

9830

N&S

Diag. Cht. No. 1216-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-72(51) Office No. T-9830 N&S.

LOCALITY

State New Jersey

General locality Barnegat Bay

Locality Borough of Island

1951-53

CHIEF OF PARTY

H.F.Garber, Chief of Field Party

H.A.Paton, Baltimore Photo. Office

9830

## DATA RECORD

T - 9830

Project No. (II): Ph-72(51)

Quadrangle Name (IV): **BARNEGAT INLET**

Field Office (II): Edenton, North Carolina

Chief of Party: Harry F. Garber

Photogrammetric Office (III): Washington, D.C.

Officer-in-Charge: Louis J. Reed, Chief,  
Stereoscopic Mapping Sec

Instructions dated (II) (III): 18 April 1951

Copy filed in Division of  
Photogrammetry (IV)Method of Compilation (III): Single Lens: Stereoplanigraph control extension and  
compilation by Kelsh Plotter.

Manuscript Scale (III): 10,000

Stereoscopic Plotting Instrument Scale (III): 4,000(kelsh)

Scale Factor (III): Photo::Stereoplanigraph::Kelsh::Manuscript =

20,000:: 12,500 ::4,000:: 10,000

Date received in Washington Office (IV):

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

MAY 29 1952

Applied to Chart No.

Date:

Date registered (IV): 9-16-58

Publication Scale (IV):

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):

Lat.:

Long.:

Adjusted

~~XXXXXXXXXX~~

Plane Coordinates (IV):

State:

Zone:

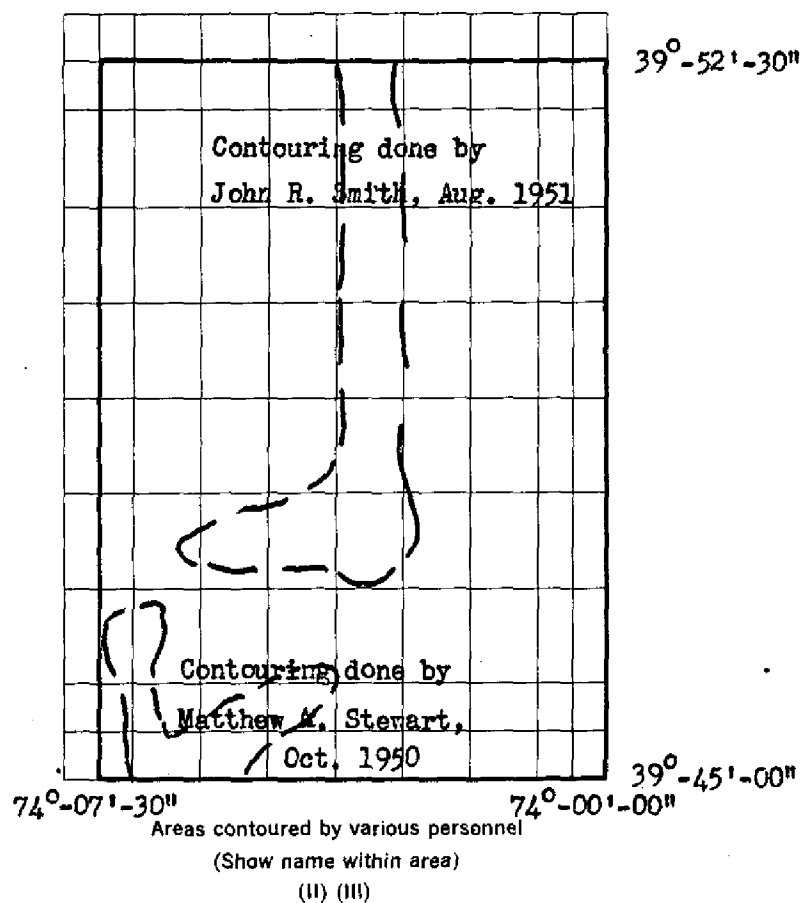
Y=

X=

NEW JERSEY STATE GRID --- 5,000ft interval (5,000ft)

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.



100% delineated by Ivan R. Jarrett  
on the Kelsh Plotter, model "B".

\* Ocean shoreline not shoreline  
of Barreget islet corrected to  
spring of 1953 by field edit. see item →  
58 near back of this report.  
Bgg



## DATA RECORD

Field Inspection by (II): John R. Smith,  
Cartographic Survey Aid

Date: August, 1951

Planetable contouring by (II): John R. Smith,  
Cartographic Survey Aid

Date: August, 1951

Completion Surveys by (II):

Date:

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

Shoreline is dated 1951 since it was indicated on field photos by the field inspector during that summer, and this field location was used as a guide during instrument delineation and manuscript compilation. ~~X~~ Jack Allen on the Reading

Projection and Grids ruled by (IV): Ruling Machine

Date: 13 Sep 51

Projection and Grids checked by (IV): Howard D. Wolfe

Date: 18 Sep 51

Control plotted by (III): Morton Keller

Date: 23 Sep 51

Control checked by (III): Stanley W. Trow

Date: 25 Sep 51

~~Redist Photo~~ Stereoscopic  
Control extension by (III):

Morton Keller

Date: 21 Feb 52

delineation by: Planimetry Ivan R. Jarrett  
Stereoscopic Instrument ~~extension~~ (III):  
Contours

Date: 26 Mar 52

Date:

compilation  
Manuscript ~~delineation~~ by (III):

Henri Lucas

Date: 26 May 52

Photogrammetric Office Review by (III): Louis J. Reed

Date: 29 May 52

Elevations on Manuscript  
checked by (II) (III):

Louis J. Reed

Date: 29 May 52

Camera (kind or source) (III): USC & GS Cartographic, wide-angle, f= 6" ("0")

Number	Date	Time	Scale	Stage of Tide
1700 thru 1708		930		About 1 ft below MHW on outside of bank, and about MHW on the inside.
and	23 Mar 51		20,000	
1807 thru 1810		1040		

Tide (III)

Reference Station: Sandy Hook  
Subordinate Station:  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
		4.2'

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 4 sq mi

Shoreline (More than 200 meters to opposite shore) (III): 28 miles

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

Control Leveling - Miles (II): 2.5

Number of Triangulation Stations searched for (II): 12 Recovered: 7 Identified: 8

Number of BMs searched for (II): 11 Recovered: 7 Identified: 7

Number of Recoverable Photo Stations established (III): two, plus two old ones recovered.

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

Remarks:

TOPOGRAPHIC MAPPING PROJECT PH-72 (51)

NEW JERSEY, Barnegat Bay - Toms River and Vicinity

Compilation scale 1:10,000



1. Preface:

FIELD INSPECTION REPORT  
QUADRANGLE T-9830  
PROJECT PH-72(51)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with Instructions, dated 18 April 1951, Project Ph-72(51), under the direction of Joseph K. Wilson, Supervisor. Field work, in addition to those phases listed on page 3, was done by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Leo F. Beugnet Cartographic Survey Aid	Horizontal Control Recovery and Shoreline	July, 1951
John R. Smith Cartographic Survey Aid	Fly Levels	Aug., 1951

This report is written in accordance with Paragraph 724 of the Topographic Manual, Part II, dated 1949.

2. AREAL FIELD INSPECTION

The quadrangle comprises a narrow strip of barrier beach lying between the Atlantic Ocean and Barnegat Bay. The sea side of the strip consists of shifting sand dunes, which are partially covered with brush. The bay side of the strip consists of marsh in the southern portion and heavy brush along the remainder.

The field work for the area south of Barnegat Inlet was accomplished during the 1950 season under the supervision of Mr. George E. Varnadoe. (See Field Inspection Report of Quadrangle T-9499, Project Ph-59(50)).

The area north of Barnegat Inlet is a part of the Borough of Island Beach. It is privately owned by the Phipps Estate and toll is charged to enter the property. This is a summer resort area and it is very sparsely settled.

Forked River and Cedar Creek Coast Guard Stations have been abandoned. Most of the buildings are intact, and are used for private interests.

No difficulty was encountered in the interpretation of the photographs. The field inspection is believed to be complete.

92 JOHN and HILL, 1951 have been reclassified as 3-order triangulation stations. field observations and positions (plane coordinates) meet 3rd order requirements. Forms 525 (Desc. of Stations) have been submitted; the data was copied from Forms 524 (Topo. Cards).  
C.H.  
Oct. 1, 1951

### 3. HORIZONTAL CONTROL

(a) Topographic stations JOHN and HILL, 1951 were established during this survey to supplement the existing Horizontal Control. These were located by a theodolite three-point fix on triangulation stations.

(b) All stations are on the N.A. 1927 datum.

(c) All control used within this quadrangle was established by the U.S. Coast and Geodetic Survey. Two USED control stations were searched for, neither of which were recovered. (See Item "e").

(e) A search was made for all known horizontal control points. Stations reported as "lost" or "not recovered" are:

Cedar Creek Coast Guard Flag Tower, 1935  
Forked River Coast Guard Station, 1926  
Front Centerline North Jetty (USE), 1938  
INLET, 1932  
Rear Centerline North Jetty (USE), 1938

lost by J. C. S. in 1935.

(f) To establish a point opposite the photograph centers, it was necessary to run short traverses from nearby triangulation stations. The directions were observed with a Wild T-2 Theodolite. Some of these traverses are approximately 1.0 mile in length. The distance was measured both forward and backward with a 300-foot tape. No grade or temperature corrections were made.

### 4. VERTICAL CONTROL

(a) A search was made for all known vertical control. Bench

(b) A 2.5 mile fly level line was run with a closure of 0.04 foot. The line was not adjusted.

(c) The first and last fly level points are 30-1 and 30-3.

(d) Inapplicable.

#### 5. CONTOURS AND DRAINAGE

The contouring was done by planetable methods directly on single-lens photographs (1:10,000 scale), at a contour interval of ten (10) feet. The natural drainage is by seepage into the sand ridge.

The area consists of a series of shifting sand dunes, the highest of which is forty-three (43) feet.

#### 6. WOODLAND COVER

The cover was classified in accordance with Paragraph 5433 of the Topographic Manual, Part II, dated 1949.

#### 7. SHORELINE AND ALONGSHORE FEATURES

(a) The mean high-water line along the ocean was determined by measurements from nearby identifiable topographic features. In the bay area, the shoreline was classified by visual inspection.

(b) The low-water line along the ocean was located by the same methods used on the high-water line. No attempt was made to locate the low water line along the bay area.

(c) The foreshore was classified as necessary on the photographs.

(d) Inapplicable.

(e) All docks, wharves, and piers not clearly discernible on the photographs have been delineated thereon.

(f) The only submarine cable, across Barnegat Inlet, was identified on Photograph 51-0-1700.

#### 8. OFFSHORE FEATURES

No offshore features were noted during the field inspection.



9. LANDMARKS AND AIDS

$N\frac{1}{2}$  =  $\Delta$  Cedar Creek Coast Guard, Arkola, 1935  
 $S\frac{1}{2}$  =  $\Delta$  Torched River Coast Guard Watchtower, 1935

(a) Two landmarks are recommended on Form 567 for charting. Form 567, Form 24A, and a chart section will be submitted at a later date for that portion of the project from Barnegat Inlet to Manasquan Inlet.

(c) There are no Aeronautical Aids within the limits of the quadrangle.

(d) Five fixed aids to navigation fall within the quadrangle limits. Lights Nos. 1 and 3 were located by Mr. George E. Varnadoe in 1950. The lights on the ends of the jetties at Barnegat Inlet were located by triangulation. Directions were observed from existing triangulation intersection stations. Light No. 32 was located by directions from triangulation stations.

$S\frac{1}{2}$

$N\frac{1}{2}$

10. BOUNDARIES, MONUMENTS AND LINES

This is the subject of a "Special Report" which was submitted by Mr. Martin C. Moody, Cartographic Survey Aid in August, 1951.

11. OTHER CONTROL

Two topographic stations (HILL and JOHN, 1951) were established. (See heading no. 3, item (a) of this report). Nine previously established topographic stations were searched for and are reported on form 524, all of which are reported destroyed or lost, with the exception of station "Club, 1935" and "U.S.C.&G.S. B.M. NO. 1, 1936".

made  $\Delta$  as

12. OTHER INTERIOR FEATURES

$S\frac{1}{2}$

$S\frac{1}{2}$

All roads and buildings have been classified in accordance with Paragraph 5441 and 5446 of the Topographic Manual, Part II, dated 1949.

There are no bridges over navigable waters within the quadrangle.

13. GEOGRAPHIC NAMES

This is the subject of a "Special Report" which will be submitted at a later date by Mr. Martin C. Moody, Cartographic Survey Aid.

on file - 854  
 L.H.



14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

A Coast Pilot Report for the project will be submitted at a later date. There are no other special reports or data, except as noted in Paragraphs 10 and 13.

20 August 1951

Submitted by:

*John R. Smith*

John R. Smith

Cartographic Survey Aid

27 August 1951

Approved by:

*Harry F. Garber*

Harry F. Garber

Commander, USC&GS

Chief of Party

RADIAL PLOT REPORT

21. Area Covered: T-9830; vicinity of Barnegat Inlet, N.J.

22. Method:

A normal hand-templet radial plot was not laid for the extension of horizontal control; instead, it was done by the Stereoplanigraph. Even so, it was necessary to set up only two models, 1808-9 and 1809-10.

23. Adequacy of control:

A combination of recovered benches, newly fixed points of elevation during field inspection, and available datum at the shoreline, provided a great sufficiency of vertical control for model leveling purposes.

Identified horizontal control was sufficient/<sup>ly</sup> well distributed to permit direct setups of Kelsh models without Stereoplanigraph bridging, except for two models in the SW corner of the quad as indicated in para 22 above.

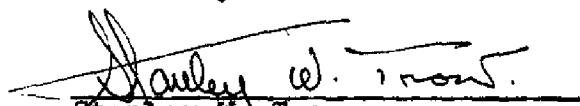
24. Supplemental data:

a. No graphic control surveys were applied to this map.

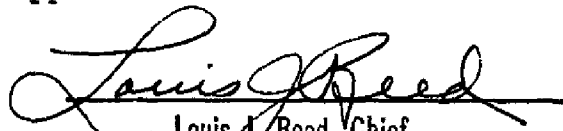
25. Photography:

Photography was adequate in all respects except that overlap was a little over-generous, being 70-75%.

Submitted by:

  
Stanley W. Trow  
Cartographer-Photogrammetric

Approved:

  
Louis J. Reed, Chief  
Stereoscopic Mapping Section  
Photogrammetric Engineer



△ EXISTING CONTROL  
 ▲ IDENTIFIED CONTROL  
 ● PHOTOS USED

9830-S

Louis J. Reed, Chief  
Stereoscopic Mapping Section  
Photogrammetric Engineer -







MAP T. 9830-S PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

SCALE OF MAP.....10,000

PROJECT NO. Ph-72(51)

MAP T-9830-S.....

STATION	N.J.GP page No. SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR U-COORDINATE LONGITUDE OR X-COORDINATE	N J State Coords EXISTING GRID IN FEET. FOR PROJECTION LINE IN METERS	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)
FORKED RIVER, COAST GUARD, WATCH TOWER, 1935 d	340	NA 1927	39 48 08.80 74 05 38.48			271.4 1579.1 915.4 512.0	
FORKED RIVER, 1932 dm	17	"	39 48 06.773 74 05 37.746	Not plotted; too crowded		208.9 1641.6 897.9 529.5	Station is destroyed
FORKED RIVER, COAST GUARD, FLAG TOWER, 1935 d	340	"	39 48 09.204 74 05 38.293	Not plotted; too crowded		283.9 1566.6 911.0 516.4	
BARNEGAT, COAST GUARD W. GABLE, CUPOLA, 1935 d	340	"	39 45 29.946 74 06 19.422			923.6 926.9 462.3 966.0	
BARNEGAT, COAST GUARD, FLAG TOWER, 1935 d	340	"	39 45 29.227 74 06 18.826			901.4 949.1 448.1 980.2	
BARNEGAT LIGHT, 1872 dm	22	"	39 45 51.178 74 06 23.894			1578.4 272.1 568.7 859.4	
BARNEGAT LIGHT 2, 1932 dm	11	"	39 45 45.212 74 06 31.474			1394.4 456.1 749.2 679.0	
INLET, 1932 dm	17	"	39 46 37.098 74 05 46.491	Recovered as "LOST"	Not shown	1144.1 706.4 1106.4 321.5	
JOHN, 1951	Field comps	"		344,493.00 2,154,871.37			

Louis J. Reed, C  
 Stereoscopic Mapping  
 Photogrammetric En

Page

15

DATE \_\_\_\_\_

CHECKED BY:...

DATE \_\_\_\_\_

1 FI = 3048006 METER  
COMPUTED BY:.....

Louis J. Reed, C  
Stereoscopic Mapping  
Photogrammetric En



COMPILATION REPORT31. Delineation:

In addition to the normal field inspection, contours were delineated in the field and positioned on the same field inspection photographs. These photos were used as a guide during Kelsh Blotter delineation of the planimetry and shoreline, and during compilation of the combined delineations into the manuscript. Photo coverage and field inspection were complete and satisfactory, and the entire land area of this quad has been mapped.

32. Control:

Both horizontal and vertical control were adequate for controlling this survey, and there is nothing to add to statements already made in sub-headings 3, 4, and 23, of this report.

33. Supplemental Data: See side-headings 14 and 24, also.

- a. Special Boundaries Report; brochure dated July 1951.
- b. Final Name Sheet of approved names; by Mr Heck.
- c. Instrument photos and 9x9 diapositives; see page 15.
- d. Field inspection photos: 51-0-1700 thru 1707, 1807-10.
- e. Air Photo Compilations: T-5097 and T-5330, 1:10,000.

34. Contours and Drainage: Not applicable.35. Shoreline and Alongshore Details: Refer to side-heading 7.

Mean high-water line indications on the field inspection photos were used as a guide during instrument delineation of the shoreline. The unstable nature of this shoreline made the field indications difficult, and later, it was difficult to translate them to the instrument work-sheet. However, a reasonable solution has been achieved, especially in view of the fact that it is only temporarily true, at best. The low-water line on the ocean side of the barrier was field indicated and compiled in like manner; no low-water line has been delineated inside the barrier. Foul or shoal areas inside are partially field indicated and office completed, or are entirely instrument delineated.

36. Offshore Details: Not applicable; see side-heading 8.



37. Landmarks and Aids: Refer to side-heading 9.

- a. Two landmarks were recommended and photo-identified in the field, and they are shown on the manuscripts in proper symbol. The two landmarks are triangulation stations as follows:

On T-9830-N      Δ CEDAR CREEK COAST GUARD, CUPOLA, 1935  
On T-9830-S      Δ forked river coast guard watchtower, 1935

- b. ~~Of the five fixed aids to navigation the field man reported to be located in this quad, lights No.1 and No.32 fall outside the limits. The other three are mapped in correct symbol. Light No.3 was transferred direct from the field identification on photo No.50-0-1052, and the two lights at the ends of the jetties at Barnegat Inlet were plotted by coordinates computed in the field after triangulation observations had been made. No.32 was plotted by Transit fixes; No.1 is not shown since it was not field identified.~~

38. Control for Future Surveys:

- a. Three permanent bench marks were recovered in the area of this quad and have been mapped according to specifications. They are:

1. RIVER, identified on photo 51-0-1703.  
2. OYSTER CREEK CHANNEL, (EAST END), BARNEGAT BAY, T.B.M. 2 A, 1936, identified on photo 51-0-1808.  
3. SUNSET SHOAL, BARNEGAT BAY, T.B.M. 2 B, 1936, identified on photo 51-0-1809.

- b. No hydro stations were established, field or office.

- c. Two field-recovered and identified topo stations are also mapped for future use. They are CLUE, 1935, and USC&GS BM No.1, 1936 stamped "A No 1, 1936". *BM No.1 was NOT Plotted - no field identification for it could be found.*

39. Junctions:

T-9828 borders on the north, and T-9829 borders on the west; these match edges agree since all three quads were mapped as part of the same project. But the match edge to the south does not agree and should be corrected during field edit; this is the north edge of T-9499 which was mapped previously as a part of Project Ph-59(50).

40. Horizontal and Vertical Accuracy:

This map is considered to meet requirement specified by National Map Accuracy Standards. The scale is 1:10,000 and the contour interval is 10ft.

See Field edit report



46. Comparison with Existing Maps:

TOMS RIVER, NEW JERSEY, Ocean County, AMS V722, Sheet 6163 I,  
1:50,000, original map of 1941, revised 1946 and 1948.

47. Comparison with Nautical Charts:


MANASQUANINLET TO LITTLE EGG HARBOR, No. 825, 1:40,000,  
July 1946(4th edition), last correction date of 31 Mar 52.

48. Geographic Name List: See numbered page, following.

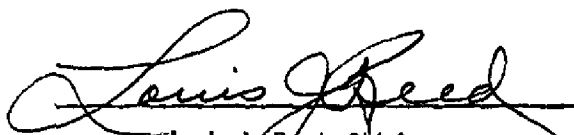
49. Notes for the Hydrographer: See <sup>side-heading 38</sup> ~~unnumbered~~ page, following.

50. Compilation Office Review: See T-2 form, following.

Submitted by:

  
Stanley W. Trow,  
Cartographer-Photogrammetric

Approved by:

  
Louis J. Beed, Chief  
Stereoscopic Mapping Section  
Photogrammetric Engineer

10/1/52







DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED  
~~TO BE DELETED~~

STRIKE OUT ONE

Toms River, N. J.  
Washington, D. C.  
24 Sept 51  
7 November, 1952

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)~~ the charts indicated.

The positions given have been checked after listing by L. J. Reed

Harry F. Garber  
Chief of Party.

CHARTING NAME	STATE	NEW JERSEY	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE	LONGITUDE	DATUM	D. P. METERS						
<del>△ CEDAR CREEK COAST GUARD FLAG TOWER, 1935 (Cupola) ht. 40 (46)</del>					<del>39 51</del>	<del>74 05</del>	<del>NA</del>	<del>367.7</del>	<del>9830 N</del>	<del>1927</del>				
<del>△ PORTED RIVER COAST GUARD WATCHTOWER, 1935, (Wood) ht. 48 (59)</del>					<del>39 48</del>	<del>74 05</del>	<del>NA</del>	<del>915.1</del>	<del>9830 S</del>	<del>1927</del>				
<del>(△ Cedar Creek Coast Guard Station), ht 40 (46) ft.</del>					<del>39 51</del>	<del>74 05</del>	<del>NA</del>	<del>367.7</del>	<del>T-9830</del>	<del>1926</del>				<del>825</del> <del>1216</del>
<del>(△ Forked River Coast Guard Watchtower), wooded, 48 (59) ft high</del>					<del>39 48</del>	<del>74 05</del>	<del>"</del>	<del>915.4</del>	<del>"</del>	<del>1935</del>				<del>"</del> <del>"</del>
Re-listed on form 567 dated 5/18/53 following														
Field Edit														

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



## PHOTOGRAMMETRIC OFFICE REVIEW

T- 9830

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 sextant 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 ☒

## MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

# MONITORING AIDS OR LANDMARKS FOR CHARTS

**TO BE CHARTED  
KXBXOXBKXED**

**STRIKE OUT ONE**

Toms River, New Jersey

18 May 1953

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

The positions given have been checked after listing by Louis J. Reed

Capt. J. C. Sammons

**Chief of Party.**

STATE New Jersey			POSITION			METHOD OF LOCATION AND SURVEY No.		DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE		DATUM					
			° ' "	D.M. METERS	° ' "	D.P. METERS						
WIPOLA	Cedar Creek Coast Guard Sta. 1926, Cupola, 1935. Ht. 40' (46') (one & same)	T-9830N	39 51	07.015 216.4	74 05	15.467 367.7	1927 NA			X	X	825 1216
BOOKOUT TOWER	Forked River Coast Guard Watch Tower, 1935. HT. = 48' (59')	T-9830S	39 48	08.80 271.4	74 05	38.48 915.4	"			X	X	825 1216
TOWER	Barnegat Light House, 1865. Ht. = 172' (184')	T-9830S	39 45	51.178 1578.4	74 06	23.894 568.7	"			X	X	825 1216
TANK	Barnegat Light Water Tank, 1950. Ht. 100 (106')	T-9830S	39 45	751.3	74 06	739.5	"	Radial PI8t		X	X	825 1216
<u>Note:</u> These are the only landmarks to be charted.												
<div style="text-align: right;"> <i>by [signature]</i> </div>												

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



FIELD EDIT REPORT  
Project PH-72(51)  
Quadrangle T-9830

51. METHODS:

The field edit of this area was accomplished by standard surveying methods in conjunction with visual inspection. Actual field work was completed 15 May 1953.

Field edit data appears on the field edit sheet, discrepancy print, field photographs 51-O-1700, 1701, 1705 and 1807, 50-O-1052, 1053, 1048, 1049, and in this report.

The reviewer's questions are answered on the discrepancy print when feasible.

A legend appears on the field edit sheet, which is self-explanatory.

52. ADEQUACY OF COMPILATION:

The map compilation is adequate and will be complete after field edit revisions have been applied.

53. MAP ACCURACY:

The horizontal accuracy of the map detail is relatively good.

The accuracy of the contouring is relatively good.

54. RECOMMENDATIONS:

None.

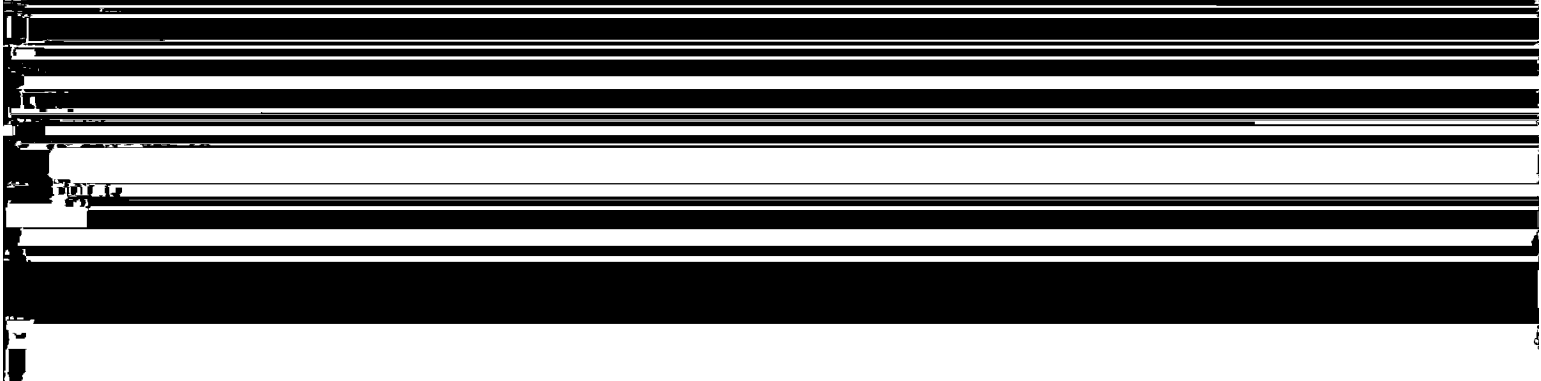
55. EXAMINATION OF PROOF COPY:

It is believed that the Engineering Company of Sherman, Sleeper and Taylor, 501 Cooper Street, Camden, New Jersey, is best qualified to examine a proof copy of this work.

56. CONTOURS AND DRAINAGE:

Refer to Item 5, Field Inspection Report.

There are no shifting sand dunes in this area. The only changes that occur in the area of the sand dunes is the apparent constant shifting of the



57. WOODLAND COVER:

Refer to Item 6, Field Inspection Report.

Numerous changes in the classification of vegetation have been shown on the field edit sheet. The majority of the woodland cover in this area is marginal.

58. SHORELINE AND ALONGSHORE FEATURES:

Refer to Item 7, Field Inspection Report.

The position of the mean high water line, throughout the entire area on the ocean side and at Barnegat Inlet, was checked and corrected by planetable methods directly on the field edit sheet.

During the course of this phase of work it was found that a satisfactory junction, M.H.W.L., did not exist with T-9499-N, PH-59(50). The M.H.W.L., ocean side, was checked by planetable methods directly on a copy of the map manuscript for T-9499-N. A satisfactory junction was made. However, after finding the M.H.W.L. in error on T-9499-N, it was necessary to check the M.H.W.L., ocean side, on T-9498-N. The correct M.H.W.L., ocean side, for T-9498-N has been shown on field photographs 50-O-1048 and 1049.

No attempt was made to show the mean low water line. From usual inspection the M.L.W.L., ocean side, appears to be about 60 feet east of M.H.W.L.

The approximate limits of all shallow areas have been shown on the field edit sheet.

Additional piers and boat basins were located, by planetable methods, directly on the field edit sheet in Barnegat Light Borough.

59. LANDMARKS AND AIDS:

Refer to Item 9, Field Inspection Report.

Four prominent structures are recommended as landmarks. Form 567 is submitted.

Five fixed aids to navigation fall within this area. Four of these aids, Lt. 3, Lt. 32, Barnegat Inlet North Breakwater Lt., and Barnegat Inlet South Breakwater Lt., were located during the original survey of this area, 1950, 1951. One aid, Lt. 1, was located by theodolite by this party. Forms 24A and 567 are submitted.

LANDMARKS AND AIDS (Cont'd)

All fixed aids to navigation in this project are erected and maintained by the State of New Jersey, Department of Commerce, Bureau of Navigation, with Capt. Raymond Huber in direct charge of placement and maintenance. The piling on which these lights are placed are permanent, but the lights are removed in November of each and every year and replaced in May of each and every year.

The designation of each and every fixed aid, in this area, is shown on Form 567 for each quadrangle in the project.

No listing of these aids exists other than in the memory of Capt. Raymond Huber.

60. BOUNDARIES:

Refer to Item 10, Field Inspection Report.

The boundary limits of Berkeley, Lacey, Ocean and Long Beach Townships, Island Beach and Barnegat Light Boroughs have been shown on the field edit sheet. These limits were checked or placed on the field edit sheet after careful scrutiny of the legal descriptions for these areas in conjunction with information, interpretations of these legal descriptions, obtained from local officials.

60. OTHER CONTROL:

(A)

Refer to Item 11, Field Inspection Report.

Two topographic stations, U.S.C.&G.S., B.M.A, No. 1, 1936 and Fly, R.M. No. 1, 1932 (AZ.MK.) were recovered and identified. Forms 24A and 524 are submitted.

60. OTHER INTERIOR FEATURES:

(B)

Refer to Item 12, Field Inspection Report.

Numerous additional buildings have been shown on the field edit sheet.

60. JUNCTIONS:

(C)

Satisfactory junctions have been made with T-9828 on the north, T-9499 - PH-59(50) on the south, and T-9829 on the west. The Atlantic Ocean is on the east.

Submitted by:

James E. Hundley  
Cartographer  
20 May 1953



Summary to Accompany Descriptive Report

T-9830

Topographic Map T-9830 is one of 6 similar maps in project Ph-72(51). This project covers the New Jersey coast from latitude  $39^{\circ} 45'$  near Barnegat Inlet, northerly to latitude  $40^{\circ} 07' 30''$  near Manasquan Inlet, and also a small area in the vicinity of Avalong (latitude  $39^{\circ} 06'$ ). This map was compiled by stereoplanigraph and Kelsh Plotter. The field operations prior to compilation included complete field inspection, supplemental leveling and planetable contouring. The compilation was at a scale of 1:10,000. The manuscript is in 2 sheets, each  $3.75'$  in latitude and  $7.5'$  in longitude. This map was field edited and is to be published by the Geological Survey at a scale of 1:24,000 as a standard 7.5-minute topographic quadrangle. The registered copies under T-9830 will include 2 one-half quadrangle ~~cloth-mounted~~ <sup>orange</sup> prints at scale 1:10,000 designated as T-9830N and T-9830S, and a complete 7.5-minute quadrangle cloth-mounted print in color at scale 1:24,000. Hydrographic data furnished by this Bureau, including depth curves and soundings will be shown on the color print.

Review Report T-9830  
Topographic Map  
28 July 1954

62. Comparison with Registered Topographic Surveys:

T-120	1:20,000	1839
1015	1:10,000	1866
13156	1:20,000	1873
5097	1:10,000	1932
6499	"	1935
6397a	"	"
6397b	"	"
6398b	"	1936

Comparison of T-9830 with the more recent of the above surveys indicates considerable shifting of shoreline in the vicinity of Barnegat Inlet. Other differences are obviously due to cultural developments. T-9830 supersedes all the above surveys in common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

Toms River, New Jersey, Ocean City County, AMS V722, Sheet 6163 I, 1:50,000, 1941, revised 1946 and 1948.

64. Comparison with Prior Hydrographic Surveys:

H-6136	1:20,000	1936
6140	1:10,000	1935-36
6141	1:10,000	1935-36

No soundings in conflict with shoreline of T-9830 except in the area of shoreline changes in the vicinity of Barnegat Inlet.

65. Comparison with Nautical Charts:

825, 1:40,000, Intracoastal Waterway, 1953, last correction date 8-24-53.

All fixed aids to navigation within the limits of T-9830 have been located except Light "2" and marker "2" in Barnegat Inlet. Charted shoreline should be corrected to that shown on T-9830 in the changeable area of Barnegat Inlet.

66. Accuracy of Results and use in 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.

67. Boundaries:

The Ocean-Long Beach township line in the vicinity of Barnegat Inlet was further investigated by this Reviewer in May, 1955 and correctly plotted on T-9829 and T-9830 in accordance with information furnished by Mr. Thomas J. Taylor (Engineer and Land Surveyor) of Brant Beach, New Jersey, and Mr. Loyd Camburn (Tax Assessor) of Waretown, New Jersey.

Reviewed by:

John M. Neal  
John M. Neal

APPROVED:

L. C. Lande  
Chief, Review Branch  
Photogrammetry Division

Max Skelton  
Chief, Nautical Chart Branch  
Charts Division

L. W. Swanson  
Chief, Photogrammetry Division

J. Bowie  
Chief, Coastal Surveys Division

27 Nov 59 BAY

Ph-72  
Application of Hydrography

<u>Manuscript</u>	<u>Sources</u>	<u>Date Applied</u>	<u>Date Verified</u>
T-9843 N Chart 795 " 824 H-6190	1:40,000 1936	Sept. '54	Dec. '54
T-9843 S Chart 825 H-5615 6136 6188 6190	1:10,000 1934 1:20,000 1936 1:40,000 1936 1:40,000 1936	" "	" "
T-9828 N Chart 825 H-6136 6188	1:20,000 1936 1:40,000 1936	Sept. '54	Dec. '54
T-9828 S Chart 825 H-6188	1:40,000 1936	" "	" "
T-9836 N Chart 825 H-6136 6188	1:20,000 1936 1:40,000 1936	Nov. '54	Dec. '54
T-9830 S Chart 1216 Chart 825 H-6136 6141 6188 6271	1:20,000 1936 1:10,000 1935 1:40,000 1936 1:40,000 1937	" "	" "
T-9827 N Chart 825		Dec. '54	Dec. '54
T-9827 S Chart 825		" "	" "
T-9829 N Chart 825		Sept. '54	Dec. '54
T-9829 S Chart 825		" "	" "
T-9831 N Chart 827 Chart 1217 H-6227 H-6264	1:20,000 1937 1:40,000 1937	Dec. '54	Dec. '54
T-9831 S Chart 1217 H-4821 H-6227 H-6264	1:20,000 1928 1:20,000 1937 1:40,000 1937	" "	Jan. '55

Hydrography for entire project was compiled by John M. Neal and verified by O. Svendsen. All soundings are in feet at mean low water. The 6, 12, 18, 30 and 60-foot depth curves are shown.

\_\_\_\_\_  
John M. Neal

Date \_\_\_\_\_

\_\_\_\_\_  
O. Svendsen

Date \_\_\_\_\_

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-9830 N & S.

### 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.