

9505

N&S

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Diag. Cht. No. 1217

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Pb-59 (50) Office No. T-9505

LOCALITY

State New Jersey

General locality Great Bay

Locality Brigantine

194 52

CHIEF OF PARTY

Harry F. Garber, Chief of Field Party

H. A. Paton, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE January 31, 1956

B-1870-1 (1)

9505

# DATA RECORD

T - 9505

Project No. (II): Ph-59(49)

Quadrangle Name (IV):

Field Office (II): Pleasantville, New Jersey

Chief of Party: H. F. Garber

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: H. A. Paton

Instructions dated (II) (III): 26 May 1950

Copy filed in Division of  
Photogrammetry (IV)

Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): \_\_\_\_\_

Scale Factor (III): 1.000

Date received in Washington Office (IV): JAN 21 1951

Date reported to Nautical Chart Branch (IV): FEB 5 - 1952

Applied to Chart No. 1216

Date: 7-53

Date registered (IV):

Publication Scale (IV): 1:24,000

Publication date (IV):

Geographic Datum (III): N. A. 1927

Vertical Datum (III):

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): BRIGANTINE, 1932

Lat.: 39° 25' 43.140" 1330.4m

Long.: 74° 20' 25.632" 613.1m

Adjusted  
Unadjusted

Plane Coordinates (IV):

State: New Jersey

Zone:

Y=

X=

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

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

All Contouring  
by  
E. L. Williams  
Cartographer

Areas contoured by various personnel  
(Show name within area)  
(II) (III)

# DATA RECORD

Field Inspection by (II): E. L. Williams, Cartographer, and  
R. G. Holland, Topographic Engineer

Date: 1 Aug. 1950 to  
30 Oct. 1950, and  
13 June 1950 to  
1 July 1950

Planetable contouring by (II): E. L. Williams

Date:

Completion Surveys by (II): J. K. Wilson

Date: March, 1952

Mean High Water Location (III) (State date and method of location):

16 April 1950, photographs; 10 June to 30 September 1950 - reference  
distances recorded on the field photographs for the Atlantic Ocean shoreline

Projection and Grids ruled by (IV): T. L. Janson

Date: 8 Jan. 1951

Projection and Grids checked by (IV): H. D. W.

Date: 16 Jan. 1951

Control plotted by (III) R. M. Whitson

Date: 17 April 1951

Control checked by (III): J. C. Richter

Date: 20 April 1951

Radial Plot or Stereoscopic Control extension by (III):  
~~Stereoscopic~~ F. J. Tarca

Date: 11 May 1951

Stereoscopic Instrument compilation (III):  
Planimetry

Date: —

Contours

Date: —

Manuscript delineated by (III): R. M. Whitson (N/2)  
J. Y. Council (S/2)

Date: 27 July 1951  
13 July 1951

Photogrammetric Office Review by (III): L. A. Senasack

Date: 12 Dec. 1951

Elevations on Manuscript checked by (II) (III): L. A. Senasack

Date: 12 Dec. 1951

Camera (kind or source) (III): USC&GS single lens, type "0" 6" focal length

Number	Date	PHOTOGRAPHS (III)		Stage of Tide
		Time 75th meridian	Scale	
50-0-338 to 352	4-8-50	0954	1:10,000	0.9(1.7 ocean)
50-0-927 to 929	4-16-50	1243	"	0.6
-930 to 931	"	1244	"	0.5
-932	"	1244	"	0.5 (0.0 ocean)
-939 to 944	"	1257	"	- 0.1 (ocean)
-944 to 945	"	1257	"	0.1
-976	"	1314	"	- 0.2 (ocean)

Tide (III)

From Predicted Tide Tables

Reference Station: Sandy Hook, N. J.

Subordinate Station: Tucker Island, Little Egg Inlet

Subordinate Station: Main Marsh Thorofare

(continued below)

Washington Office Review by (IV): K. N. Mak;

Final Drafting by (IV): FRANCIS JOHNSON  
+ STICKUP

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 11.5

Shoreline (More than 200 meters to opposite shore) (III): 24.5 mi

Shoreline (Less than 200 meters to opposite shore) (III): 41.7 mi

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 21      Recovered: 16      Identified: 8

Number of BMs searched for (II): 15      Recovered: 13      Identified: 13

Number of Recoverable Photo Stations established (III): 1\*

Number of Temporary Photo Hydro Stations established (III): None

Remarks: Subordinate stations

Brigantine Channel

Grassy Bay

Seven Islands

Ratio of Ranges <sup>-1</sup>	Mean Range	Spring Range
0.8	3.5	4.2
0.7	3.4	4.1
0.8	3.5	4.2

\* Previous Recoverable Topographic Stations searched for: 9  
recovered: 5  
identified: 5

[illegible]

T-9497-N, T-9497-S to T-9509-N, T-9509-S are Topographic Maps  
Mapped by the U.S.C. and G.S. from aerial photographs to be taken in 1950  
Scale 1:10,000

## Summary to Accompany Descriptive Report T-9505

Topographic map T-9505 is one of 13 similar maps in project Ph-59(50). This project covers the New Jersey coast from Townsend Inlet north to the borough of Barnegat Light. This map was compiled by graphic methods. The field operations preceding compilation included complete field inspection and the determination of numerous elevations for plane-table contouring. The compilation was at a scale of 1:10,000. The manuscript consists of 2 sheets each  $3\frac{3}{4}$ ' in latitude by  $7\frac{1}{2}$ ' in longitude. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard  $7\frac{1}{2}$ ' topographic quadrangle. The registered copies under T-9505 will include 2 one-half quadrangle cloth-mounted prints at scale 1:10,000 identified as T-9505 N/2 and T-9505 S/2 and one cloth-mounted color print at scale 1:24,000 of the entire quadrangle. Hydrographic information furnished by this Bureau, depth curves and soundings, will be included on the color print.

## FIELD INSPECTION REPORT

QUADRANGLE T-9505

39-22.5/74-22.5

Project Ph-59(49)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with the Director's Instructions, Project Ph-59(49), Field, dated 26 May 1950, and other instructions as noted herein. The field work was accomplished by:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
R. G. Holland Topographic Engineer	Horizontal control recovery, Shoreline inspection	13 June 1950 to 1 July 1950
E. L. Williams Cartographer	Horizontal control recovery, shoreline and field inspection, contours	1 August 1950 to 30 October 1950

2. AREAL FIELD INSPECTION

Brigantine, a seashore resort, is the only town and populated area in the quadrangle. It is rapidly developing as a residential community with a year-round population of about 1500, increasing to 2300 during the summer season. A bridge across Absecon Channel from Atlantic City is the only means of access to the town. Brigantine has no industry and most of the people receive their income in the summer from tourists or by commuting to jobs in Atlantic City. A large resort hotel has reopened, and many new homes are being built. On the north end of the town lies a large, abandoned golf course. An intricate street pattern, complete with concrete sidewalks and fire plugs, was developed there, but has been neglected and is now overgrown with marsh elder bushes and poison ivy. However, some of these streets are still passable, although most are abandoned.

Most of the marsh islands in the quadrangle are now under the jurisdiction of the United States Brigantine National Wildlife Refuge.

A group of buildings around the former Little Beach Coast Guard Station is used at irregular intervals by sportsmen and vacationists.



The photographs were of good quality and no difficulty was encountered in their interpretation.

The field inspection is complete as of this date, but construction of blocks of homes in Brigantine is planned for this winter. Since this area is not classified as urban, the field editor should delineate those additional homes.

### 3. HORIZONTAL CONTROL

All known horizontal control stations were searched for and reported on Form 526.

(a) TANK, ELEVATED, NORTH BRIGANTINE, 1950, was established as an intersection station by theodolite cuts from four stations.

This station is also a topographic station named TANK (Elevated), 1936.

(c) Control established by the New Jersey Geodetic Control Survey was used. No datum adjustments were made.

(e) The following stations were reported "Lost" on Form 526:

BEACH (U.S.E.D.), 1946  
 BRIGANTINE BEACH, WATER TANK (NORTH), 1932  
 BRIGANTINE COAST GUARD, 1931  
 Mon. 4827 (N.J.G.C.S.), 1936  
 " 4828 " "

### 4. VERTICAL CONTROL

All known vertical control was searched for and reported on Form 685A.

(a) A list of all bench marks of third-order or higher accuracy is as follows:

<u>Designation</u>	<u>Establishing Agency</u>	<u>Order</u>
BRIGANTINE CHANNEL TBM 1	U.S.C. & G.S.	Tidal Bench Marks
" TBM 2	"	"
" TBM 3	"	"
Mon. 4822	N.J.G.C.S.	Unknown
" 4823	"	"
" 4824	"	"
" 4825	"	"
" 4826	"	"
" 4829	"	"
" 4830	"	"
" 4831	"	"
" 4832	"	"
" 4833	"	"

(b) No supplemental elevations were established because the existing bench marks provided sufficient control for contouring.

## 5. CONTOURS AND DRAINAGE

The contouring was done directly on single lens 1:10,000 scale photographs at a contour interval of ten (10) feet.

The abandoned golf course in Brigantine has many grass-covered hillocks which were once bunkers. A representative number of these which rise to ten feet were shown. It is believed the resulting contours are and will be almost negligible at the published map scale. However, those shown are for the most part prominent, because they are not overgrown. The few hillocks hidden by the dense undergrowth were not shown.

Contouring of Little Beach was done by getting an elevation of the water at BRIGANTINE CHANNEL TIDAL BENCH MARK NO. 1, 1935, and using that to begin plane-table contouring at the former Coast Guard Station at Little Beach.

## 6. WOODLAND COVER

There are a few scattered trees in the quadrangle. Other than those, all the area classified as woods (T) is very dense brush consisting for the most part of marsh elder bushes.

## 7. SHORELINE AND ALONGSHORE FEATURES See item 52.

(b) The low-water line was determined only when the field inspector was inspecting shoreline at time of low-water.

(c) The foreshore along the ocean is sand with many wooden and rock groins along Brigantine Beach.

(d) For a short distance along the south end of Little Beach, there is a sandy bluff resulting from erosion of the dunes on shore.

(f) The submarine cable shown on Chart 826, crossing Brigantine Inlet west of the Coast Guard Station, is incorrectly charted. The cable was identified on the photograph east of the Coast Guard Station. Confirmation of this location was obtained from the U. S. Coast Guard telephone section supervisor at 35 S. Annapolis Avenue in Atlantic City, N. J.

## 8. OFFSHORE FEATURES

Ruins of a boardwalk shown off Brigantine Beach on Chart 826 should be deleted. There is no evidence of this above water. Mr. Earnest, City Clerk of Brigantine, states that this boardwalk was removed just before the 1944 hurricane. The contractor pulled out all piling except for several which were too rotted.

## 9. LANDMARKS AND AIDS

(d) Fixed aids to navigation are discussed in the Field Inspection Report for Quadrangle T-9504. Attached to descriptive report for T-9504.

## 10. BOUNDARIES, MONUMENTS, AND LINES

This will be the subject of a special report to be submitted by Mr. R. L. McGlinchey, Cartographic Survey Aid. Div. of Photogrammetry general files.

## 11. OTHER CONTROL

Recoverable topographic stations are:

- (1) E. DOME CATHOLIC CHURCH, 1935
- (2) INLET C & N, 1935
- (3) PINK, C & N, 1935
- (4) ~~POINT C & N, 1935~~ Tank (Elevated) 1936
- (5) UVA, 1936

## 12. OTHER INTERIOR FEATURES

A Coast Guard telephone pole line and an Atlantic City electric power pole line traverse the islands from the north end of the town of Brigantine to Little Egg Inlet. The telephone pole line, although strung with wire, is not used. Instead, a subterranean cable paralleling the pole line is used at present. The Atlantic City Electric power line which is west of, and parallels the Coast Guard line, is abandoned. Since field inspection of this area, the Atlantic City Electric Company reports that a contractor is removing all their poles in the area mentioned.

## 13. GEOGRAPHIC NAMES

This will be the subject of a special report to be submitted by Mr. M. W. Smith, Cartographic Survey Aid.

## 14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

A special report on Landmarks and Fixed Aids to Navigation will be submitted by the Chief of Party at a later date.

25 October 1950

Submitted by:

*E. L. Williams*  
E. L. Williams  
Cartographer

26 October 1950

Approved:

*Harry F. Garber*  
Harry F. Garber  
Chief of Party

MAP T-9505..... PROJECT NO. Ph-59(50)..... SCALE OF MAP 1:10,000..... SCALE FACTOR.....

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)		FORWARD	(BACK)	FORWARD	(BACK)
TANK, ELEVATED NORTH BRIGANTINE, 1930	Computed	N.A. 1927	39 24	55.43				1709.4	(140.9)		
BRIGANTINE, 1932	447 19	"	74 21	21.82				522.0	(913.3)		
			39 25	43.140				1330.4	(520.0)		
			74 20	25.632				613.1	(822.0)		
HOTEL, 1931	G-1249 13	"	39 23	58.012				1789.0	(61.3)		
			74 22	18.905				452.3	(983.3)		
LETTUCE (C&N) 1935	G-3126 342	"	39 29	01.669				33.0	(1817.4)		
			74 20	33.217				793.9	(640.0)		
LETTUCE USE, 1946	U.S.E. Descrip.		237,026.21					617.6	(906.4)		
			2,091,808.43					551.2	(972.8)		
LITTLE BEACH, 1932	447 19	"	39 28	14.608				450.5	(1399.9)		
			74 19	41.935				1002.4	(431.8)		
SIMKIN, 1935	G-3126 342	"	39 27	45.899				1415.5	(434.9)		
			74 21	16.850				402.8	(1031.5)		
MON 4822 NJGCS 1936	Descrip of Mon		207,217.74					676.0	(848.0)		
			2,082,920.53					890.2	(633.8)		
MON 4823 NJGCS 1936	"		208,119.81					951.0	(573.0)		
			2,084,193.17					1278.1	(245.9)		
MON 4824 NJGCS 1936	"		209,790.86					1460.3	(63.7)		
			2,086,078.92					328.9	(1195.1)		
MON 4825 NJGCS 1936	"		210,993.84					303.0	(1221.0)		
			2,087,327.70					709.5	(814.5)		
MON 4826 NJGCS 1936	"		211,239.49					377.8	(1146.2)		
			2,083,996.29					1218.1	(305.9)		

MAP T- 9505 PROJECT NO. Ph-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -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)	
MON 4829 NJGCS 1936	Descript of Mon		212,004.51 2,086,735.77				611.0 (913.0) 529.1 (994.9)		
MON 4830 NJGCS 1936	"		213,098.68 2,085,739.55				944.5 (579.5) 225.4 (1298.6)		
MON. 4831 NJGCS 1936	"		214,266.36 2,083,424.53				1300.4 (223.6) 1043.8 (480.2)		
MON. 4833 NJGCS 1936	"		212,492.84 2,083,631.69				759.8 (764.2) 1107.0 (417.0)		
SUB PT MON 4831 NJGCS 1936			Plotted graphically						
SUB PT. SIMKIN, 1935			39° 27' 74° 21'				1461.4 (389.0) 429.7 (1004.6)		
✓ SUB PT. LETTUCE (C&N) 1935			39° 29' 74° 20'				53.2 (1797.2) 725.9 (708.0)		
SUB PT MON 4824 NJGCS 1936			Plotted graphically						
SUB PT. BRIGANTINE, 1932			39° 25' 76° 20'				1343.5 (506.9) 655.6 (779.5)		
RM 1 LITTLE BEACH, 1932			39° 28' 74° 19'				422.9 (1417.5) 1017.9 (416.3)		
									-12-

# PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH-59(50)

SURVEYS T-9501 and T-9505

## 21. AREA COVERED

This radial plot covers the areas of topographic surveys Nos. T-9501 and T-9505, on the Atlantic Coast of New Jersey, located in the area between, and including, Brigantine City and Tuckerton, New Jersey.

## 22. METHOD - RADIAL PLOT

Map Manuscripts: The map projections are on vinylite sheets, ruled at a scale of 1:10,000, with polyconic projections in black and New Jersey grids (Transverse Mercator) in red.

Control stations and substitute stations were plotted using beam compass and meter bar, except substitute points for monuments with positions in grid coordinates. These positions were plotted using steel protractor.

A sketch showing the layout of these surveys, the distribution of control and photograph centers, and a list of control stations, are attached to this report.

Photographs - All photographs used in this radial plot are single lens, Type O photographs, ratioed to a scale of 1:10,000. The contact scale is 1:24,000. Forty-seven (47) photographs were used. They are numbered as follows:

50-0-920 to 50-0-932, inclusive  
50-0-939 to 50-0-952, inclusive  
50-0-969 to 50-0-976, inclusive  
50-0-980 to 50-0-985, inclusive  
50-0-1035 to 50-0-1040, inclusive

Templets - Acetate templets were made from all photographs, using a master templet to adjust and correct errors due to film and paper distortion.

Closure and adjustment to control - Base sheets were prepared using vinylite sheets with 5000 foot grids. Control points were transferred to these by matching the New Jersey grids on the map manuscripts. Survey T-9497 to the north has already been compiled in the Washington Office. A paper print was available and positions of identifiable common pass points were transferred to the base sheets. There is considerable distortion in the paper print making the transfer inaccurate but the points transferred served as a guide in this radial plot so that a satisfactory junction may be made. The radial plot for Survey T-9502 on the east side has been completed previously in this office. The position of photograph centers and pass points along the junction with these surveys were used in this radial plot. The templets for these were laid first and previous positions held. Then the next flight to the west was laid and the plot continued westward by flights. There was no difficulty in laying these flights except at SUB. PT. STORY, 1935 which was held later after an error was found. The flight along the western side of this plot was across

water areas and several centers fall in these areas. It was necessary to do considerable adjusting. The north and south ends were laid first. Photographs Nos. 925, 926 and 927 were in water areas and, due to lack of control and flight lines, they were adjusted holding pass points from the adjoining flight. GREAT, 1935, was not identified in the field. An attempt was made to identify it in the office but there was insufficient information in the description to prick the station.

### 23. ADEQUACY OF CONTROL

Except at station GREAT, 1935, control was adequate for a satisfactory radial plot. Normally the plot could be laid easily without this station. However, the location on a point of land and the position of photograph centers in water makes this a desirable control point for the radial plot.

Two stations could not be held in the preliminary radial plot. SUB. PT. STORY, 1935 was about 2 mm northeast of the radially plotted position. It appeared to be an error in azimuth but a recheck of computations revealed no error. An error of  $4^\circ$  was found in the field notes on the back of the pricking card. The wrong angle was recorded on the front of the card. When the correct angle was used in the computation and station replotted, it could be held in the radial plot.

SUB. PT. SHACK (C&N) 1935 falls about 1 mm north of the geographic position. No reason was found for this discrepancy. This station falls in the survey to the west and a radially-plotted position will be established and reported in a future radial plot for that survey.

### 24. SUPPLEMENTARY DATA

Several positions of topographic stations were established in 1935 and 1936 but their positions were not plotted because it is believed that they are not reliably accurate. They were established in this radial plot. One of these, M.E. CHURCH (WEST CREEK), 1935, was used to control this radial plot on the north side. It falls in Survey T-9497 which has been completed. This station was used because its position was verified or reestablished in compiling that survey.

### 25. PHOTOGRAPHY

The photographic coverage is adequate and definition of photographs is good. There are some slightly tilted photographs but the effect of tilt is negligible in these areas of very little relief.

Respectfully submitted

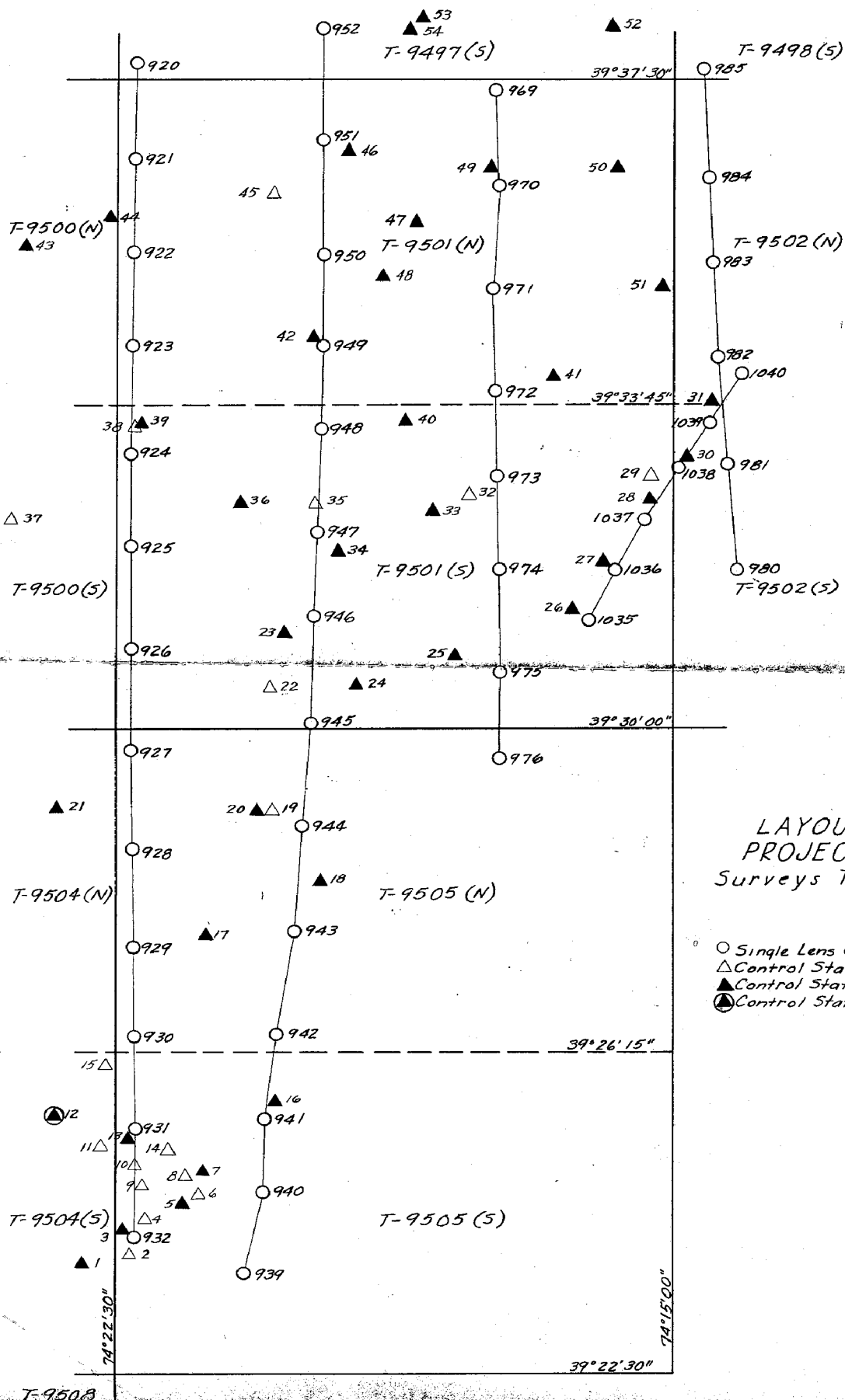


Frank J. Tarcza  
Photogrammetric Engineer

No.	Control Station	Identification
1.	MON. 4821 (NJGCS) 1936	Direct
2.	HOTEL, 1931	None
3.	MON. 4822 (NJGCS) 1936	Direct
4.	MON. 4823 (NJGCS) 1936	None
5.	MON. 4824 (NJGCS) 1936	Sub. Pt.
6.	MON. 4825 (NJGCS) 1936	None
7.	TANK, ELEVATED, NORTH BRIGANTINE, 1950	Direct
8.	MON. 4829 (NJGCS) 1936	None
9.	MON. 4826 (NJGCS) 1936	None
10.	MON. 4833 (NJGCS) 1936	None
11.	MON. 4832 (NJGCS) 1936	None
12.	SHACK (C&N) 1935	Sub. Pt.
13.	MON. 4831 (NJGCS) 1936	Sub. Pt.
14.	MON. 4830 (NJGCS) 1936	None
15.	DIRTY (C&N) 1935	None
16.	BRIGANTINE, 1932	Sub. Pt.
17.	SIMKIN, 1935	Sub. Pt.
18.	LITTLE BEACH, 1932	R.M. 1
19.	LETTUCE (USED) 1946	None
20.	LETTUCE (C&N) 1935	Sub. Pt.
21.	MAIN, 1935	Sub. Pt.
22.	CONTROL PT. "H", 1950	None
23.	FISH FACTORY WATER TANK, 1950	Direct
24.	SHOOTING, 1935	Sub. Pt.
25.	INLET, 1935	Sub. Pt.
26.	CONTROL PT. "G", 1950	Direct
27.	BONDS, 1932	Sub. Pt.
28.	MON. 8208 (NJGCS), 1937	Sub. Pt.
29.	ST. JAMES, 1932	None
29.	ST. JAMES R.M. 2, 1937	None
30.	MON. 8207 (NJGCS) 1937	Sub. Pt.
31.	BEACH HAVEN WATER TANK, 1932	Direct
32.	POLE, 1935	None
33.	STORY ISLAND STACK, 1935	Direct
34.	SHEEPHEAD, 1935	Sub. Pt.
35.	WIN, 1946	None
36.	BAY, 1935	Sub. Pt.
37.	GREAT, 1935	None
38.	TUCKERTON RADIO, 1932	None
39.	TUCKERTON RADIO TOWER-780'-MAIN TOWER OF RCA, 1931	Direct
40.	STORY, 1935	Sub. Pt.
41.	BARREL, 1935	Sub. Pt.
42.	JESSIE, 1935	Sub. Pt.
43.	MON. 7873 (NJGCS), 1940	Sub. Pt.
44.	MON. 2261 (NJGCS) 1935	Sub. Pt.
45.	MON. 2259 (NJGCS) 1935	None



No.	Control Station	Identification
46.	MON.5249 (NJGCS) 1932	Sub. Pt.
47.	ROSE, 1946	Sub. Pt.
48.	EDGE, 1946	Sub. Pt.
49.	PARKER, 1935	Sub. Pt.
50.	WEST, 1935	Sub. Pt.
51.	SHELTER, 1935	Sub. Pt.
52.	DINNER (USE), 1946	Sub. Pt.
53.	MON. 2257 (NJGCS) 1935	Sub. Pt.
54.	M.E. CHURCH (WEST CREEK), 1935	Direct



LAYOUT SKETCH  
PROJECT PH-59(50)  
Surveys T-9501 and T-9505

COMPILATION REPORT

Ph-59(50)

T-9505

31. DELINEATION

Manuscript No. T-9505 was delineated by graphic methods.

32. CONTROL

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

33. SUPPLEMENTAL DATA

Geographic name standard, dated January 27, 1951, on Corps of Engineers, Atlantic City, N.J. quadrangle, was furnished by the Washington Office.

The following were furnished by the field party:

Map of Atlantic County, N.J. prepared for the Board of Chosen Freeholders of Atlantic County, N.J., revised 1949.

Road Map of Atlantic County, New Jersey.

Photostat Map of Brigantine National Wild Life Refuge.

Special Report on Boundaries, New Jersey.

USC&GS Chart No. 826 (Landmarks and Aids Report, Exhibit 4)

Map of City of Brigantine, N.J.

34. CONTOURS AND DRAINAGE

No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection is considered adequate. The MHW line along the ocean was furnished by reference distances to identifiable detail. A small amount of apparent shoreline and low water line was indicated by the field party. The remainder was identified by analogy and office interpretation of the photographs.

36. OFFSHORE DETAILS

The method of establishing the elevations on the shell banks in the NW corner of this survey is described in item 8 of the field report for Survey T-9504.

### 37. LANDMARKS AND AIDS

Forms 567 for three (3) landmarks and three (3) non-floating aids to navigation, which appear on the manuscript are submitted with this report.

### 38. CONTROL FOR FUTURE SURVEYS

Forms 524 were completed for one recoverable topographic station established and ~~five~~<sup>four</sup> previous stations recovered, and are being submitted herewith. These stations are listed under item 49. POINT C&N, 1935 is erroneously listed in item 11 of the field report instead of TANK BRIGANTINE (Elevated), 1936.

### 39. JUNCTIONS

Junctions with surveys T-9504 to the west and T-9501 to the north have been made and are in agreement. There is no contemporary survey to the east and south.

### 40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41-45.

Inapplicable.

### 46. COMPARISON WITH EXISTING MAPS

Survey T-9505 has been compared with:

1. Corps of Engineers, Atlantic City, N.J. quadrangle, scale 1:62,500, published 1941.
2. USC&GS Topographic Maps T-5635 (1935) and T-5637(1936) scale 1:10,000.

47. COMPARISON WITH NAUTICAL CHARTS

Survey T-9505 has been compared with USC&GS Chart No. 826, scale 1:40,000, published in June 1949, corrected to 4 September 1950.

Items to be applied to nautical charts:

None.

Items to be carried forward

None.

Respectfully submitted  
14 December 1951

*Joseph W. Vonasek*  
Joseph W. Vonasek  
Cartographer (Photo)

Approved and forwarded

*Hubert A. Paton*  
Hubert A. Paton  
Comdr., C&GS  
Officer in Charge



48. GEOGRAPHIC NAMES T-9505

~~Anchoring Island~~  
~~Atlantic County~~  
~~Atlantic Ocean~~

(omit, per Field Edit. also not on latest  
Ed. chart 826.

\* ~~Baremore Quarters~~  
~~Betsey Channel~~  
~~Brigantine~~  
~~Brigantine Avenue~~  
~~Brigantine Beach~~  
~~Brigantine Channel~~  
~~Brigantine Inlet~~  
~~Brigantine National Wild Life Refuge~~

~~Cabbage Thorofare~~

~~Dog Island~~

~~Egg Island~~  
~~Elder Island~~

~~14th Street Pier~~

~~Galloway Township~~  
~~Great Bay~~  
~~Great Thorofare~~

~~Hoffman Thorofare~~

~~Intracoastal Waterway~~

Alternate Route

~~Little Bay~~  
~~Little Beach~~  
~~Little Crooked Thorofare~~  
~~Little Egg Inlet~~  
~~Little Mud Thorofare~~  
~~Little Weakfish Thorofare~~

Little Egg Harbor Township

~~Miles Thorofare~~  
~~Mud Thorofare~~

Mile Thorofare per Heck 7-13-53

~~Obes Thorofare~~  
~~Ocean County~~

~~Pullen Island~~

~~Salt Island~~  
~~Simkins Thorofare~~  
~~Somers Bay~~  
~~Steelman Bay~~

~~Weakfish Thorofare~~  
~~Widgeon Bay~~

Names approved  
8-24-53.  
L. Heck

\*Name taken from Map of City of Brigantine, N.J. and  
Survey T-5635 (1935).

49. NOTES FOR THE HYDROGRAPHER

Six recoverable topographic stations are shown on the manuscript:

E. DOME, CATHOLIC CHURCH, (1935) ~~1950~~  
 PINK, C & N, (1935), ~~1950~~  
~~TANK (Elev.) 1936~~ *This is triangulation-1950*  
 INLET, C & N(1935)~~1950~~  
 UVA, (1936), ~~1950~~  
 ✓HOTEL AZ MK (1931) ~~1932~~, 1950

Information from the field man indicates difficulty in navigation through Brigantine Inlet. It may be advisable to check for Breakers or tide rips. *No comment by field edit on this.*

*When the 1950 photogrammetrically determined position does not differ from the previously determined position the 1950 date reverts to a recovery date and is not shown on the manuscript. The original date of station establishment is retained on the map.*

*Forms 524 cross referenced and filed in  
 Div. Photogrammetry general files.*

*K h m 8/25/53*



FIELD EDIT REPORT  
Quadrangle T-9505  
Project Ph-59(50)

Paul Taylor, Chief of Party

The field edit of this quadrangle was accomplished during the month of March, 1952.

51. METHODS

The quadrangle was inspected by traversing all passable roads by trucks; by skiff in water areas, and on foot in other areas which required special investigation. Standard surveying methods were used for corrections and additions.

All additions, corrections and deletions have been either indicated on the field edit sheet or referenced to the field photographs. A legend describing the symbols and colored inks used is shown on the field edit sheet.

One 1:20,000 scale sheet is submitted with the field edit information.

52. ADEQUACY OF COMPILATION

The map compilation is adequate, with the exception of a few corrections and additions.

Attention is invited to the large number of buildings which have been added by the field editor. This is practically all new construction that has taken place since field inspection. The building boom is still continuing at a rapid rate.

The 14TH STREET PIER has been partially destroyed by a storm. The portion that remains of the pier and several wooden piling are indicated on photograph 50-0-940.

A segment of the boundary of the Brigantine National Wild Life Refuge was questioned on the discrepancy print. Upon questioning Mr. Whitley, the supervisor in charge of this refuge, and checking his map of the area, the boundary as shown on the discrepancy print was found to be correct. ✓



The piles, which were shown in Great Bay and questioned on the discrepancy print, do not exist. A very thorough investigation was made of the area and none could be found. It is believed that the field inspector sighted objects on shore and not in the water. Attention is also called to Pile "B", "C" and "D" which are shown on the southern portion of Quadrangle T-9501. These piles no longer exist and should be deleted. - Done.

The areas of shoreline labeled "A" and "B" on the discrepancy print were investigated by plane table and an approximate mean high-water line has been shown in purple on the photographs. The shoreline at these points is constantly changing as can be seen in comparing the 1950 and 1952 work. It is therefore recommended that all shoreline at these points be shown as indefinite.

#### 52. MAP ACCURACY

The horizontal positions of the map detail appear to be good.

No vertical accuracy test was required for this quadrangle.

#### 54. RECOMMENDATIONS

None.

#### 55. EXAMINATION OF PROOF COPY

Captain Raymond Huber, of the New Jersey Department of Commerce and Navigation, who has been a resident of this area for forty years and is highly familiar with both the land and water areas, states that he would be willing to examine a proof copy of this quadrangle for possible errors. Captain Huber's address is: State Boat Transit 3, Forked River, New Jersey.

#### 56. GEOGRAPHIC NAMES

The placement of the name ANCHORING ISLAND was found to be approximately correct. This island can no longer be seen at mean low water. The name is not recommended. Not shown.

25 March 1952  
Submitted by:

28 March 1952  
Approved by:

*Paul Taylor*  
Paul Taylor  
Lt. Comdr., USC&GS  
Chief of Party

Joseph K. Wilson,  
Cartographer

## PHOTOGRAMMETRIC OFFICE REVIEW

T-9505

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒  
9. Plotting of extent fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

## PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

## CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

## BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

## MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒  
40. L.A. Senasack K. Glan  
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

Review Report T-9505  
Topographic Map  
26 August 1953

62. Comparison with Registered Topographic Surveys.-

H-109	1:10,000	1840
T-119	1:20,000	1840-41
T-142	1:20,000	1841
T-1166	"	1869-70
T-1333	"	1871
T-2455	"	1899
H-2693	1:10,000	1904
H-2694	"	"
T-5635	"	1932
T-5637 supp.	"	1932
T-6401a	"	1935 Planetable
T-6401a Ad Wk.	"	1936 "
T-6501a	"	1935-36 "
T-6501b	"	" "
T-6502b	"	" "

The shoreline along the ocean front on T-9505 in comparison with the previous surveys shows an alternating pattern of accretion and recession. On the south half of T-9505 this change in position of shoreline amounts to about 85 meters. On the north half the differences are large and conspicuous amounting to shoreline movements along the ocean front in a westerly and northerly direction of approximately a half mile or more. A sandspit of considerable size has formed between latitude  $39^{\circ}28'$  and  $39^{\circ}29'$  at longitude  $74^{\circ}19'$ . This sand formation is very unstable and is shown by a dashed line on T-9505N. The shoreline of the inside channels on T-9505 has remained stable and shows no large or significant differences in comparison with the previous surveys. The boardwalk at Brigantine is no longer in existence.

T-9505 supersedes all the above surveys in common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies.-Atlantic City, N.J., USE 15' quadrangle, 1:62,500, 1941. Also at scale 1:50,000 with revision of marginal data, 1946, and UTM grid added 1948, AMS.

A comparison of the quadrangle with T-9505 shows that the shoreline of the ocean side area from Brigantine Inlet northward to Island Beach has changed considerable subsequent to the publication of the quadrangle.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

826, 1:40,000, Intracoastal Waterway, ed. 1951  
corr. to 6/9/52  
1217, 1:80,000, ed. 1948, corr. to 2/13/50.

Shoreline differences between the charts and T-9505 are very prominent along the ocean side from Bregantine Inlet northward to Little Beach. Erosion has moved the shoreline considerably west of the shoreline position as shown on the charts. The sand spit south and east of Little Beach has also become more extended in a north and westerly direction. The shoreline of interior waters is in good agreement with the shoreline as shown on the charts.

66. Accuracy of Results and Future Surveys.-This map complies with all instructions and is adequate as a base for hydrographic surveys and the construction of nautical charts. This map complies with the National Map Accuracy Standards. ✓

Reviewed by:

K. N. Maki  
K. N. Maki

APPROVED:

H. C. Sands  
Chief, Review Branch  
Div. of Photogrammetry

L. W. Swanson  
Chief, Div. of Photogrammetry *MSR*

30 January 1952

H. P. Edmonston  
Chief, Nautical Chart Branch  
Div. of Charts *GFD*

Earl O. Heston  
Chief, Div. of Coastal Surveys

## History of Hydrographic Information for T-9505

Hydrography applied to the map manuscript for T-9505 is in accordance with the general specifications of May 18, 1949.

Soundings in feet and depth curves at 6, 12, 18, 30 and 60 feet (Mean Low Water Datum) originate with the following chart and surveys:

Nautical Chart No. 1217	1:80,000	1950
Hydrographic Survey H-5893	1:10,000	1935
" " H-6144	1:10,000	1936
" " H-6145	1:10,000	1936
" " H-6195	1:10,000	1937
" " H-6271	1:40,000	1937

Photographs taken April 16, 1950 were used in conjunction with the above listed hydrographic sources for the interpretation of the mean low water line and the determination of channels subject to constant and rapid change.

Hydrography was compiled by L. Martin Gazik and checked by O. Svendsen.



L. Martin Gazik

10-21-53

**DEPARTMENT OF COMMERCE**  
**U. S. COAST AND GEODETIC SURVEY**

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

**TO BE CHARTED** } **STRIKE OUT ONE**

~~Baltimore, Md.~~

29 Nov, 1951

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ *2* the charts indicated. *2*

The positions given have been checked after listing by

Leroy A. Denasack

Hubert A. Paton

**New Jersey**

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT ONE

TO BE CHARTED

TO BE DELETED

Baltimore, Md.

29 Nov. . 1951

I recommend that the following objects which have ~~been~~<sup>have not</sup> been inspected from seaward to determine their value as landmarks be charted on ~~deleted from~~<sup>the</sup> the charts indicated.

The positions given have been checked after listing by Leroy H. Denasack  
Leroy A. Denasack

Hubert A. Paton

Hubert A. Paton

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9505

## 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.**