5635

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

DESCRIPTIVE REPORT

Field No. 2

Air Photo

Topographic / ~~*Hydrographic*~~ } *Sheet No* Reg. No. T5635

State New Jersey

LOCALITY

ATLANTIC COAST
~~North of Atlantic City~~

Brigantine, ~~North to Little Egg Inlet.~~ INLET AND VICINITY

1935

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5635

Applied to drawing of Chart 1216 - Aug 16, 1937 - J.T.W.
" " " " " 1217 Apr. 1938 J.T.W
Applied to chart 826 May 24, 1938 J.T.W.

FIELD NO. 2
Reg. No. T5635

PROJECTION BY	Discharged. L. C. Ripley	4-19-35
PROJECTION CHECKED BY	Discharged. T. B. Nutting	4-20-35
CONTROL PLOTTED BY	On leave. P. W. Hund	4-30-35
CONTROL CHECKED BY	On leave E. J. Anderson	4-30-35
TRIANGULATION SPOTTED BY	Discharged. J. F. Richardson	
RADIAL PLOT BY	On leave. E. J. Anderson	6-14-35
DETAIL STARTED BY	Discharged. T. P. Mitchell	6-14-35
DETAIL FINISHED BY	Discharged. T. P. Mitchell	7-20-35
DETAIL CHECKED BY	On leave P. W. Hund	7-23-35
TOPOGRAPHY TRANSFERRED BY	Discharged. T. P. Mitchell	7-18-35

AREA DETAIL INKED: 13.7 Square statute miles.

LENGTH OF SHORELINE: 33.0 Statute miles (over 200 meters wide)

LENGTH OF STREAMS: 64.8 Statute miles (less 200 meters wide)

LENGTH OF COASTLINE: 8.8 Statute miles.

Datum N.A. 1927

Ref. Sta. Little Beach 1932

Lat. 39° 28' 14.608" (450.5 M) (adjusted)
Long. 74° 19' 41.935" (1002.4 M)

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. T - 5635

REGISTER NO. T5635

State New Jersey

General locality ~~North of~~ Atlantic ~~City~~ COAST

Locality Brigantine, ~~North to Little Egg Inlet.~~ INLET AND VICINITY
Photographs - April 1932

Scale 1:10,000 Date of ~~survey~~, 19
Compilation - July 20, 1935

Vessel Air Photo Compilation Party No. 21.

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by T. P. Mitchell

Heights in feet above - - - to ground to tops of trees

Contour, Approximate contour, Form line interval 0- - feet

Instructions dated May 16, 1935., 19

Remarks: None.

GENERAL INFORMATION

Statistics:

The total land area covered by this sheet is 13.7 square statute miles. The total length of the outside coast shoreline is 9.2 statute miles. There are 33.0 statute miles of River shoreline more than 200 meters from the nearest opposite shore, and 64.8 statute miles of streams and sloughs less than 200 meters wide.

General Topographic Information:

The general description of the area covered by this sheet, along with adjoining sheets of this series, is of low coastal plane type with very little relief. The coastal shoreline in general is very regular, being broken only by a few small inlets. Just inside the coastal shoreline we find a strip of ground slightly elevated, and approximately 75 to 400 meters wide, which has been classed as beaches and sand dune. The dune area is interspersed with small patches of marshy ground and the only vegetation afforded is grass and scrub bushes. Between the dune area and the mainland is a vast area comprised of marshes, bays, therofares, creeks and numerous sloughs and ponds. Any number of islands also appear in this area; some of which are practically covered at high water. On the larger islands are found ponds which are usually surrounded by sand upon which grows grass and bushes. The only solid ground appearing on this sheet is theextreme southern part. The street system represents the town of Brigantine and its subdivisional development.

Report:

The general report is listed under"General Topographic Information."

Photographs:

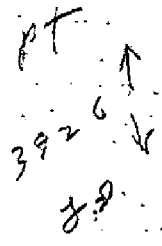
Photographs from part of four flights were used in the compilation of this sheet.

Flight No. 66 - 6 with photos No. 77 - 80 inclusive, began at Little Egg Inlet, ran south parallel to the coastline to the entrance of Great Thorofare. This flight was made April 15, 1932.

Flight No. 66 - 11 with photos 84 - 88 inclusive, began at the northwest end of Salt Island and ran southeast to Brigantine's Coast Guard Station. This flight was made April 20, 1932.

Flight No. 66 - 11 with photos No. 94 - 97 inclusive, began at triangulation station "Shack" and ran northwest to the northwest end of Shad Island. This flight was made April 20, 1932.

Flight No. 66 - 55 with photos No. 4-16 inclusive, began at Brigantine and parallelled the coastline to Great Egg Inlet. This flight was made August 1, 1932. Only one photo of this flight was used in this compilation. All photos were taken with a Standard Single



Note The paragraph on the opposite page headed Interpretation is not clear. The mean High Water line on the outer coast from Little Egg Inlet to lat 39°28' was located on T 6401 A May 1935. The mean High water line from lat 39°28' to lat 39°26.1' including Brigantine Inlet was located on T 6501 B July 1935. This area is very changable as discussed on Page of descriptive report T 6501 B. The High water line south of lat 39°26.1' was determined by field inspection on or in July 1935.

lens camera, operated by the Sero Service Corporation of Philadelphia, Pa.

All photos are very good as to scale but seem to be blurred. Therefore, much difficulty was had in transferring detail, but with assistance from the field party, along with inspection by the compiler, it is felt that all difficulties have been cleared up and no appreciable error will be found. These photos were made some three years ago and drastic topograhpic changes have taken place along the coast shoreline and inlets but this matter will be discussed later in this report.

CONTROL

Sources:

Triangulation by B. H. Rigg - 1935 and R. C. Bolstad - 1935. All on North American 1927 datum.

Errors:

No errors was found in the plotting of control or radial plot.

Discrepancies:

No control stations established by other organizations were used in the compilation of this sheet.

Method:

The standard radial line method was used as described in the U. S. Coast and Geodetic Survey notes on the compilation of planimetric Line maps from Single Lens Aerial Photographs.

Adjustment of Plot:

No unusual adjustment was had in making the radial plot. Triangulation station "Big Shad" was not held to in making the plot due to the fact that spoils around this station obliterated the possibility of making accurate measurements in the field, therefore it could not be spotted correctly on the photo.

Interpretation:

Since the photos were made three years previous to the compilation, we find the coast line has eroded to such an extent that a plane table survey was necessary to determine the exact high water line. This survey has been made from Little Egg Inlet, south to Brigantine Channel. When the photos were too indefinite to compile an actual high water line, a survey was made and this survey will be shown on the over-lay sheet by dashed lines. It is presumed that exceedingly high waters and storm tides caused the eroding of the beach area, as the interior seems fairly well preserved. Where the high water line could not be defined on the photos, nor a survey made, the broken marsh lines indicate the boundary of the highwater, as shown just north of Brigantine's Coast Guard Station. The coastal high water line from Brigantine Channel southwest to

see Note on opposite page.

* No planetable survey on file shows a check of this area. Bgg

Brigantine Hotel, was determined by measurements from object on the photos to the high water line. However, a plane table survey over part of this area was made later and checked remarkably well. Consult photo 66-11 - 88 for more information. Along the northeast, east and southeast part of Fullen Island the high water line as shown, although obtained by a plane table survey, is subject to frequent changes and should not be firmly relied upon. The prevailing conditions of this area are such that a small rise in elevation of the tide will move the present high water line inland by several hundred meters. The low water line obtained by the same survey should be within the required limit of accuracy as it was ~~gotten~~ taken at approximate low tide. The low water line just south of Lat. 39° 27' and east of Long 74° 20' was not obtained by a survey but was detailed in accordance with other prevailing low water lines. A cable crossing is shown by a dashed line across Little Egg Inlet. This cable was from a point on Salt Island N.E. to triangulation station "Cable". Since we have the location of the last pole on Salt Island we get our authority to show the crossing. Submerged cable.

Sea walls have been built along the coast to preserve the beaches since the photos were made and will be shown on the overlay sheet. One small dock, just west of Triangulation station "Brigantine Beach Water Tank" (North of) does not appear on the photo. The subdivisional development, northwest of Brigantine, upon field inspection, shows an unkept seawall around the entire area, with a golf course on the left as you enter to the clubhouse, which is near the bank of Obe's Thorofare. The roads are not paved. All buildings have been shown that could be clearly seen on the photo. Street names of Brigantine and the Surrounding development will be found on a map accompanying this sheet.

All symbols were taken from the Topographic manual.

Information from Other Sources:

Graphic Control sheets No. "P" Reg. No. T 6401a, "S" Reg. No. T 6501b, "T" Reg. No. T 6501a, and "U" Reg. No. T 6502b.

Field inspection by Lieutenant B. H. Rigg and Lieutenant (j.g.) E. H. Kirsch, and the compiler. July 1935 -

Conflicting Names:

There are no conflicting names on this sheet.

Comparison with other Surveys:

A comparison with U. S. Coast and Geodetic Survey Chart No. 1217 has been made and the Topographic Changes discussed previously in this report.

Junctions:

Satisfactory junctions have been made with sheet No. 4 Reg. No. T 5637 on the South. Sheet No. 1, Reg. No. T 5634 on the West. Atlantic Ocean on The East and Great Bay on the North.

Landmarks:

A list of landmarks for charts and marked Topographic Stations will be submitted with Graphic Control sheets mentioned previously in this report by Lt. B. H. Rigg, Chief of Party 1935.

Recommendation for Further Surveys:

The compilation of this sheet is believed to be accurate, thorough, and complete for charting purposes and no additional surveys are necessary. A probable error of not more than .3 mm may be found in detail of importance and not more than .6 mm for detail of lesser imporatance.

Approved by:

E. H. Kirsch

E. H. Kirsch,
Chief of Party.

Submitted by:

Discharged.

T. P. Mitchell.

T 5635

Additional information to be added to the descriptive report for air photo topographic sheet No. T5635

CONTROL

Sources

Triangulation by C. D. Meaney 1932, C. G. Quillian 1903 and R. W. Woodworth 1931.

Landmarks

Lieutenant J. A. Bond, Chief of Party 1936, will also submit additional landmarks for charts and marked topographic stations, covering the area of this sheet.

Information from other sources.

The additional information that has been added to the compilation since the press plate was made has been shown in red ink on a copy of the advance print. These changes include the 1936 location of the lights and beacons and minor changes in the shoreline for agreement with the hydrographic sheet. The changes were in areas where the image was very indistinct on the photographs and in several cases a new location of the shoreline was obtained with the planetable. The 1936 location of landmarks for charts and marked topographic stations were also added to the sheet.

Assisted by,

E. H. Kirsch

Lieut. E. H. Kirsch,

Chief of Party.

Submitted by,

C. J. Harryman

C. J. Harryman

T5635

	Remarks	Decisions
1		
2		
3	Thoro. is an abbreviation for Thorofare. Use complete spelling unless crowded for space	
4		
5		
6		
7		
8		
9	See Note above on Thorofare.	
10	USGS has "Simkins"	Simkins
11	Adds GHE 5/9/39 →	
12		
13		
14		
15		
16	has "Big Mud Thorofare on T142 See Note above on Thorofare	Mud Thoro[illegible]
17		
18		
19	USGS has "Steelman"	Steelmans
20		
21	See Note above on Thorofare.	
22	USCS has Thorofare See Note above on Thorofare.	Thoro
23		
24	Coast Guard Hdqrs. reports this name O.K.	
25		
26		
27		

M 234

GEOGRAPHIC NAMES

Survey No. T5635

Name on Survey	A On Chart No. 1216	A On Chart No. 1217	A On Chart No. 1243	B On previous Survey No. T-1142	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K USCP T5635	
Little Egg Inlet	✱	✓	✓		✓	✓			✓	✓	✓	1
Great Bay	✱	✓	✓		✓	✓			✓			2
Main Marsh Thoro ~~thorofare~~	✓	✱			✓		SEE NOTE		OPPOSITE			3
Great Thoro	✓	✱		✓	✓	✓						4
Egg Island	✓	✱		✓	✓							5
Mile Thoro	✓	✱		✓	✓							6
Salt Island	✓	✱		✓	✓	✓						7
Pullen Island	✓	✱		✓	✓	✓						8
Little Mud Thoro ~~face~~	✓	✱		✓	✓		SEE NOTE		OPPOSITE			9
Simkins Thoro	✓	✱		✓	✓							10
Little Bay	✓	✱		✓	✓				✓			11
Shad Island	✓	✱		✓	✓	✓						12
Perch Cove	✓	✱		✓	✓							13
Grassy Bay		✱		✓	✓							14
Black Point		✱		✓								15
Mud Thoro ~~thorofare~~	✓	✱		✓	✓		SEE NOTE		OPPOSITE			16
Brigantine Channel		✱		✓	✓	✓				✓		17
Brigantine Inlet		✱		✓	✓				✓	✓	✓	18
Steelman Bay				✱	✓	✓						19
~~Sackett Bay~~				✱		✓						20
Obes Thoro ~~thorofare~~				✱		✓	SEE NOTE		OPPOSITE			21
Wading Thoro ~~thorofare~~	✓	✱			✓		"	"	"	"		22
Brigantine	✓	✱			✓	✓		✓	✓			23
Little Beach C.G.	✓	✱										24
Brigantine C. G.	✓	✱				✓						25
Brigantine Beach												26
												27

Names underlined in red approved by C.P.N. on 7/23/36

omit 5 3/4/37 GFE

3/4/37 GFE See H-6144

Add 3/4/37 GFE See H-6145 for Auth.

M 234

M-350

T-5635

PLANE COORDINATE GRID SYSTEM

Positions of grid intersections used for fitting the grid to this compilation were computed by Division of Geodesy and the computation forms are included in this report.

Positions plotted by R. E. Ask

Positions checked by R. E. Ask

Grid inked on machine by R. E. Ask

Intersections inked by Frank R. Dollon

Points used for plotting grid:

x 2,095,000 ft y 240,000	x 2,080,000 y 230,000
x 2,080,000 y 220,000	x y
x 2,095,000 y 220,000	x y
x 2,080,000 y 210,000	x y

Triangulation stations used for checking grid:

X=2,095,521.54 y=232,327.75 ft

1. Little Beach 1932 (ref. st.)
2. Brigantine 1932
3. Hotel 1931
4. _____
5. _____
6. _____
7. _____
8. _____

Form No. 743
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1925

T-5635

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	2,095,000.00	$\log S_g$	4.97772210
K	2,000,000.00	$\log (1200/3937)$	9.48401583
x' $(=x-K)$	+ 95,000.00	$\log (1/R)$	0.0086
$x'^3/(6\rho_o^2)_g$	− 0.33	$\log S_m$	4.46174879
S_g	+ 94,999.67	cor. arc to sine	− 149
		$\log S_1$	4.46174730
$3 \log x'$	4.93317093	$\log A$	4.50913129
$\log 1/(6\rho_o^2)_g$	4.58102 13	$\log \sec \phi$	0.01125427
$\log x'^3/(6\rho_o^2)_g$	9.51419 21	$\log \Delta\lambda_1$	3.08342126
		cor. sine to arc	+ 250
$\log S_m^2$	8.92349758	$\log \Delta\lambda$	3.08342376
$\log C$	1.320550	$\Delta\lambda$	1211.7799
$\log \Delta\phi$	0.244048		
y	240,000.00		
ϕ' (by interpolation)	39° 29′ 32.2100	λ (central mer.)	74° 40′ 00.0000
$\Delta\phi$	− 1.7541	$\Delta\lambda$	20 11.7799
ϕ	39 29 30.4559	λ	74 19 48.2201

93.93 mm

115.24 mm

Explanation of form:

$x'=x-K$

$S_g=x'-\frac{x'^3}{(6\rho_o^2)_g}$

$S_m=\frac{1}{R}\left(\frac{1200}{3937}\right)S_g$

R=scale reduction factor

ϕ' is interpolated from table of y

$\Delta\phi=C\,S_m^2$

$\phi=\phi'-\Delta\phi$

$\Delta\lambda_1=S_1 A \sec\phi$

$\log S_1=\log S_m-$cor. arc to sine

$\log \Delta\lambda=\log \Delta\lambda_1+$cor. arc to sine

$\lambda=\lambda$ (central mer.)$-\Delta\lambda$

U. S. GOVERNMENT PRINTING OFFICE 11—11531

Form No. 743
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1965

T-5635

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	2,080,000.00	$\log S_g$	4.913084490
K	2,000,000.00	$\log (1200/3937)$	9.484015833
x' $(=x-K)$	+ 80,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	− 0.20	$\log S_m$	4.397115599
S_g	+ 79,999.80	cor. arc to sine	− 106
		$\log S_1$	4.397114453
3 log x'	4.709269997	$\log A$	8.509132677
$\log 1/(6\rho_o^2)_g$	4.581021300	$\log \sec \phi$	0.112200900
$\log x'^3/(6\rho_o^2)_g$	9.290291300	$\log \Delta\lambda_1$	3.008446810
		cor. sine to arc	+ 176
$\log S_m^2$	8.774231178	$\log \Delta\lambda$	3.008446986
$\log C$	1.319707	$\Delta\lambda$	1019.6470
$\log \Delta\phi$	0.093934		
y	220,000.00		
ϕ' (by interpolation)	39° 26′ 14.6362	λ (central mer.)	74° 40′ 00.0000
$\Delta\phi$	− 1.2415	$\Delta\lambda$	16′ 59.6470
ϕ	39° 26′ 13.2947	λ	74° 23′ 00.3530

41.00 mm. 0.84 mm.

Explanation of form:

$x'=x-K$

$S_g=x'-\frac{x'^3}{(6\rho_o^2)_g}$

$S_m=\frac{1}{R}\left(\frac{1200}{3937}\right)S_g$

R=scale reduction factor

ϕ' is interpolated from table of y

$\Delta\phi=C\,S_m^2$

$\phi=\phi'-\Delta\phi$

$\Delta\lambda_1=S_1 A \sec\phi$

$\log S_1=\log S_m-$cor. arc to sine

$\log \Delta\lambda=\log \Delta\lambda_1+$cor. arc to sine

$\lambda=\lambda$ (central mer.)$-\Delta\lambda$

U. S. GOVERNMENT PRINTING OFFICE 11—11521

Form No. 748
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1935

T-5635

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	2,095,000.00	$\log S_g$	4.97772210
K	2,000,000.00	$\log (1200/3937)$	9.48401583
x' $(=x-K)$	+ 95,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	− 0.33	$\log S_m$	4.46174879
S_g	+ 94,999.67	cor. arc to sine	− 149
		$\log S_1$	4.46174730
3 log x'	4.93317083	$\log A$	8.50913267
$\log 1/(6\rho_o^2)_g$	4.57810213	$\log \sec \phi$	0.11220002
$\log x'^3/(6\rho_o^2)_g$	9.51141921	$\log \Delta\lambda_1$	3.04307999
		cor. sine to arc	+ 250
$\log S_m^2$	8.92349758	$\log \Delta\lambda$	3.04308249
$\log C$	1.319707	$\Delta\lambda$	1210.98281
$\log \Delta\phi$	0.243205		
y	220,000.00		
ϕ' (by interpolation)	39° 26′ 14.5362″	λ (central mer.)	74° 40′ 00.0000″
$\Delta\phi$	− 1.7607	$\Delta\lambda$	20′ 10.9828″
ϕ	39° 26′ 12.7755″	λ	74° 19′ 49.0172″

39.43 mm 117.60 mm

Explanation of form:

$x'=x-K$

$S_g=x'-\frac{x'^3}{(6\rho_o^2)_g}$

$S_m=\frac{1}{R}\left(\frac{1200}{3937}\right)S_g$

R=scale reduction factor

ϕ' is interpolated from table of y

$\Delta\phi=C\,S_m^2$

$\phi=\phi'-\Delta\phi$

$\Delta\lambda_1=S_1 A \sec\phi$

$\log S_1=\log S_m-$cor. arc to sine

$\log \Delta\lambda=\log \Delta\lambda_1+$cor. arc to sine

$\lambda=\lambda$ (central mer.)$-\Delta\lambda$

U. S. GOVERNMENT PRINTING OFFICE 11—11521

Form No. 743
DEPARTMENT OF COMMERCE
U. S. Coast and Geodetic Survey
Ed. May 1935

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

State New Jersey Station T-5635

x	2 080 000.00	$\log S_g$	4.90308890
K		$\log (1200/3937)$	9.48401583
x' $(=x-K)$	80 000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	− 20	$\log S_m$	4.38711559
S_g	79.999.80	cor. arc to sine	− 106
		$\log S_1$	4.38711453
$3 \log x'$	4.70926997	$\log A$	9.50913336
$\log 1/(6\rho_o^2)_g$	4.58102 13	$\log \sec \phi$	0.11202982
$\log x'^3/(6\rho_o^2)_g$	9.29029127	$\log \Delta\lambda_1$	3.00 27771
		cor. sine to arc	+ 177
$\log S_m^2$	8.77423118	$\log \Delta\lambda$	3.00827 948
$\log C$	1.319286	$\Delta\lambda$	1019.2471
$\log \Delta\phi$	0.09351718		
y	210 000.00		
ϕ' (by interpolation)	39° 24′ 35.6986″	λ (central mer.)	74° 40′ ″
$\Delta\phi$	− 1.2403	$\Delta\lambda$	− 16 59.2471
ϕ	39 24 34.4583	λ	74 23 00.7529
	106.27 mm		1.80 mm

Explanation of form:

$x'=x-K$

$S_g=x'-\frac{x'^3}{(6\rho_o^2)_g}$

$S_m=\frac{1}{R}\left(\frac{1200}{3937}\right)S_g$

R=scale reduction factor

ϕ' is interpolated from table of y

$\Delta\phi=C\,S_m^2$

$\phi=\phi'-\Delta\phi$

$\Delta\lambda_1=S_1 A \sec\phi$

$\log S_1=\log S_m-$cor. arc to sine

$\log \Delta\lambda=\log \Delta\lambda_1+$cor. arc to sine

$\lambda=\lambda$ (central mer.)$-\Delta\lambda$

U. S. GOVERNMENT PRINTING OFFICE 11—11521

Form No. 743
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1985

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE New Jersey STATION T-5635 & T-5634

x	2,080 000.00	$\log S_g$	
K	2	$\log (1200/3937)$	9.4840 1583
x' $(=x-K)$		$\log (1/R)$	
$x'^3/(6\rho_o^2)_g$	—	$\log S_m$	
S_g	+ 80 mm	cor. arc to sine	—
		$\log S_1$	4.38711453
$3 \log x'$		$\log A$	8.50913198
$\log 1/(6\rho_o^2)_g$		$\log \sec \phi$	0.11237215
$\log x'^3/(6\rho_o^2)_g$		$\log \Delta\lambda_1$	3.00861866
		cor. sine to arc	+ 177
$\log S_m^2$	8.77423118	$\log \Delta\lambda$	3.00862043
$\log C$	1.320129	$\Delta\lambda$	+ 1020.0476"
$\log \Delta\phi$	0.09436018		
y	220 000.00		
ϕ' (by interpolation)	39° 27' 53.3734"	λ (central mer.)	74° 40' "
$\Delta\phi$	— 1.2427	$-\Delta\lambda$	— 17 00.0476
ϕ	39 27 52.1307	λ	74 22 59.9524
	160.77 mm		143.35 mm

Explanation of form:

$x'=x-K$

$S_g=x'-\frac{x'^3}{(6\rho_o^2)_g}$

$S_m=\frac{1}{R}\left(\frac{1200}{3937}\right)S_g$

R=scale reduction factor

ϕ' is interpolated from table of y

$\Delta\phi=C\,S_m^2$

$\phi=\phi'-\Delta\phi$

$\Delta\lambda_1=S_1 A \sec\phi$

$\log S_1=\log S_m-$cor. arc to sine

$\log \Delta\lambda=\log \Delta\lambda_1+$cor. arc to sine

$\lambda=\lambda$ (central mer.)$-\Delta\lambda$

U. S. GOVERNMENT PRINTING OFFICE 11—11521

REVIEW OF AIR PHOTO COMPILATION T-5635
Scale 1:10,000

Data Record

Triangulation to 1935
Photographs to 1932
Planetable surveys to 1936
Hydrography to 1936
Field inspection to 1935

Refer to page 2 of the descriptive report regarding method of location of the M.H.W. line on the outer coast.

The detail on this compilation is that of the date of the photographs except for changes along the shoreline as determined by field inspection and 1935 and 1936 planetable surveys

Comparison with Contemporary Graphic Control Surveys

T-6401a (1935 and 1936), 1:10,000
T-6501a (1935 and 1936), 1:10,000
T-6501b (1935 and 1936), 1:10,000
T-6502b (1935 and 1936), 1:10,000

The above graphic control surveys are in agreement with the compilation.

All detail and information shown on the above graphic control surveys is shown on the compilation except temporary topographic signals and the magnetic meridians.

Comparison with Contemporary Hydrographic Surveys

H-5893 (1935), 1:10,000
H-6144 (1936), "
H-6145 (1936), "
H-6196 (1936), "

The shoreline for the portions of the above hydrographic surveys covered by this compilation was taken from the compilation and is in agreement with the soundings.

Comparison with Former Topographic Surveys

T- 142 (1841), 1:20,000
T-1166 (1870), 1:20,000
T-2455 (1899), 1:20,000
T-2640 (1903), 1:10,000

The former surveys show that there has been very little change or erosion along the streams but the outer coast in the vicinity of Brigantine Inlet shows considerable erosion. The compilation is complete and adequate to supersede those portions of the above surveys which it covers.

Comparison with Charts 1217 and 3243

A visual comparison shows no other outstanding difference than that the compilation is more complete in detail.

L. C. Lande

July 7, 1937

L. C. Lande

REVIEW OF AIR PHOTO COMPILATION NO. T-5635

Chief of Party: E. H. Kirsch Compiled by: T.P.Mitchell

Project: HT - 205 Instructions dated: May 16, 1935.

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)

2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)

3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)

4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)

5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." M-87

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)

11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)

12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)

13. The geographic datum of the compilation is N. A. 1927 (adjusted) and the reference station is correctly noted.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

15. The drafting is satisfactory and particular attention has been given the following:

1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.

2. The degrees and minutes of Latitude and Longitude are correctly marked.

3. All station points are exactly marked by fine black dots.

4. Closely spaced lines are drawn sharp and clear for printing.

5. Topographic symbols for similar features are of uniform weight.

6. All drawing has been retouched where partially rubbed off.

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

17. Remarks:

18. Examined and approved;

E. H. Kusch
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

E. K. Green
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

K. T. Adams
Acting Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hydrography and Topography.