

# 13147

Original

# 13147

<p>Form 504</p> <p>U. S. DEPARTMENT OF COMMERCE</p> <p>COAST AND GEODETIC SURVEY</p> <p><b>DESCRIPTIVE REPORT</b></p>
<p>Type of Survey <u>Shoreline (Photogrammetric)</u></p> <p>Field No. _____ Office No. <u>T-13147</u></p>
<p><b>LOCALITY</b></p> <p>State <u>New Jersey</u></p> <p>General locality <u>Barnegat Bay</u></p> <p>Locality <u>Toms River (Pelican Island)</u></p>
<p><u>1967</u></p> <p><b>CHIEF OF PARTY</b></p> <p><u>J. Bull. RADM, Director, Atlantic Marine Center</u></p>
<p><b>LIBRARY &amp; ARCHIVES</b></p> <p>DATE _____</p>

USCOMM-DC 5087

## DESCRIPTIVE REPORT - DATA RECORD

T - 13147

PROJECT NO. (II):		
PH-6713		
FIELD OFFICE (II):		CHIEF OF PARTY
Ipswich, Massachusetts		J. K. Wilson
PHOTOGRAMMETRIC OFFICE (III):		OFFICER-IN-CHARGE
Atlantic Marine Center, Norfolk, Virginia		J. Bull, RADM, Director, AMC
INSTRUCTIONS DATED (II) (III):		
May 26, 1967 (FIELD) July 17, 1967 (OFFICE) August 10, 1967 (SPECIAL)		
METHOD OF COMPILATION (III):		
Wild B-8 Stereo-Plotter		
MANUSCRIPT SCALE (III):		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:10,000		1:5,000 pantographed to 1:10,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
MAY 29, 1968		
APPLIED TO CHART NO.		DATE: DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):		VERTICAL DATUM (III):
N.A. 1927		MHW <del>MEAN LOW WATER</del> 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 <del>MEAN LOW WATER</del>
REFERENCE STATION (III):		
SEASIDE HEIGHTS, 1932 ✓		
LAT.:	LONG.:	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
39° 56' 36.4004" (1122.7m)	74° 04' 42.2219" (1002.4m)	
PLANE COORDINATES (IV):		STATE: ZONE:
= 404,881.34 ft. ✓ X = 2,164,948.58 ft. ✓		New Jersey
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.		

## DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III): E. W. Hartford P. B. Walbolt		DATE: June 28, 1967 July 5, 1967
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  Air Photo Compilation Date of Photography - April 1957 1967 FIELD INSPECTION - 1967		
PROJECTION AND GRIDS RULED BY (IV):  A. E. Roundtree		DATE  May 5, 1967
PROJECTION AND GRIDS CHECKED BY (IV):  L. F. Van Scoy		DATE  May 10, 1967
CONTROL PLOTTED BY (III):  A. Shands L. Neterer, Jr.		DATE  Aug. 7, 1967
CONTROL CHECKED BY (III):  L. Neterer, Jr. A. Shands		DATE  Aug. 8, 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  R. B. Kelly		DATE  Aug. 2, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III):		PLANIMETRY  A. Shands Aug. 7, 1967
		CONTOURS  Inapplicable
MANUSCRIPT DELINEATED BY (III):  A. L. Shands		DATE  Aug. 14, 1967
SCRIBING BY (III):  F. P. Margiotta		DATE  Sept. 1, 1967
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  R. E. Smith & C. H. Bishop		DATE  November 1967
REMARKS:  <i>Some "Field Completion Notes" on an ozalid and on a film print, were submitted by Hydro Party 745, G.M. Ward; Aug. - Oct. 1967 see pages 21 &amp; 22.</i>		



## DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

~~WILD~~  
~~USCGS Type "L"~~

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE *
67L-1749R thru 1751R	April 25, 1967	1157	1:30,000	0.57' above MLW **
67L(c)-1490 thru 1493	April 21, 1967	0952	1:15,000	0.54' above MLW
67L(c)-1733 thru 1735	April 25, 1967	1144	1:30,000	0.57' above MLW ***
67L(c)-1482	April 21, 1967	0944	1:15,000	0.54' above MLW

\*\* AT MLW ON OCEAN SHORGLINE  
THE ABOVE ARE FOR BARNEGAT BAY

\*\*\* 0.5 ABOVE MLW, ON OCEAN L.

## \* PREDICTED TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: SANDY HOOK, NEW JERSEY	0.11	4.5	5.6
SUBORDINATE STATION: COATES POINT (HIGHWAY BRIDGE)	0.11	0.5	0.6
SUBORDINATE STATION:		4.2	5.1

Atlantic Marine Center  
WASHINGTON OFFICE REVIEW BY (IV):*M. M. Slattery*

DATE:

*May 1968*

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

6

RECOVERED:

6

IDENTIFIED:

3

NUMBER OF BM(S) SEARCHED FOR (II):

0

RECOVERED:

0

IDENTIFIED

0

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

none

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

none

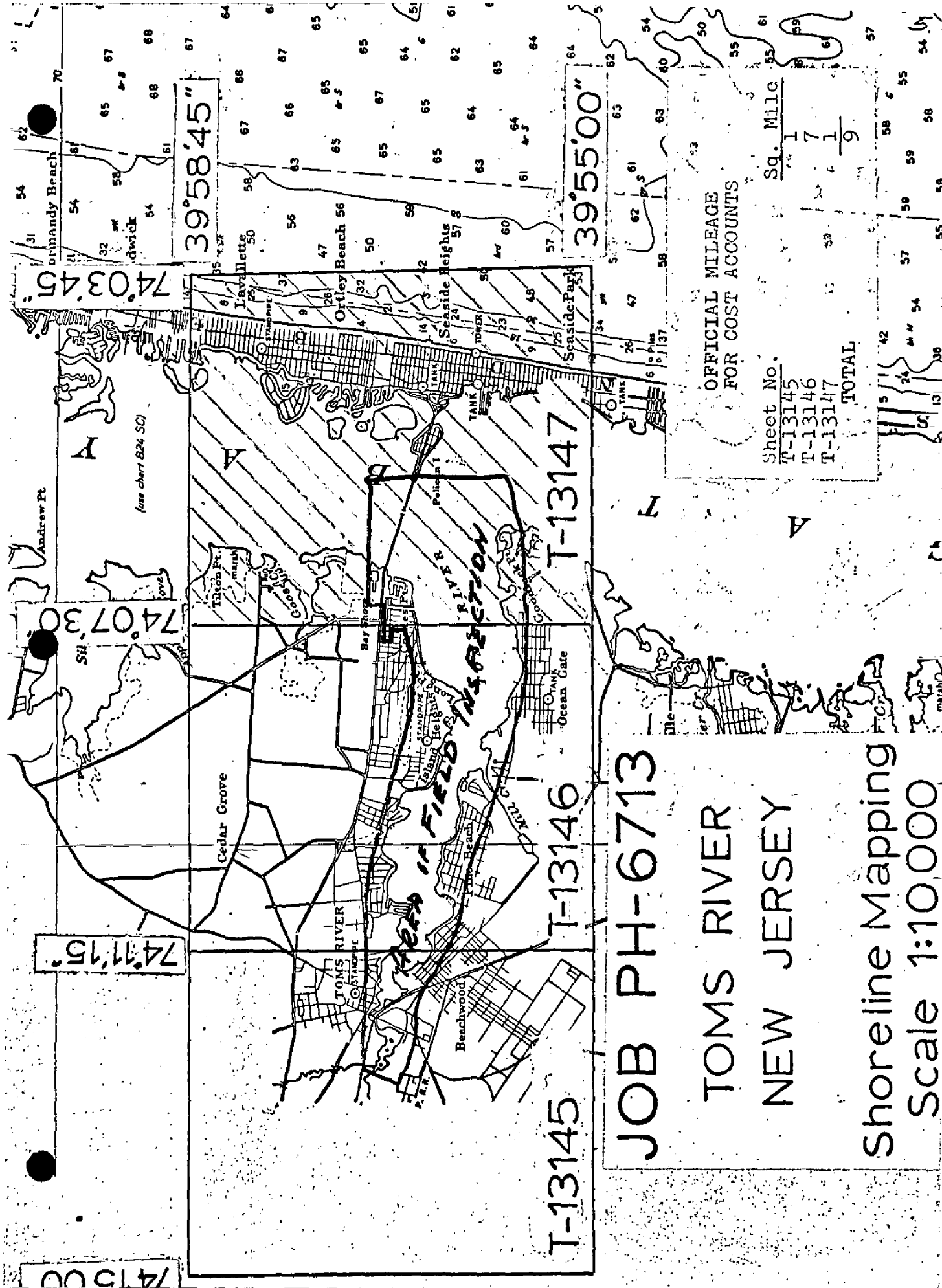
REMARKS:



T-13147

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete pending Field Edit	August 1967	Superseded
Corrections made from Hydro. Party	November 1967	<i>Superseded</i>
<i>Final Review</i>	<i>May 1968</i>	







6.

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-13147

Shoreline manuscript T-13147 is one of three 1:10,000 scale maps that comprise Ph-6713, Toms River, New Jersey. The sketch on page 5 of this report shows the position of this manuscript in the project.

Ph-6713 is a stereo-instrument project in advance of hydrographic surveys of the area. Compilation was by ~~Kelsh~~ Plotter\* using the same 1:30,000 scale diapositives (67-L-1749 through 1751) of the April 25, 1967 infra-red photographs that were used for the stereoplanigraph bridge. Ratio black and white prints of the April 25, 1967 1:30,000 scale color photographs, 67-L(c)-1733 and 1735 were used for reference during compilation, and were processed for hydrographic support. It is noted that the centers of only these processed photographs, 67-L(c)-1733 and 1734, appear on the manuscript; the centers of 67-L-1749 through 1751 are not shown. Color ratio prints of the 1:15,000 scale photography of April 21, 1967, (67-L(c)-1481, 1482, and 1490 through 1494) were also furnished the compiler, and later proved very useful in final review.

Field work before compilation consisted of control identification on 1:30,000 scale contact color transparencies, (flight 67-L(c)-1733 through 1738), during June 1967, and field inspection in June and July of 1967 on 1:15,000 scale contact color prints 67-L(c)-1492 and 1493. The Washington Office set the eastern limits of field inspection at about longitude  $74^{\circ} 05.8'$ .

In accordance with AMENDED INSTRUCTIONS - SPECIAL PROJECT AMC-12-67 of August 18, 1967, see pages 21 and 22 of this report, field edit was not done. The hydrographer did fully answer the compiler's questions on the ozalid and the cronaflex "Field Information Prints" during August and September 1967. Three point fixes were furnished for the aids to navigation, and landmarks were identified east of the original field inspection limits.

Final review was done in May 1968 at the Atlantic Marine Center.

\* WILD B-8



FIELD INSPECTION REPORT  
JOB PH-6713  
MAPS T-13145, T-13146, T-13147

This report is submitted for three maps, since there are no areas requiring special treatment.

2. AREAL FIELD INSPECTION

The area lies along the North and South shores of Toms River, extending to the East across Barnegat Bay to Ortley Beach and Seaside Heights, and to the West to the Garden State Parkway.

The area of field inspection is the immediate shore line of Toms River from the mouth westward to the Garden State Parkway (Instructions dated 26 May ~~1956~~). 1967

This area is extensively developed, and is accessible by truck.

Field inspection is complete; no part being omitted or left for field edit.

Photographic quality is very good. Photographs were taken in April 1967.

Photographs used for field inspection are listed below Maps:

T-13145  
67-L-1476

T-13146  
67-L-1477  
1494  
1495  
1496  
1497

T-13147  
67-L-1492  
1493

3. HORIZONTAL CONTROL

Horizontal control recovery has been completed in accordance with project instructions.

The identification of horizontal control was accomplished during period June 22, 1967, through June 28, 1967.

The control was identified on color transparencies of 1:30,000 scale.



4. VERTICAL CONTROL

None.

5. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage is composed of small streams, and drains with a very few swamp and marsh areas.

6. WOODLAND COVER

Woodland cover was classed in accordance with the Topographic Manual.

7. SHORELINE AND ALONGSHORE FEATURES

The high-water and apparent shoreline have been indicated on the photographs by symbol.

The field inspection was accomplished by visual inspection from skiff.

The high-water line is clearly visible on the photographs by bulkheads and the change in color tone on the sand beaches, which is from a redish color to a white color, and is shown by the inspector in several places on the photographs.

Special attention is invited to a small area just West of Island Heights; this shore line has been filled for a new beach since photography. Measurements were taken at this area to the high-water line, and are shown on Photograph 67-L-1496.

8. OFFSHORE FEATURES

This phase was checked, and adequate field inspection notes were made on the photographs.

9. LANDMARKS AND AIDS

Non-floating aids to navigation were verified as to existence and correct number. These aids are identified on photograph 67-L-1492, and located in Map T-13147.

There are six private aids in Toms River; these are single pile structures about 10 feet above the water with a light at the top, and are maintained by the state. The channel is also marked by bouys. These and the lights are seasonal (June to September 1). Five aids are identified on Photographs 67-L-1476, 1477, and 1494. One was located by sextant fix, and submitted on form 274.

All landmark buildings recommended for charting are circled on the photographs.

Two landmark bluffs are noted on photographs 67-L-1496 and 1497.

Nautical landmarks outside the field inspection area were visually inspected, and are to be carried forward. Forms 567 are submitted for one deletion, and four (4) to be charted. There were no Nautical Landmarks in the area of field inspection.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None.

12. OTHER INTERIOR FEATURES

Three submerged cable shore ends were identified on the photographs: Two on photo 67-L-1476, and one on photo 67-L-1493.

13. GEOGRAPHIC NAMES

None.



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14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

None.

7 July 1967  
Submitted by:*E. W. Hartford*E. W. Hartford  
Chief, sub-unit, Photo Party 62

PHOTOGRAMMETRIC PLOT REPORT

Job PH-6713

Toms River, New Jersey

August 2, 1967

21. Area Covered

The area covered extends along Toms River from the city of Toms River, New Jersey, to the city of Seaside Heights, New Jersey. Included in the area are T-sheets, T-13145 thru T-13147, all at 1:10,000 scale.

22. Method

One strip of infrared photography (67-L-1746R thru 1751R) was bridged on the C-8 stereoplanigraph to provide passpoints for B-8 compilation and ratio points for low-altitude, color photography. Five horizontal control stations were used in the IBM bridge adjustment with the companion points and one other station used as checks.

23. Adequacy of Control

The horizontal control provided complied with job instructions and was adequate in quality and quantity. All control held within National Map Accuracy Standards with the exception of ISLAND HEIGHTS STANDPIPE, 1932 "SS". This point was identified on color photography and could not be clearly identified on the infrared photography.

24. Supplemental Data

Local USGS quads and sea level datum were used to rough control elevation during bridging operations.

25. Photography

The infrared photography used for bridging was adequate in coverage, overlap and definition.

Submitted by:

*Robert B. Kelly*  
Robert B. Kelly

Approved by:

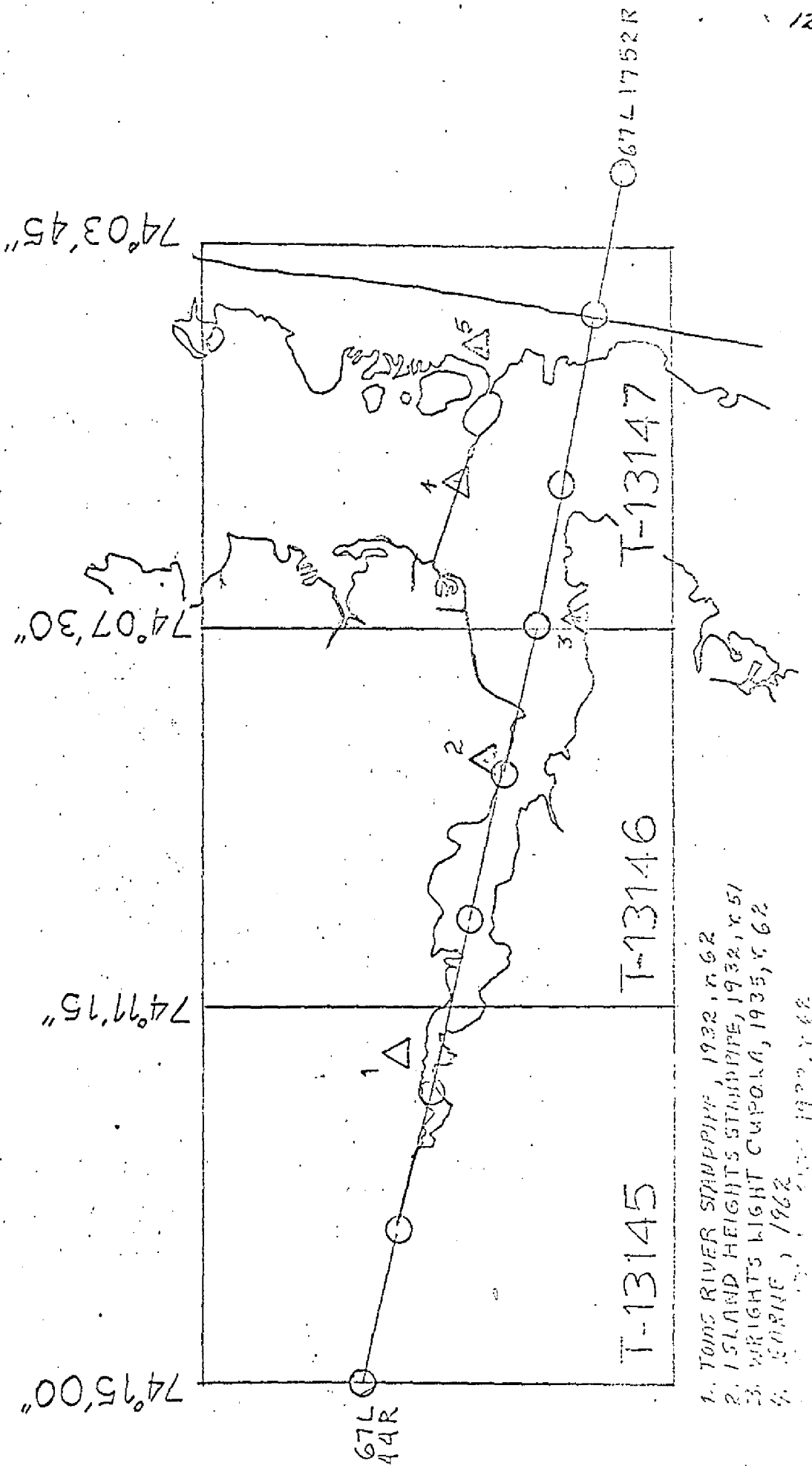
*John D. Perrow, Jr.*  
John D. Perrow, Jr.



JOB PH-6713

TOMS RIVER  
NEW JERSEY

Shoreline Mapping  
Scale 1:10,000



MAP T- 13147

PROJECT NO: PH-6713

SCALE OF MAP

1:10,000

SCALE FACTOR

None

[illegible]

COMPILATION REPORT  
T-13147  
Job PH-6713

31. DELINEATION:

The Wild B-8 was used.

Photography and field inspection were adequate.

32. CONTROL:

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs with the aid of field inspection.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline inspection was adequate.

No low water line was shown.

36. OFFSHORE DETAILS:

No statement.

37. LANDMARKS AND AIDS:

Form 567 for seven Landmarks and fifteen Aids have been submitted to the Washington Office under date of November 16, 1967.

38. CONTROL FOR FUTURE SURVEYS:

Refer to Item 49.



39. JUNCTIONS:

There are no contemporary surveys to the north, south or east. Junction is in agreement to the west.

40. HORIZONTAL AND VERTICAL ACCURACY :

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle SEASIDE PARK, N.J., scale 1:24,000, dated 1953.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Nautical Chart No. 824-SC, scale 1:40,000, 5th Edition, dated January 1967.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Submitted by:

*R. E. Smith*  
R. E. Smith  
Cartographer

Approved and forwarded by:

*J. Bull*  
J. Bull, RADM, USESSA  
Director, Atlantic Marine Center

16  
6-14-67

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6713 (Toms River, N. J.)

T-13147

✓ Atlantic Ocean

✓ Barnegat Bay

✓ Bay Shore

✓ Coates Point

✓ Gilford Park

✓ Goodluck Point

\* ~~Goose Creek~~

✓ Intracoastal Waterway

\* ~~Lavallette~~

\* ~~Ocean Gate~~

\* *Not used, feature is outside compilation limits.*

\*\* *Not used, only a 50 meter slice of the borough falls on T-13147;  
name was used on T-13146*

✓ Ortleigh Beach

✓ Pelican Island

✓ Seaside Heights

✓ Seaside Park

\* ~~Shelter Cove~~

✓ Thomas A. Mathis Bridge

\* ~~Tilton Point~~

✓ Toms River

\* ~~West Point Island~~

Approved by:

*A. Joseph Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

The following is a list of office selected photo-hydro stations:

<u>Number</u>	<u>Description</u>
4701	S.E. Corner of bulkhead, N. of Slip.
4702	S.E. Corner of BRIDGE ABUTMENT.
4703	S.E. Corner of bulkhead.
4704	Corner of bulkhead.
4705	Center of westerly tower at Bridge span.
4706	N.W. Corner of pier.
4707	Corner of bulkhead.
4708	Corner of bulkhead
4709	End of North pier of 2
4710	S. Radio Mast
4711	N. Radio Mast.

Verify and submit Form 567 for the following Daybeacons: 45, 46, 47, 48, and Lights 2, 3, 43, and 51.

Locate and submit Form 567 for the following: Daybeacon - 49; and Light - 50.

There are no recoverable Topographic Stations within this survey.

Refer to ozalid for notes pertaining to Landmarks.



C&GS FORM 1002 (11-13-61)		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW T-10060x 13147			
1. PROJECTION AND GRIDS  CHB	2. TITLE  CHB	3. MANUSCRIPT NUMBERS  CHB	4. MANUSCRIPT SIZE  CHB
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY  CHB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)  RES		7. PHOTO HYDRO STATIONS  XX
8. BENCH MARKS  XX	9. PLOTTING OF SEXTANT FIXES  RES	10. PHOTOGRAMMETRIC PLOT REPORT  Bridge (W.O.)	11. DETAIL POINTS  Wild B-8
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE  CHB	13. LOW-WATER LINE  XX	14. ROCKS, SHOALS, ETC.  XX	15. BRIDGES  CHB
16. AIDS TO NAVIGATION  RES	17. LANDMARKS  RES	18. OTHER ALONGSHORE PHYSICAL FEATURES  XX	19. OTHER ALONGSHORE CULTURAL FEATURES  RES
PHYSICAL FEATURES			
20. WATER FEATURES  RES		21. NATURAL GROUND COVER  CHB	22. PLANETABLE CONTOURS  XX
23. STEREOSCOPIC INSTRUMENT CONTOURS  XX	24. CONTOURS IN GENERAL  XX	25. SPOT ELEVATIONS  XX	26. OTHER PHYSICAL FEATURES  CHB
CULTURAL FEATURES			
27. ROADS  CHB	28. BUILDINGS  CHB	29. RAILROADS  XX	30. OTHER CULTURAL FEATURES  RES
BOUNDARIES			
31. BOUNDARY LINES  XX		32. PUBLIC LAND LINES  XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES  RES		34. JUNCTIONS  CHB	35. LEGIBILITY OF THE MANUSCRIPT  RES
36. DISCREPANCY OVERLAY  XX	37. DESCRIPTIVE REPORT  RES	38. FIELD INSPECTION PHOTOGRAPHS  CHB	39. FORMS  RES
40. REVIEWER Charles H. Bishop & R. E. Smith C. H. Bishop & R. E. Smith		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck, Jr. A. C. Rauck, Jr.	
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 R. E. Smith		SUPERVISOR A. C. Rauck, Jr.	
43. REMARKS  Hydro. Party corrections made from Field Information Ozalid, cronaflex copy of sheet, and Ratio photo. No. 67-L-1734 (Office).			

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## NON-FLOATING AID TO NAVIGATION LANDMARKS FOR CHARTS

TO BE CHARTED  
~~TO BE REVISED~~  
~~TO BE DELETED~~ } STRIKE OUT TWO

Atlantic Marine Center

November 14, 1967

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

The positions given have been checked after listing by

R. E. Smith

J. J. Bull, RADN, USESSA

Director, ANC

Chief of Party

STATE	CHARTING NAME	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								
					°	'	°	'	"						

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

\* TABULATE SECONDS AND METERS

USCOMM-OC 16234-P&amp;I

# NONFLOATING AIDS TO NAVIGATION FOR CHARTS

TO BE CHARTED  
TO BE REVISED  
TO BE DELETED

STRIKE OUT TWO

Atlantic Marine Center November 14, 1967

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.

The positions given have been checked after listing by *R. E. Smith*

*R. E. Smith*  
for J. Bull, RADN, USESSA

Director, ANC

Chief of Party

STATE	NEW JERSEY		DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE						
					°	'	°	'					
</													

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

\* TABULATE SECONDS AND METERS







U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY  
Atlantic Marine Center  
439 West York Street  
Norfolk, Virginia 23510

Page 21.

18 August 1967

Officer in Charge  
Hydrographic Field Party 745

AMENDED INSTRUCTIONS -- SPECIAL PROJECT AMC-12-67 -- INVESTI-  
GATIONS OF CHART DEFICIENCIES -- COAST OF NEW JERSEY

1. A photogrammetrist will not be assigned to provide photo-  
hydro support for hydrography in Toms River.
2. Office identified points have been picked to supplement  
existing pass points, land marks and triangulation. Each of-  
fice identified point has been numbered and a description of  
each point will be furnished.
3. Field edit of the Toms River manuscripts will not be re-  
quired. Notes to the hydrographer listing additional informa-  
tion required for compilation will be furnished.
4. A strong sextant fix with check angle will be acceptable  
for location of the fixed aids in lieu of location by triangu-  
lation.
5. Forward field notes and Form 567s for the Toms River manu-  
scripts to Chief, Photogrammetric Processing Branch, Atlantic  
Marine Center.
6. Receipt of these ammended instructions shall be acknowledged.

J. Bull  
Director  
Atlantic Marine Center

*Memorandum*

22.

TO : Director  
Atlantic Marine Center

ATTN : Chief, Photogrammetric Processing Branch

FROM : Officer-In-Charge  
Hydrographic Field Party 745

DATE: 30 October 1967

In reply refer to:

SUBJECT: SP-AMC-12-67 - Investigation of Chart Deficiencies,  
Coast of New Jersey -- Additional Field Information  
for Compilation Ph-6713 - Vicinity of Toms River

Pursuant to Amended Instructions for SP-AMC-12-67 dated 18 August 1967, additional field information was obtained for compilation of sheets T-13145, -6, & -7 during the period August - October 1967. The majority of the work being done on 30 & 31 August 1967.

Sextant positions with check angles using triangulation or photo points were obtained for all aids not compiled in the project area. All aids and landmarks on T-13147 were additionally checked by a planetable cut from BARNE, 1962. A two-position theodolite cut was obtained as a check for the Ocean Gate Water Tank which was located by the party with two photo cuts on T-13146.

A few of the more important details remaining to be compiled were noted, however a thorough edit was in no way undertaken.

*Gerald M. Ward*  
Gerald M. Ward  
LT - USESSA

Enclosures  
As per Form 413



REVIEW REPORT T-13147  
SHORELINE  
May, 1968

61. GENERAL STATEMENT :

See Summary on page 6 of this Descriptive Report.

The eastern half of T-13147 was compiled from office interpretation only, although the hydrographer did provide fixes for aids to navigation, and give heights and elevations for most of the landmarks in the eastern half (on the ozalid "Field Information Print"). The "limits of field inspection and compilation" indicated by the Washington Office on a quadrangle are shown in green on the project sketch, which is page 5 of this report.

An ozalid Comparison Print (pages 27 through 30) which shows the differences noted in Items 62 and 65 is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

T-9828<sup>N</sup>/2; 1:10,000; Aug. 1952; Field edit June 1953; Final Review June 1954  
T-9828<sup>S</sup>/2; 1:10,000; Aug. 1952; Field edit June 1953; Final Review June 1954

The registered surveys are in fairly good agreement with T-13147 with the major differences obviously from construction etc. The differences are on the Comparison Print in blue.

The landmark at Lat. 39° 56.1', Long. 74° 04.33', on T-9828<sup>S</sup>/2 was dismantled in late Feb. 1963, see Form 567 (page 26).

The two radio masts shown as landmarks near Lat. 39° 55.45', Long. 74° 06.48' have slightly different (about 12 meters) positions, heights, and elevations:

148 (149) on T-13147, 144 (146) on T-9828<sup>S</sup>/2  
157 (158) on T-13147, 144 (146) on T-9828<sup>S</sup>/2

The eastern half of T-13147, compiled without field inspection, reveals the largest differences with the registered surveys:

The Atlantic Ocean shoreline has shifted in some areas as much as 50 meters (near Lat. 39° 56.7').

Filling, bulkheading, and other types of construction are responsible for extensive changes in the eastern shoreline of Barnegat Bay.

The landmark, TOWER 1967, at Lat. 39° 56.22', Long. 74° 04.29' was corroborated by the hydrographer, but no elevation and/or height was furnished. The height was not observed during stereo-instrument compilation.

\* Form 567  
Page 18

There are several new aids to navigation on T-13147, and new positions



of those mapped on T-9828<sup>n</sup>/2 and <sup>s</sup>/2.

T-13147 supersedes the previously registered surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

SEASIDE PARK, N.J.: U.S.G.S. quadrangle; 1:24,000; 1953

This quadrangle is a reduction of the U.S.C. & G.S. topographic surveys T-9828<sup>n</sup>/2 and <sup>s</sup>/2, see Item 62. The same differences therefore exist with T-13147 except the quadrangle omits the height and elevations of the radio masts.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A "Chart Investigation Smooth Sheet" for Special Project AMC-12-67 (see pages 21 and 22), is being prepared by Hydrographic Party #745 for transmittal to Washington in May 1968. Hydro Party #745 is using a print of the Final Reviewed Manuscript of T-13147 for shoreline information.

65. COMPARISON WITH NAUTICAL CHARTS:

Chart 824 S.C.; 1:40,000; 6th edition, Jan. 1968, corrected through Notice to Mariners #52 of Dec. 30, 1967.

The Comparison Print shows the chart differences with T-13147 in red.

The landmark "TOWER" on the chart at Lat. 39° 56.1', Long. 74° 04.33' was dismantled in late Feb. 1963, see Form 567 (page 26).

Considering the 4X enlargement required, the positions of the aids to navigation check quite well with T-13147.

The chart shows differences in piers and shoreline with some rather large at:

Lat. 39° 56.55',	Long. 74° 04.2'
Lat. 39° 56.95',	Long. 74° 06.8'
Lat. 39° 55.85',	Long. 74° 05'
Lat. 39° 55.3',	Long. 74° 04.95'
Lat. 39° 56.2',	Long. 74° 04.3'

The chart shows a sunken wreck at Lat. 39° 55.22', Long. 74° 05.02', which falls outside the limits of field inspection, and is not on T-13147. It is not visible on photographs 67-L(c)-1484, 1485, or 67-L-1733, 1734.

The chart also shows a cable area in the area of Lat. 39° 55', Long. 74° 06', also outside field inspection limits, and not on T-13147. The photographs gave no sign of it.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with the Bureau requirements and the National Standards of Map Accuracy. The eastern half of the map and the area south of 39° 55.6' were compiled without field inspection, but they too meet the requirements and standards. No accuracy tests were run in the field.

Reviewed by:

*M. M. Slavney*

M. M. Slavney

Approved by:

*J. Bull*

J. Bull, RADM, USESSA  
Director, Atlantic Marine Center

Approved by:

*Charles L. Henn*  
Chief, Photogrammetry <sup>Branch 181</sup> Section

*John D. Boyer*  
Chief, Nautical Chart Division

*J. Ralph Sobieralski*  
Chief, Photogrammetry Division

JUN 27 1968



~~TO BE CHARTERED~~  
~~TO BE RELEASED~~  
TO BE DELETED

TO BE RELEASED  
TO BE DELETED

Atlantic Marine Center

May 15 1968

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

The positions given have been checked after listing by

M. M. Slavney / For J. Bull, RADM, USESSA  
Director, A.M.C.

Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *floating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

\* TABULATE SECONDS AND METERS

NOTES TO VERIFIER  
T-13147, Job Ph-6713

"CHART INVESTIGATION SMOOTH SHEET for Special Project AMC-12-67"

Should be in agreement with 13147, see Item 64 (page 24) of the  
Descriptive Report.



56'00"

= 400,000 FT.

55'30"

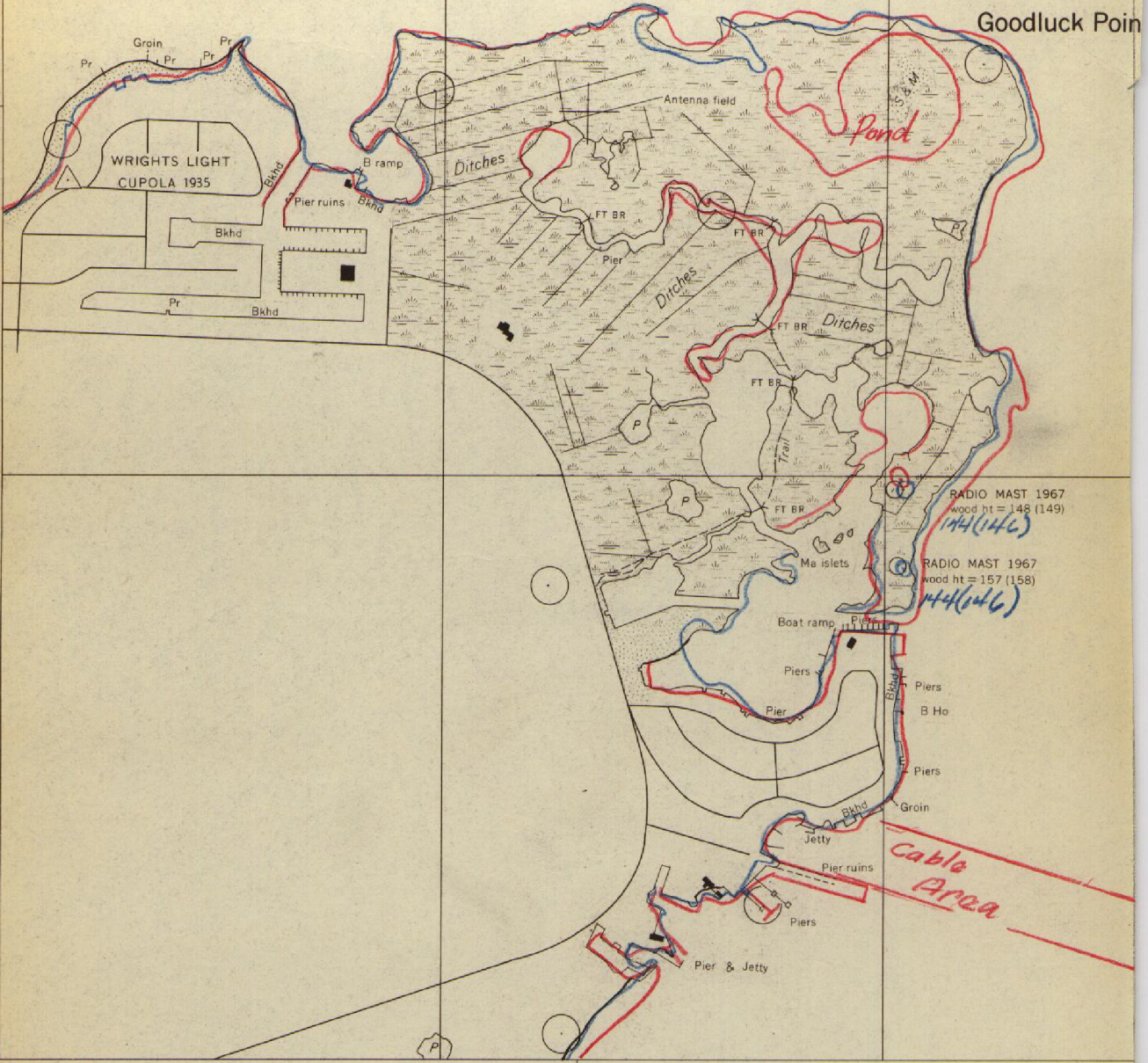
39°55'00"

74°07'30"

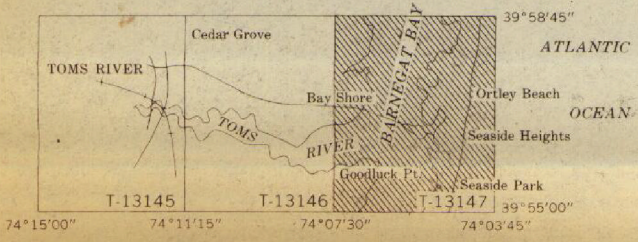
07'00"

x=2,155,000 FT.

06'30"



JOB PH-6713  
INDEX TO ADJOINING SHEETS



NOTE: Unlabeled circles are photogrammetric plot points; not map features



57'30"  
1,000 FT.

57'00"

1,000 FT.

56'30"

74'07"

Gilford Park

Bay Shore

Coates Point

TOMS RIVER

TOMS RIVER  
LIGHT 1 1967  
(Print wanted)

BARNEGAT WATERWAY  
LIGHT 43 1967

Bridge clearance  
sign and gauge

BARNEGAT  
DAYBEACON

THOMAS A. MATHIS BRIDGE

BARNEGAT WATERWAY  
DAYBEACON 46 1967

BARNEGAT WA  
DAYBEACON

INTRACOASTAL

Bridge clearance  
sign and gauge

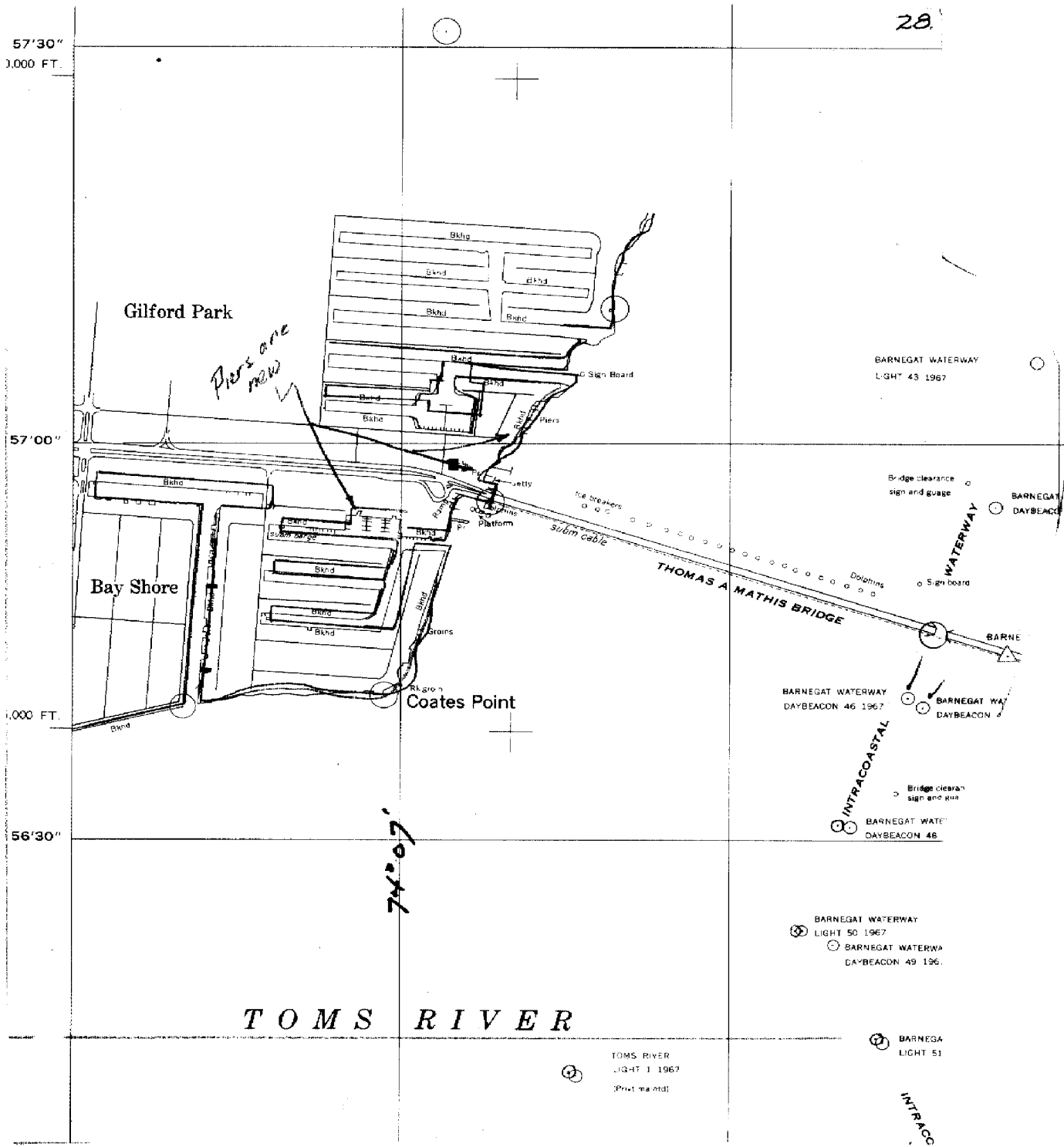
BARNEGAT WATE  
DAYBEACON 48

BARNEGAT WATERWAY  
LIGHT 50 1967  
BARNEGAT WATERWA  
DAYBEACON 49 1967

BARNEGA  
LIGHT 51

INTRACOASTAL

*Piers are new*





SEASIDE HEIGHTS  
LIGHT 1 1967  
(Priv. maintn)

BARNEGAT WATERWAY  
LIGHT 56 1967

SEASIDE PARK  
LIGHT 1 1967  
(Priv. maintn)

*Area Not on chart*

*39° 55' 30"*

*Not visible on photos*

*Cable Area*

$x=2,160,000$  FT. 05'30'

*55'*

05'00"  $x=2,165,000$  FT.

04'30"

# LEGEND

- Marsh
- Sand
- Paved road

- Recoverable horizontal control station of third-order or higher accuracy
- Recoverable horizontal control station of less than third-order accuracy
- State route
- The light shoreline defines the outer limits of vegetation visible above approximate mean high water.
- The heavy shoreline defines the approximate mean high water.
- Compiled by photogrammetric methods, from aerial photographs.
- Date of Photography April 1967
- Date of Field Inspection July 1967
- Date of Field Edit None
- Date of Final Compilation Nov. 1967
- Date of Final Review May 1968