

5 cards

5645

5645

Air
Photo

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Field 12
Hydrographic } Sheet No. Reg. 5645

State NEW JERSEY

LOCALITY
Atlantic
~~SOUTH NEW JERSEY COAST~~

~~TOWNSEND INLET & VICINITY~~

193 6

CHIEF OF PARTY
E. H. Kirsch

Applied to drawing of Chart 1217 - May 16, 1938 - JFW.
Supplemental correction applied to T5645 May 20, 1938 Applied to Ch. 1217 May 23, 1938 - JFW
Applied to compilation of new chart 827 July 1939 BR.

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. 12

REGISTER NO. 5645

T5645

State NEW JERSEY

General locality ~~SOUTH NEW JERSEY COAST~~ ^{Atlantic}

Locality TOWNSEND INLET ~~& VICINITY~~

Scale 1:10 000 Date of survey Photos 4-18-32
Compilation Aug. 1936

Vessel Air Photo Party No. 21.

Chief of party E. H. Kirsch

Surveyed by See data sheet in the descriptive report

Inked by F. H. McBeth

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

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

Instructions dated May 16th, 1936, 19

Remarks: NONE

SHEET 12
REGISTER NO. 5645

PHOTO NOS.

66-8-47
66-8-30 to 35
66-8-42 to 44
66-8-2- to 4
66-7-97 to 98

DATE

4-18-32
4-18-32
4-18-32
4-18-32
4-18-32

Projection by

L. C. Ripley 5-3-35

Projection Checked by

T. B. Nutting 5-3-35

Control plotted by

E. J. Anderson 1935

Control Checked by

P. W. Hund 1935

Control Plotted on photos by

J. F. Richardson 1935

Control Checked on Photos by

E. H. Kirsch
E. H. Kirsch June 1936

Smooth radial plot by

E. H. Kirsch
E. H. Kirsch June 1936

Smooth radial plot Checked by

F. H. McBeth
F. H. McBeth Aug. 1936

Detailed by

F. H. McBeth
F. H. McBeth Aug. 1936

STATISTICS:

Land Area 27.5 square statute miles

Coast line 4.6 statute miles

Shore line 14.5 statute miles (More than 200 meters wide)

Shore line 58 statute miles (Less than 200 meters wide)

1.

SHEET 12
Reg. 5645

GENERAL INFORMATION

STATISTICS:

This compilation consists of 27.5 square statute miles of territory. There is 4.6 statute miles of coast line, 14.5 statute miles of shore line more than 200 meters wide and 58 statute miles of shore line less than 200 meters wide. This last figure does not include the drainage ditches nor the smallest streams. Reference Station - Avalon
Lat. $39^{\circ} 06' 22.519''$ (694.4 meters)
Long. $74^{\circ} 42' 50.779''$ (1220.1 ")
(adjusted)

GENERAL REPORT:

The area covered in this sheet resembles other coastal sheets of this area. On the coast is a low sandy area, occupied mostly by the three towns of that area. For a distance of three miles back of this narrow strip the terrain is marshy. Along the higher ground west of this is U. S. Highway No. 9 running through a rather intensely cultivated area of truck farms, and from there westward the country is largely wooded.

PHOTOGRAPHS:

Parts of the following flights were used in this compilation:

Photo Nos.	Along Long.	Date
66-8-47	Over Sea Isle City	4-18-32
66-8-30 to 35	$74^{\circ} 44'$	4-18-32
66-8-42 to 44	$74^{\circ} 46'$	4-18-32
66-8-2 to 4	$74^{\circ} 46'$	4-18-32
66-7-97 to 98	$74^{\circ} 48'$	4-18-32
M (181 to 191) 871-14	Coast line	1-23-33

Most of these photographs are good as to scale, but the definition on many of them is very poor.

CONTROL

SOURCES:

First order triangulation by C. D. Meaney 1932. Second order triangulation by J. A. Bond 1936. All control was executed on N. A. 1927 datum.

ERRORS & DISCREPANCIES:

No errors were found in spotting the control on the photos.

COMPILATION

METHOD:

The method used in this compilation is that described in the

The outer coast high water line was determined by sextant positions and reference measurements at frequent intervals. ^{on Aug 3, 1937} Sextant angles are recorded on photos M (182-191) 871-14 taken at 12:30 P.M. on Jan 23, 1933 and reference distances noted on the same photographs and recorded in field inspection books. ←

R.E. Ask

X

X

1933 edition of the "Notes on the Compilation of Planimetric line Maps from five lens aerial Photographs". No deviation from standard practice was necessary.

ADJUSTMENTS OF THE PLOT:

No unusual adjustments of the plot were necessary.

INTERPRETATION:

A great deal of difficulty was encountered in the interpretation.

The picture covering the area including the area of Timber and Beaver Swamp shows a differentiation in timber growth from the higher ground. Where this difference was clear, it has been so indicated by a variation in the timber symbol. Where not plainly visible this type of timber appears to fade into a thicker growth of the usual type of deciduous trees. The whole area has been called Timber and Beaver Swamp although it is probable that the swampy area varies greatly with the seasons.

There being no symbol designating abandoned railroads in the topographic manual, the regular railroad symbol, dashed, has been used.

The marshy area included here has offered the most trouble. Although the date of the photos is recorded, the actual time of the flights are not known. The stage of the tide is therefore not known.

What appears to be shallow areas on some photos, appears to be part of the marsh area, distinctly above the H. W. L. on others. The most perceptible instance of this type occurs in the area lying just south of triangulation station TOWN. A number of the larger streams likewise appear dissimilar on different photos, and in detailing such features, the pictures with the clearest definition were used. In the coastal area the photos of the Riparian Survey were used to study detail, as they have the best definition.

The actual H. W. L. on the Ocean beach appears quite different from that shown on the photos. The coast line as compiled on this sheet is taken from field inspection notes dated August 3rd, 1936. (see note opposite)

The shoal area north of Avalon and on the north side of Townsend Inlet channel was taken from the Riparian Survey pictures. This area will be developed by hydrography next season.

INFORMATION FROM OTHER SOURCES:

Information on railroads were obtained from the local R. R. office.

CONFLICTING NAMES:

The waterway, Townsend Inlet, appears as Townsends Inlet on the N. J. map. Townsend Inlet has been retained. There is a small town on the north side of the Inlet. The postoffice name is Townsend Inlet. Townsend Channel appears on the Chart This is shown as Main Channel on the State map and on the Geological Quad. The name has been changed to Main Channel on the overlay. Kitts Thorofare, and Uncle Aarons Creek are from the N. J. map* and

* State of N.J. Dept. of Conser & Develop. No 37
on file in Geog. Names.

should be added to the Chart. Leonard Thorofare and Graven Thorofare are shown with a S on the N. J. map. The S has not been added on the overlay. Middle Thorofare appears as Middle Channel on the N. J. map and on the U. S. Geological quad. Middle Channel is recommended and appears on the overlay.

COMPARISON WITH OTHER SURVEYS:

Satisfactory junctions have been made with sheet No. 5644 on the northeast, with sheet No. 5650 on the northwest, and with sheet No. 5646 on the southwest.

LANDMARKS:

A list of marked topographic stations is submitted with this report. A list of landmarks for charts will be submitted as a separate report for the project at the end of the season. *This list of landmarks has been submitted and is filed as chart letter 751-1936*

BRIDGES:

The following data on bridges is from field inspection notes:

LOCALITY	TYPE	LAT	LONG	VERT. CLEAR	HOR. CLEAR
Ingram Thoro.	Hand Swing	39° 06.5'	74° 44.0'	*7.5 Ft.	50 Ft Both
Leonard Thoro	Fixed	39° 07.0	74° 45.0'	4.0	11 Ft
Avalon	Fixed	39° 06.2	74° 43.2	4.0	20 Ft
Avalon	Fixed	39° 06'	74° 43.4'	4.0	14 Ft.

* Several errors have been found in clearance values in this locality as given by U.S. Engineers, therefore the values here given, which are RECOMMENDATIONS FOR FURTHER SURVEYS: *field measurements, will be used.* R.E.A.

It is believed that the probable error in the detail of importance will not exceed .3MM, and for other detail that the error will not exceed .6 MM.

This survey is thorough and complete for charting purposes, and no further surveys are needed at this time.

Submitted by

F. H. McBeth
F. H. McBeth

Assisted by

E. H. Kirsch

E. H. Kirsch

Chief of Party NO. 21.

Remarks

Decisions

1	Seaville Camp or South Seaville on Prog. Mil. Quad.	
2		
3		
4		
5	on Prog. Mil. Quad.	
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16	Swanton of Prog. Mil. Quad.	
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-5645

Name on Survey	A	B	C	D	E	F	G	H	K	
	On Chart No. 1217	On previous survey No. T147	On U. S. quadrangle Maps	From local information	State of N.J. On local Maps Cons. & Develop. Map No. 37	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>South Seaville</u> ✓			Seaville		✓	✓				1
<u>Timber and Beaver</u>			✓							2
<u>Swamp</u> ✓					✓					3
<u>Cedar Grove</u> ✓			✓		✓					4
<u>Clermont</u>					✓				✓	5
<u>Townsend Sound</u> ✓	✓	Townsend Sound	✓		✓				✓	6
<u>Mill Creek</u> ✓		✓	✓		✓					7
<u>Ware Thorofare</u>			✓		✓				✓	8
<u>Ludlam Thorofare</u> ✓		Ludlam Thoro	✓		✓				Ludlam's Thoro	9
<u>Uncle Aaron's Creek</u>					✓					10
<u>Mud Thorofare</u> ✓			✓		✓					11
<u>Mill Thorofare</u> ✓	✓	Weir Thoro	✓		✓				✓	12
<u>Townsend Channel</u> ✓	✓	Townsend channel	Main Channel		Main chan.				Main channel	13
<u>Sea Isle City</u>	✓		✓		✓	✓				14
<u>Swain</u> ✓			✓		✓					15
<u>Swainton</u> ✓			Townsend channel		✓				✓	16
<u>Stites Sound</u> ✓	✓	Stites Sound	✓		✓				✓	17
<u>Bottle Creek</u>			✓		✓					18
<u>Kitts Thorofare</u> ✓			✓		✓					19
<u>North Channel</u> ✓			✓		✓				✓	20
<u>Middle Thorofare Channel</u> ✓	Middle Thoro	Middle Thoro	✓		Middle chan				✓	21
<u>Townsend Inlet</u> ✓	✓	Townsend Inlet	✓			✓			Townsend Inlet	22
<u>Atlantic Ocean</u> ✓										23
<u>Dead Thorofare</u> ✓		✓							✓	24
<u>Leonard Thorofare</u> ✓		Leonard Thoro							✓	25
<u>South Channel</u> ✓	✓	✓	✓		✓				✓	26
<u>Ingram Thorofare</u> ✓	✓	Ingram Thoro	✓		Ingram's Thoro				Ingram's Thoro	27

Remarks

Decisions

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		see Boro of Avalon
23		Building Zone Map.
24		File SM # 21
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-5645

Name on Survey	A On Chart No. 1217	B On previous survey No. T-147	C On U. S. quadrangle Maps	D From local information	E 572 ^{1/2} No. of N. J. On local Maps No. 37	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
<u>Graven Thorofare</u> ✓	✓	Gravens Thoro	Gravens Thoro		Gravens Thoro				Gravens Thoro	1
<u>Avalon</u>	✓				✓	✓			✓	2
<u>Peermont</u> ✓	✓				✓	✓				3
										4
Add.										5
<u>Granny Creek</u> ✓			✓							6
<u>Jonadab Creek</u> ✓			✓							7
<u>Townsend Dulet</u> (de Paroffia) ✓						Townsend Dulet			Townsend Dulet	8
<u>Scrappy Creek</u> ✓									✓	9
<u>Crab Creek</u> ✓		✓							Sunk's Cr.	10
<u>Leaming's Creek</u> ✓		✓								11
<u>Clem's Thorofare</u> ✓		✓								12
<u>Sunk Creek</u> ✓		Sunk's Cr.							Sunk's Cr.	13
										14
										15
										16
										17
										18
										19
										20
Add. App'd for Air Photo Comp.					3/24/37	GFE				21
<u>Princeton Hbr</u>										22
<u>Pennsylvania Hbr</u>										23
<u>Cornell Hbr</u>										24
										25
										26
										27

Names underlined in red approved
by K.T.A. on 12/7/36

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 H. H. Schleiter

Points used for plotting grid:

x 1,965,000 ft
y 125,000

x 1,985,000
y 100,000

Offset from Avalon 1935 (ref. sta.)

x 1,965,000
y 110,000

x
y

x 1,995,000
y 110,000

x
y

x 1,980,000
y 110,000

x
y

Triangulation stations used for checking grid:

Avalon 1932, ref. sta. $x = 1,986,537.80'$ $y = 99,403.07'$

- | | |
|-------------------------|----------|
| 1. <u>Sea Isle 1932</u> | 5. _____ |
| 2. <u>Townsend 1932</u> | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

T 5645

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE

N. J.

STATION

x	1,965,000	$\log S_o$	4.54406779
K		$\log (1200/3937)$	9.48401583
$x' (=x-K)$	-35000	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_o$	0.02	$\log S_m$	4.02809448
S_o	-34999.98	cor. arc to sine	20
		$\log S_1$	4.02809428
$3 \log x'$	13.6323	$\log A$	8.50913923
$\log 1/(6\rho_o^2)_o$	4.5810	$\log \sec \phi$	0.11058406
$\log x'^3/(6\rho_o^2)_o$	8.2133	$\log \Delta\lambda_1$	2.64781757
		cor. sine to arc	+ 34
$\log S_m^2$	8.056189	$\log \Delta\lambda$	2.64781791
$\log C$	1.315700	$\Delta\lambda$	444.4449
$\log \Delta\phi$	9.371889		
y	125,000		
ϕ' (by interpolation)	39° 10' 35.5600	λ (central mer.)	74° 40' "
$\Delta\phi$	0.2354	$\Delta\lambda$	- 7 24.4449
ϕ	39 10 35.3246	λ	74 47 24.4449

108.93 mm. ✓

58.68 mm ✓

Explanation of form:

$$x' = x - K$$

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

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

R = scale reduction factor

ϕ' is interpolated from table of y

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

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

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

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

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

$$\lambda = \lambda \text{ (central mer.)} - \Delta\lambda$$

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N.J. STATION _____

x	1965 000	$\log S_0$	
K	-	$\log (1200/3937)$	9 . 4 8 4 0 1 5 8 3
$x' (=x-K)$	-35 000	$\log (1/R)$	
$x'^3/(6\rho_0^2)_0$	-	$\log S_m$	
S_0		cor. arc to sine	-
		$\log S_1$	4.02809428
$3 \log x'$		$\log A$	8.50914027
$\log 1/(6\rho_0^2)_0$		$\log \sec \phi$	0.11032987
$\log x'^3/(6\rho_0^2)_0$		$\log \Delta\lambda_1$	2.64756442
	8.056189	cor. sine to arc	+ 34
$\log S_m^2$	6.365993	$\log \Delta\lambda$	2.64756476
$\log C$	1.315066	$\Delta\lambda$	444.1859
$\log \Delta\phi$	9.371255		
y	110 000		
ϕ' (by interpolation)	39° 08' 07.2967	λ (central mer.)	74° 40' "
$\Delta\phi$	- 0.2351	$\Delta\lambda$	- 7 24.1859
ϕ	39 08 07.0616	λ	74 47 24.1859

21.80 mm. ✓

58.09 mm. ✓

Explanation of form:

$$x' = x - K$$

$$S_0 = x' - \frac{x'^3}{(6\rho_0^2)_0}$$

$$S_m = \frac{1}{R} \left(\frac{1200}{3937} \right) S_0$$

R = scale reduction factor

ϕ' is interpolated from table of y

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

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

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

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

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

$$\lambda = \lambda (\text{central mer.}) - \Delta\lambda$$

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N.J. STATION _____

x	<u>1995000</u>	$\log S_0$	<u>3.69897000</u>
K		$\log (1200/3937)$	<u>9.48401583</u>
$x' (=x-K)$	<u>-5000</u>	$\log (1/R)$	<u>1086</u>
$x'^3/(6\rho_0^2)_0$		$\log S_m$	<u>3.18299669</u>
S_0	<u>-5000</u>	cor. arc to sine	
		$\log S_1$	<u>3.18299669</u>
$3 \log x'$	<u>11.0970</u>	$\log A$	<u>8.50914027</u>
$\log 1/(6\rho_0^2)_0$	<u>4.5810</u>	$\log \sec \phi$	<u>0.11033026</u>
$\log x'^3/(6\rho_0^2)_0$	<u>5.6780</u>	$\log \Delta\lambda_1$	<u>1.80246722</u>
		cor. sine to arc	<u>+ 1</u>
$\log S_m^2$	<u>6.365993</u>	$\log \Delta\lambda$	<u>1.80246723</u>
$\log C$	<u>1.315066</u>	$\Delta\lambda$	<u>63.4552</u>
$\log \Delta\phi$	<u>7.681059</u>		
y	<u>110000</u>		
ϕ' (by interpolation)	<u>39° 08' 07.2967</u>	λ (central mer.)	<u>74° 40' "</u>
$\Delta\phi$	<u>.0048</u>	$\Delta\lambda$	<u>- 1 03.4552</u>
ϕ	<u>39 08 07.2919</u>	λ	<u>74 41 03.4552</u>

22.49 mm.

8.30 mm.

Explanation of form:

$$x' = x - K$$

$$S_0 = x' - \frac{x'^3}{(6\rho_0^2)_0}$$

$$S_m = \frac{1}{R} \left(\frac{1200}{3937} \right) S_0$$

R = scale reduction factor

ϕ' is interpolated from table of y

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

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

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

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

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

$$\lambda = \lambda \text{ (central mer.)} - \Delta\lambda$$

T 5645

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE _____ STATION _____

x	1980000	$\log S_e$	4.30103000
K		$\log (1200/3937)$	9.48401583
$x' (=x-K)$	-20000	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_e$	—	$\log S_m$	3.78505669
S_e		cor. arc to sine	7
		$\log S_1$	3.78505662
$3 \log x'$	12.9030	$\log A$	8.50914027
$\log 1/(6\rho_o^2)_e$	4.5810	$\log \sec \phi$	0.11033014
$\log x'^3/(6\rho_o^2)_e$	7.4840	$\log \Delta\lambda_1$	2.40452703
		cor. sine to arc	+ 11
$\log S_m^2$	7.570113	$\log \Delta\lambda$	2.40452714
$\log C$	1.315066	$\Delta\lambda$	253.8208
$\log \Delta\phi$	8.885179		
y	110000		
ϕ' (by interpolation)	39° 08' 07.2967	λ (central mer.)	74° 40' "
$\Delta\phi$	— 0.0768	$\Delta\lambda$	- 4 13.8208
ϕ	39 08 07.2199	λ	74 44 13.8208

22.26 min.

33.19 min

Explanation of form:

$$x' = x - K$$

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

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

R = scale reduction factor

ϕ' is interpolated from table of y

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

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

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

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

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

$$\lambda = \lambda \text{ (central mer.)} - \Delta\lambda$$

cht 827
2.6.

Data Record

Triangulation to 1935

Photographs to 1933

Field Inspection to 1936

All detail on this compilation is of the date of the

1932 photographs (Listed on Page 1) except for the following:

The detail immediately along the outer coast
and extending for about $\frac{1}{2}$ mile inland is of the
date of the photographs taken Jan. 23, 1933.
The outer coast mean high water line was determined
by field inspection August 3, 1936

B. J. Jones

X

OFFICE
REVIEW OF AIR PHOTO COMPILATION T-5645

See page opposite for data record.

Comparison with Previous Topographic Surveys

This compilation, T-5645, is adequate to supersede the previous topographic surveys in this area over the common area, except as noted below:

T-147 (1842)	1:10,000
T-1597 (1885)	1:20,000, Except for form lines
T-2453 (1899)	1:20,000
H-2165 (1891)	1:20,000

There is good general shoreline agreement with numerous changes in detail between these old surveys and T-5645, as far as interior waterways are concerned, but a considerable shift in outer coastline in the vicinity of Townsend Inlet has occurred during the past 100 years. Since T-147 (1842) is on the same scale as this photo compilation, the changes can readily be seen by placing T-147 under the celluloid sheet.

Hydrographic and graphic control surveys as requested for hydrographic control are contemplated for this area in 1937. Corrections and additions to T-5645 as a result of these surveys will be made when this work is completed.

Comparison with Charts 1217 and 3243.

This compilation shows numerous corrections to shoreline and interior detail on the present charts.

See page 3 of Descriptive Report regarding landmarks.

Determination of Low Water Line.

A strip of outer coast photographs Nos. M(182 to 191) 871-14 taken at 12:30 P. M. on Jan. 23, 1933, for the U. S. Beach Erosion Board, were used to determine the low water line. The photographs were taken at approximate low tide.

These photographs were not used in the radial plot but were used for examination of detail along the coast line.

Feb. 12, 1936.

R. E. Ask.

R. E. Ask
v. B. G. Jones

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: E. H. Kirsch

Compiled by: F. H. McBeth

Project: H. T. 205

Instructions dated: May 16th, 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."

- ✓ 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* and the reference station is correctly noted. *adjusted*
- ✓ 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.~~ *for the pronounced brush symbol used around field and marsh areas and the symbol labeled*
 2. The degrees and minutes of Latitude and Longitude are correctly marked.

The Brush symbol as used around the fields is too pronounced and is not recommended for general use.

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:
See following sheet.

Reviewed in office by: R. E. Ask *B. G. Jones*

Examined and approved:

C. K. Green
Chief, Section of Field Records
L. O. Solbert
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work
W. H. Hulse
Chief, Division of Hydrography
and Topography.

Report T 5645 Supplemental

Corrections in red applied by J. A. Ferguson and checked by E. W. Frederick 5/19/30 from the following sources:

a. Plane table survey of September, 1937 (Field No. 11). Office No. C 5 113 M. All details within the area of T 5645 applied except:

1. Magnetic meridian.
2. Temporary plane table stations.
3. Certain Recoverable plane table stations.

A large number of recoverable stations were located and described on C 5 113 M.

More than desirable to show on T 5645 because of congestion of detail.

Also a number of the descriptions were unnecessary as the stations could be recovered without the descriptions.

Only a selected number of the recoverable stations ~~are~~ have been transferred to T 5645. Only those descriptions needed for the recovery of the stations have been put in the regular files. The remainder are filed in report envelope C 5 113 M.

at lat. $39^{\circ}07'$ long $74^{\circ}42.8'$ the shoreline has been corrected in accordance to C 5 113 M and report C 5 113 M. This does not agree with the appearance on the photos but C 5 113 M is of a later date and the photos are without field inspection at this point.

b. Plane table survey of September 1937 (Field No. #1). Office No. C 5 114 M. Same statement applies as under items 1, 2, and 3, for C 5 113 M above.

(over)

C. H 6231 1937 - Examined in connection
with Supplemental T 5645. No
discrepancies noted.

Note The sanding shown in red on T 5645
supplemental is outside the H & W line at
N. side of Townsend inlet is not the T.W.
line and was not surveyed in the field
It has been drawn in the office merely to
end the sanding line brought down the
outer coast without breaking it off
abruptly.

Bgg.

X

X