"	1881
1485	"	1881
1502a	"	1881

Such areas of the above listed surveys as are common to this manuscript have been superseded by it for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

Bridgeport, N. J.-Pa. 1:31,680 1944 U.S.G.S.

See Item 44 in the Compilation Report for comment.

64. Comparison with Contemporary Hydrographic Surveys:

None contemporary.

65. Comparison with Nautical Charts:

Chart 295 1:40,000 June, 1948

Comment under Item 45 of Compilation Report is satisfactory.

66. Adequacy of Manuscript:

This compilation complies with the National Standards of Map Accuracy.

67. Landing Fields and Aeronautical Aids:

The approximate limits of the seaplane base at Essington, Pa., were not furnished by the field party and are therefore not shown on the manuscript.

The airport at Bridgeport, N. J. was added during review from the photographs. - Not previously included in the compilation because it was outside the area compiled.

68. Miscellaneous:

Field information was not furnished for the two wrecks about 180 meters offshore from the photo-topo station SCAR, 1946. After checking Nautical Chart 295 (1948) and the photograph 46-D-1903 it was decided to show them as baring at MLW.

Reviewed by:

L. Martin Gatzik

APPROVED:

S. V. English 1/21/52
Chief, Review Section
Div. of Photogrammetry

H. Edmuntson
Chief, Nautical Chart Branch
Division of Charts

B. S. Reading
Chief, Div. of Photogrammetry

H. G. Stenbury
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-8770

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.