9 Form 524 descriptions filed

5650

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

Air Photo Field 17

Topographic } Sheet No. Reg. 5650
~~Hydrographic~~

State New Jersey

LOCALITY

~~N. J. Coast, Delaware Bay~~

~~Dennis Creek to Dias Creek~~

Goshen and Vicinity

Photographs — 1952
Field Inspection — 1936
Compiled — 1936

~~1936~~

CHIEF OF PARTY

E. H. Kirsch

U.S. GOVERNMENT PRINTING OFFICE: 1934

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. 17

REGISTER NO. 5650 **T5650**

State New Jersey

General locality ~~N. J. Coast~~ Delaware Bay

Locality ~~Dennis Creek to Dias Creek.~~ Goshen and Vicinity
Photographs 4-18-32

Scale 1:10 000 Date of survey Compilation Oct., 19 36

Vessel Air Photo Party No. 21.

Chief of party E. H. Kirsch

Surveyed by See data sheet in the descriptive report.

Inked by Ralph L. Fisher

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

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

Instructions dated May 16th, 1935, 19

Remarks: None.

OFO

SHEET FIELD NO. 17

REGISTER NO. 5650

Photo Nos.	Date
66-9-29	4-19-32
66-7-65 to 73	4-18-32
66-7-97 to 98	4-18-32
66-7-13 to 20	4-18-32

Projection By	L. C. Ripley 5-9-35
Projection Checked By	T. B. Nutting 5-9-35
Control Plotted By	E. J. Anderson 1935
Control Checked By	P. W. Hund 1935
Control Plotted on Photographs By	E. H. Kirsch Aug. 1936
Control Checked on Photographs By	R. L. Fisher Oct. 1936
Smooth radial plot By	E. H. Kirsch Sept. 1936
Smooth radial plot Checked By	R. L. Fisher Oct. 1936
Detailed By	R. L. Fisher Oct. 1936

STATISTICS

Land area detailed 23.3 square statute miles
Length of Coast Line 5.8 Statute Miles
Length of Shore Line 0 (More than 200 meters wide)
Length of Shore Line 20.6 (Less than 200 meters wide)

Ref. Sta.: Goshen, 1932

Datum: N.A. 1927. 39° 08' 13.308 (410.4 m)
74° 51' 12.195 (292.9 m)

N.J. Grid Coord. x = 1,947,035.12
y = 110,662.64

GENERAL INFORMATION

STATISTICS

This sheet covers a land area of 23.3 square statute miles. There are 5.8 statute miles of coast line, 0.0 statute miles of shore line as measured along streams and bays more than 200 meters wide and 20.6 statute miles if streams less than 200 meters in width.

GENERAL REPORT:

This sheet is a continuation of compilations to the south and east and covers the area on Delaware Bay from Dennis Creek to Dias Creek. Outside of a few small towns the sheet consists of farm lands, Marsh and small timbered areas. The area is very flat and is but a few feet above sea level.

The area adjacent to Delaware Bay is marshy and is subject to erosion. There is a narrow sand beach from the southern end of the sheet to Bidwells Ditch, but north of there in most cases the marsh grass extends to the low water line.

PHOTOGRAPHS:

This sheet was compiled from parts of four flights of single lens, 1:10 000 scale aerial photographs, taken by the Aero Service Corp. of Philadelphia, Pa.

Photo No. 66-9-29 covers the north west edge of the compilation.

Photos No. 66-7-65 to 73 cover the western half of the sheet and run parallel to the coast line.

Photos No. 66-7-97 to 98 cover the north eastern edge of the compilation

Photos. No. 66-7-13 to 20 run from the south eastern to the northern edges of the compilation.

Practically all of the photographs are of good scale and free from excessive tilt.

CONTROL

SOURCES:

Triangulation by C. D. Meaney, 1932. Triangulation by Robinson, 1933. Traverse by Air Photo Party No. 21. 1936. The traverse runs from J. A. Bonds triangulation station MAY to C. D. Meaneys triangulation station GOSHEN, and the field computations of this traverse are submitted with this report. The only marks left in the field are six N. J. Geodetic control Survey marks which were tied in with this traverse.

CONTROL

ERRORS:

No errors in the control were found.

COMPILATION

METHOD:

The usual radial line method as described in "Notes on the compilation of planimetric line maps from five lens aerial photographs" was used in compiling this sheet.

ADJUSTMENTS OF THE PLOT:

No unusual adjustments of the plot were necessary.

INTERPRETATION:

The time at which the pictures were taken was not known and therefore the stage of the tide at the time of the photos were taken could not be ascertained. As the photos were four years old at the time oft the compilation it was deemed necessary to field inspect the entire Coast line. Measurements were taken from points that could be clearly seen on the photographs such as ditches and ponds. It is believed that the coast line as shown is correct for the present date. THE DATE OF THE FIELD INSPECTION WAS OCTOBER 8th, 1936.

The photos were generally clear and no unusual difficulty was encountered in interpreting the detail.

INFORMATION FROM OTHER SOURCES:

In all cases where it was determined that changes had been made in piers, docks etc. since the photos were taken, field measurements were taken and the present shape and condition were shownon the compilation.

There is a civilian conservation camp at Lat. 39° 06.3' and Long. 74° 52.7' which does not appear on the photos. This was added to the compilation from a map obtaimed from the commanding officer and from field inspection notes.

At the mouth of Bidwells Ditch jetties are being constructed. These were shown on the compilation in their finished state as the construction work on them will be finished this fall. The position of these jetties was determined by field inspection notes and by information obtained from the N. J. Board of Commerce and Navigation.

CONFLICTING NAMES:

All names in ink on the overlay sheet were taken from U. S. C. & G. S. Chart No. 1218, N. J. Department of Conservation and Development Atlas Sheet No. 37, and U. S. Geological Sheet (DENNISVILLE)

The railroad cutting across the North east corner of the compilation is now known as the Pennsylvania Reading Seashore Lines. This name was verified by the railroad officials. It was shown on the chart No. 1218 as the Atlantic City R. R.

Reeds Beach (Lat. 39° 07' Long. 74° 53') is a new name for a small settlement. It was verified by field inspection, local residents, highway signs, State highway maps, and N. J. Department of Conservation and Development Atlas Sheet No. 37. It also appears in the telephone book. As this is a well established name it is recommendadethat it be added to the charts covering this area and that the name (THE HUMMOCKS) shown on chart No. 1218 be expunged. Hummock means a small elevation, and this area is very flat. The field inspection party states that THE HUMMOCKS is not used by local residents and is unknown to them.

OLD ROBINS BRANCH (Lat. 39° 11' Long. 74° 52.5'), CROW CREEK (Lat. 39° 10' Long. 74° 51') and SLUICE CREEK (Lat. 39° 10' Long. 74° 50') are new names for small streams. They appear on U. S. Geological Survey Quad. (DENNISVILLE) and N. J. Department of Conservation and Development Atlas Sheet No. 37. They were verified by the field inspection party. The name SLUICE CREEK also appears on a State highway marker.

BIDWELLS DITCH (Lat. 39° 07' Long. 74° 52') is a new name verified by the field inspection party. It also appears on a State highway marker.

South DENNIS (a town at the N. E. corner of the compilation) was verified by field inspection party. It appears in the telephone book, on highway signs and on the N. J. Department of Conservation and Development Atlas sheet No. 37.

COMPARISON WITH OTHER SURVEYS:

Satisfactory junctions have been made with sheets No. 12, Reg. No. 5645 on the north east; No. 13, Reg. 5646 on the southeast; and sheet No. 16, Reg. 5649 on the south. Sheets to the north and northwest have not yet been started.

LANDMARKS:

A list of marked recoverable stations has already been submitted. There are no landmarks for charts on this sheet.

BRIDGES:

There are no bridges of importance to navigation on this compilation.

The Sluice Creek bridge (Lat. 39° 09.7' Long. 74° 49.9') is a fixed concrete girder bridge. Ver. Clearance 2.0 feet above M. H. W. Hor. Clearance 28.2 feet.

The Bidwells Ditch bridge (Lat. 39°07' LOng. 74° 52') is a fixed steel girder bridge. Vert Clearance 3.0 feet above M. H. W. Hor. Clearance 60.0 feet.

The trails leading into the marsh are used by local farmers to haul salt hay and are not passable for automobiles. The small streams are bridged

by logs with cross planks. These are shown on the compilation as in most cases they are the only means of access to the marsh areas.

RECOMMENDATION FOR FURTHER SURVEYS:

This compilation is believed to have a probable error of not more than .3 MM in position of well defined detail for charting and not more than .6 MM for other detail.

To the beat of my knowledge this sheet is complete in all detail for charting and no additional topographic surveys are necessary.

Assisted By

E. H. Kirsch

E. H. Kirsch
Chief of Party, No. 21.

Submitted By

Ralph L. Fisher

	Remarks	Decisions
1		
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GEOGRAPHIC NAMES

Survey No. T-5650

Name on Survey	A: On Chart No. 1218	B: On previous survey No. T-154, T-153	C: On U.S. quadrangle Maps	D: From local information	E: N.J. On local Maps, Cape & Bay #37	F: P.O. Guide or Map	G: Rand McNally Atlas	H: U.S. Light List	K	
Old Robins Branch			✓		✓					1
Dennis Creek	✓	✓	✓		✓					2
Crow Creek			✓		✓					3
Sluice Creek		Mill Cr.	✓		✓					4
South Dennis		Dennis-ville	So. Dennis-ville		S.D.	✓	✓			5
Delaware Bay	✓		✓		✓					6
Goshen Creek	✓		✓		✓					7
Goshen	✓	✓	✓		✓	✓				8
Reeds Beach					✓					9
Bidwell Ditch		Goshen Cr. (upper End)								10
										11
										12
										13
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										27

Names underlined in red approved by GFE on 12/17/36

M 234

M-350

T-5650

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. Gollo

Points used for plotting grid:

x 1,940,000 ft y 125,000	x 1,940,000 y 105 000
x 1,955,000 y 125 000	x y
x 1,925,000 y 105,000	x y
x 1,940,000 y 95,000	x y

Triangulation stations used for checking grid:

X = 1,947,035.12 Y = 110,662.64

1. Goshen 1932 (ref. sta.)
2. Dennis Creek Rear Range Light 1933
3. Dennis Creek Front Range Light 1933
4. Reeds 1933
5.
6.
7.
8.

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

T-5650

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	1,940,000.00	$\log S_g$	4.7781506 7
K	2,000,000.00	$\log (1200/3937)$	9.4840 1583
x' $(=x-K)$	- 60,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	- .08	$\log S_m$	4.2621 7736
S_g	59,999.92	cor. arc to sine	- 59
		$\log S_1$	4.2621 7677
3 $\log x'$	14.3344 5375	$\log A$	8.5091 3924
$\log 1/(6\rho_o^2)_g$	4.5810 213	$\log \sec \phi$	0.1105 8327
$\log x'^3/(6\rho_o^2)_g$	8.9154 7750	$\log \Delta\lambda_1$	2.8861 8992 8
		cor. sine to arc	+ 99
$\log S_m^2$	8.5243 5472	$\log \Delta\lambda$	2.8861 9002 7
$\log C$	1.3157 00	$\Delta\lambda$	761.9040
$\log \Delta\phi$	9.8400 55		
y	125,000.00		
ϕ' (by interpolation)	39 10 35.5601	λ (central mer.)	74 40
$\Delta\phi$	- .6919	$\Delta\lambda$	12 41.9040
ϕ	39 10 34.8682	λ	74 52 41.9040
	107.53 mm		100.60 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—11601

Form No. 743
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1935

T-5650

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	1,955,000.00	$\log S_g$	4.653212 22
K	2,000,000.00	$\log (1200/3937)$	9.484015 83
x' $(=x-K)$	- 45,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	- .02	$\log S_m$	4.137238 91
S_g	44,999.97	cor. arc to sine	- 33
		$\log S_1$	4.137238 58
$3 \log x'$	13.954963753	$\log A$	8.509139 23
$\log 1/(6\rho_o^2)_g$	4.581021 3	$\log \sec \phi$	0.110583 79
$\log x'^3/(6\rho_o^2)_g$	8.540654 88	$\log \Delta\lambda_1$	2.756961 60
		cor. sine to arc	+ 56
$\log S_m^2$	8.274477 82	$\log \Delta\lambda$	2.756962 16
$\log C$	1.315700	$\Delta\lambda$	571.4288
$\log \Delta\phi$	9.590178		
y	125,000.00		
ϕ' (by interpolation)	39° 10' 35.5601"	λ (central mer.)	74° 40'
$\Delta\phi$	- .3892	$\Delta\lambda$	9' 31.4288"
ϕ	39° 10' 35.1709"	λ	74° 49' 31.4288"
	108.46 mm		75.45 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

T-5660

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	1,925,000.00	$\log S_g$	4.875060 33
K	2,000,000.00	$\log (1200/3937)$	9.484015 83
x' $(=x-K)$	− 75,000.00	$\log (1/R)$	.1086
$x'^3/(6\rho_o^2)_g$	− .16	$\log S_m$	4.359087 02
S_g	74,999.84	cor. arc to sine	− 93
		$\log S_1$	4.359086 09
3 log x'	14.625183 78	$\log A$	8.509140 62
$\log 1/(6\rho_o^2)_g$	4.554102 13	$\log \sec \phi$	0.110243 76
$\log x'^3/(6\rho_o^2)_g$	9.207205 1	$\log \Delta\lambda_1$	2.978447 047
		cor. sine to arc	+ 154
$\log S_m^2$	8.718174 04	$\log \Delta\lambda$	2.978447 201
$\log C$	1.314855	$\Delta\lambda$	951.6385"
$\log \Delta\phi$	0.033029		
y	105,000.00		
ϕ' (by interpolation)	39° 07' 17.8754"	λ (central mer.)	74° 40'
$\Delta\phi$	− 1.0790	$\Delta\lambda$	15' 51.6385"
ϕ	39° 07' 16.7964"	λ	74° 55' 51.6385"
	51.80 mm		124.05 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

T- 5650

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	1,940,000.00	$\log S_g$	4.77415067
K	2,000,000.00	$\log (1200/3937)$	9.48401583
x' $(=x-K)$	−60,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	− .08	$\log S_m$	4.26217736
S_g	59,999.92	cor. arc to sine	− 59
		$\log S_1$	4.26217677
3 log x'	14.33445375	$\log A$	8.50914131
$\log 1/(6\rho_o^2)_g$	4.54102 13	$\log \sec \phi$	0.11007526
$\log x'^3/(6\rho_o^2)_g$	8.91547 50	$\log \Delta\lambda_1$	2.88139334
		cor. sine to arc	+ 99
$\log S_m^2$	8.52435472	$\log \Delta\lambda$	2.88139433
$\log C$	1.31443 3	$\Delta\lambda$	761.0170
$\log \Delta\phi$	9.83878 8		
y	95,000.00		
ϕ' (by interpolation)	39 05 39.0324	λ (central mer.)	74 40
$\Delta\phi$	− .6899	$\Delta\lambda$	12 41.0170
ϕ	39 05 38.3425	λ	74 52 41.0170
	118.24 mm		98.59 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—11621

Form No. 743
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ed. May 1935

T-5660

GEODETIC POSITIONS FROM TRANSVERSE MERCATOR COORDINATES

STATE N. J. STATION

x	1,940,000.00	$\log S_g$	4.77815067
K	2,000,000.00	$\log (1200/3937)$	9.48401583
x' $(=x-K)$	− 60,000.00	$\log (1/R)$	1086
$x'^3/(6\rho_o^2)_g$	− .04	$\log S_m$	4.26217736
S_g	59,999.92	cor. arc to sine	− 59
		$\log S_1$	4.26217677
$3 \log x'$	14.33445375	$\log A$	8.50914062
$\log 1/(6\rho_o^2)_g$	4.58102133	$\log \sec \phi$	0.11024493
$\log x'^3/(6\rho_o^2)_g$	8.91547508	$\log \Delta\lambda_1$	2.88156182
		cor. sine to arc	+ 99
$\log S_m^2$	8.52435472	$\log \Delta\lambda$	2.88156281
$\log C$	1.31455	$\Delta\lambda$	761.3122
$\log \Delta\phi$	9.83921 0		
y	105,000.00		
ϕ' (by interpolation)	39° 07′ 17.87564″	λ (central mer.)	74° 40′ ″
$\Delta\phi$	− .6906	$\Delta\lambda$	12 41.3122
ϕ	39 07 17.1848	λ	74 52 41.3122
	53.00 mm.		99.25 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

Sta	Objects	∠	Dist to next sta.					
Mag	Channel / T.P.1	180-05-45.2	741.65	T.P.11	T.P.10 T.P.12	202-47-30.8	476.68	
T.P.1	Mag T.P.2	182-24-31.2	821.47	T.P.12	T.P.11 T.P.13	175-04-42.1	943.85	
T.P.2	T.P.1 T.P.3	228-22-30.4	1339.28	T.P.13	T.P.12 T.P.14	147-44-02.9	321.96	
T.P.3	T.P.2 T.P.4	112-56-36.7	530.41	T.P.14	T.P.13 T.P.15	149-29-44.2	423.67	
T.P.4	T.P.3 T.P.5	251-08-25.8	1465.48	T.P.15	T.P.14 T.P.16	197-24-06.2	387.31	
T.P.5	T.P.4 T.P.6	179-54-52.4	1967.21	T.P.16	T.P.15 Goshen	120-07-34.2	111.07	
T.P.6	T.P.5 T.P.7	187-55-30.0	3873.07	Goshen	T.P.16 R.M.2	284-31-04.2		
T.P.7	T.P.6 T.P.8	147-44-10.8	520.42					
T.P.8	T.P.7 T.P.9	66-45-7.9	1218.53					
T.P.9	T.P.8 T.P.10	201-39-29.2	390.74 ~~308.49~~					
T.P.	T.P.9 T.P.11	150-24-37.5	767.43					

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 May	to 3 Channel	305	23	07.2
2d ∠		&	+180	05	45.2
α	2 May	to 1 T.P.1	125	28	52.4
Δα				−	15.8
			180	00	00.0
α′	1 T.P.1	to 2 May	305	28	36.6

			°	′	″
α	3 T.P.1	to 2 May	305	28	36.6
3d ∠		&	+182	24	31.2
α	3 T.P.1	to 1 T.P.2	122	53	07.8
Δα				−	17.0
			180	00	00.0
α′	1 T.P.2	to 3 T.P.1	307	52	50.8

First Angle of Triangle

	°	′	″			°	′	″
φ	39	04	42.764	2 May	λ	74	48	15.323
Δφ		+	13.959	741.65	Δλ		+	25.126
φ′	39	04	56.723	1 T.P.1	λ′	74	48	40.449

	°	′	″			°	′	″
φ	39	04	56.723	3 T.P.1	λ	74	48	40.449
Δφ		+	16.357	821.47	Δλ		+	26.976
φ′	39	05	13.080	1 T.P.2	λ′	74	49	07.425

	Logarithms	Values in seconds
s	2.870199	+1749.1
Cos α	9.763754	−101.1
B	8.510922	
h	1.144875	1st term 13.959
s²	5.7404	
Sin²α	9.8216	
C	1.3142	
	6.8762	2d term +.0008
h²		
D		
		3d term +
		−Δφ 13.959

	°	′	″	Logarithms	Values in seconds
½(φ+φ′)	39-04-49.7				
s				2.870199	+972.2
Sin α				9.910787	+ −469.9
A′				8.509142	
Sec φ′				0.110004	
Δλ				1.400132	25.1265
Sin ½(φ+φ′)				9.799623	
−Δα				1.199755	15.8

	Logarithms	Values in seconds
s	2.914592	+403.3
Cos α	9.788229	− −1447.0
B	8.510921	
h	1.213742	1st term 16.358
s²	5.8292	
Sin²α	9.7944	
C	1.3142	
	6.9378	2d term +.001
h²		
D		
		3d term +
		−Δφ 16.357

	°	′	″	Logarithms	Values in seconds
½(φ+φ′)	39-05-04.9				
s				2.914592	
Sin α				9.897208	+ 178.4
A′				8.509142	−1263.7
Sec φ′				0.110032	
Δλ				1.430974	26.976
Sin ½(φ+φ′)				9.799663	
−Δα				1.230637	17.0

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

(2)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P.2 to 3 T.P.1		307	52	50.8
2d ∠	&		+228	22	30.4
α	2 T.P.2 to 1 T.P.3		77.6	15	21.2
Δα					−2.3
			180	00	00.0
α′	1 T.P.3 to 2 T.P.2		356	15	18.9

			°	′	″
α	3 T.P.3 to 2 T.P.2		356	15	18.9
3d ∠	&		+112	56	36.7
α	3 T.P.3 to 1 T.P.4		109	11	55.6
Δα					−13.1
			180	00	00.0
α′	1 T.P.4 to 3 T.P.3		289	11	42.5

First Angle of Triangle

	°	′	″			λ	°	′	″
φ	39	05	12.080	2 T.P.2		λ	74	49	07.425
Δφ		+	43.338	1339.28		Δλ		+	3.639
φ′	39	05	56.418	1 T.P.3		λ′	74	49	11.064

	°	′	″			λ	°	′	″
φ	39	05	56.418	3 T.P.3		λ	74	49	11.064
Δφ		+	5.656	530.41		Δλ		+	20.846
φ′	39	06	02.074	1 T.P.4		λ′	74	49	31.910

	Logarithms	Values in seconds
s	3.126 871	+1739.8
Cos α	9.999 072	−110.4
B	8.510 921	
h	1.636864	1st term 43.338
s²	6.2537	
Sin²α	7.6298	
C	1.5143	
	5.1978	2d term +
h²		
D		3d term +
		−Δφ −43.338

	°	′	″	Values in seconds
½(φ+φ′)	39	05	34.8	
s	Logarithms 3.126 871			
Sin α	8.814917			+265.9
A′	8.509141			−1175.9
Sec φ′	0.110107			
Δλ	0.561036			3.6394
Sin ½(φ+φ′)	9.799 740			
−Δα	0.360776			2.3

	Logarithms	Values in seconds
s	2.724612	+63.9
Cos α	9.516993	−1786.4
B	8.510920	
h	0.752525	1st term 5.6562
s²	5.4492	
Sin²α	9.9502	
C	1.3145	
	6.7139	2d term +.0005
h²		
D		3d term +
		−Δφ −5.656

	°	′	″	Values in seconds
½(φ+φ′)	39	05	59.2	
s	Logarithms 2.724612			
Sin α	9.975 148			+766.8
A′	8.509.141			(675.0)
Sec φ′	0.110116			
Δλ	1.319017			20.846
Sin ½(φ+φ′)	9.799 804			
−Δα	1.118821			13.1

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

(3)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P.4	to 3 T.P.3	289	11	42.5
2d ∠		&	+251	08	25.8
α	2 T.P.4	to 1 T.P.5	180	20	08.3
Δα					+.2
			180	00	00.0
α′	1 T.P.5	to 2 T.P.4	00	20	08.5

			°	′	″
α	3 T.P.5	to 2 T.P.4	00	20	08.5
3d ∠		&	+179	54	52.4
α	3 T.P.5	to 1 T.P.6	180	15	00.9
Δα					+.2
			180	00	00.0
α′	1 T.P.6	to 3 T.P.5	00	15	01.1

First Angle of Triangle

	°	′	″			°	′	″
φ	39	06	02.074	2 T.P.4	λ	74	49	31.910
Δφ			+47.522	1465.48	Δλ		−	.357
φ′	39	06	49.596	1 T.P.5	λ′	74	49	31.553

	°	′	″			°	′	″
φ	39	06	49.596	3 T.P.5	λ	74	49	31.553
Δφ		+1	03.792	1967.21	Δλ			−.358
φ′	39	07	53.388	1 T.P.6	λ′	74	49	31.195

	Logarithms	Values in seconds
s	3.165980	−1529.5″
Cos α	9.999993	(320.86)
B	8.510920	
h	1.676893	1st term 47.″527
s²	6.33720	
Sin²α	5.535 55	
C	1.3145	
	3.1820	2d term + —
h²		
D		
		3d term +
		−Δφ −47.527

	°	′	″
½(φ+φ′)	39	06	25.8

	Logarithms	Values in seconds
s	3.165980	
Sin α	7.767746	−758.00
A′	8.509141	(683.44)
Sec φ′	0.110197	
Δλ	9.553064	.35″73
Sin ½(φ+φ′)	9.799873	
−Δα	9.357937	.225

	Logarithms	Values in seconds
s	3.293853	−1646.47
Cos α	9.999996	(203.91)
B	8.510919	
h	1.804768	1st term 63.″792
s²	6.5877	
Sin²α	5.2802	
C	1.3147	
	3.1826	2d term + —
h²		
D		
		3d term +
		−Δφ −63.792

	°	′	″
½(φ+φ′)	39	07	21.5

	Logarithms	Values in seconds
s	3.293853	−749.2
Sin α	7.640250	(691.8)
A′	8.509140	
Sec φ′	0.110306	
Δλ	9.553549	.35″76
Sin ½(φ+φ′)	9800017	
−Δα	9.353566	.22

11—9362 U. S. GOVERNMENT PRINTING OFFICE, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

		°	′	″
α	2 T.P.6 to 3 T.P.5	00	15	01.1
2d ∠	&	+187	55	30.0
α	2 T.P.6 to 1 T.P.7	188	10	31.1
Δα			+	14.5
		180	00	00.0
α′	1 T.P.7 to 2 T.P.6	8	10	45.6

First Angle of Triangle

	°	′	″		λ	°	′	″
φ	39	07	53.388	2 T.P.6	λ	74	49	31.195
Δφ		+ 2	04.318	3873.07	Δλ		−	22.942
φ′	39	09	57.706	1 T.P.7	λ′	74	49	08.253

	Logarithms	Values in seconds
s	3.588 055	1779.6 (70.7)
Cos α	9.995 564	
B	8.510 917	
h	1.094536	1st term 124.319
s²	7.1761	
Sin²α	8.3058	
C	1.3150	
	6.7969	2d term + .0006
h²	4 1890	
D	2.3831	
	6.5721	3d term + .0004
		−Δφ − 124.318

	°	′	″
½(φ+φ′)	39	08	55.5

	Logarithms	Values in seconds
s	3.588 055	−
Sin α	9.152 907	198.13
A′	8.509 140	(1242.26)
Sec φ′	0.110 520	
Δλ	1.360 627	22.942 −
Sin ½(φ+φ′)	9.800 260	
−Δα	1.160 880	14.48

	Logarithms	Values in seconds
s	2.716 354	404.4 (14.45.98)
Cos α	9.960 445	
B	8.510 915	
h	1.187 714	1st term 15 407
s²	5.4327	
Sin²α	9.7715	
C	1.3155	
	5.9697	2d term + —
h²		
D		
		3d term +
		−Δφ − 15.407

	°	′	″
½(φ+φ′)	39	10	05.4

	Logarithms	Values in seconds
s	2.716354	
Sin α	9.610 747	+ 410.5 (1029.9)
A′	8.509 139	
Sec φ′	0.110 546	
Δλ	0.946 786	8.8468
Sin ½(φ+φ′)	9.800 441	
−Δα	0.747 227	5.587

		°	′	″
α	3 T.P.7 to 2 T.P.6	8	10	45.6
3d ∠	&	+147	44	10.8
α	3 T.P.7 to 1 T.P.8	155	54	56.4
Δα			−	5.6
		180	00	00.0
α′	1 T.P.8 to 3 T.P.7	335	54	50.8

	°	′	″		λ	°	′	″
φ	39	09	57.706	3 T.P.7	λ	74	49	08.253
Δφ		+	15.407	520.42	Δλ			+ 8.847
φ′	39	10	13.113	1 T.P.8	λ′	74	49	17.100

11—9262 U. S. GOVERNMENT PRINTING OFFICE, 1930

(5

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P.8	to 3 T.P.7	335	54	50.8
2d ∠		&	+.66	45	07.9
α	2 T.P.8	to 1 T.P.9	42	39	58.7
Δα				−	21.7
			180	00	00.0
α′	1 T.P.9	to 2 T.P.8	NNW	39	37.0

			°	′	″
α	3 T.P.9	to 2 T.P.8	222	39	37.0
3d ∠		&	−201	39	29.2
α	3 T.P.9	to 1 T.P.10	64	19	06.2
Δα					− 7.3
			180	00	00.0
α′	1 T.P.10	to 3 T.P.9	N44	18	589

First Angle of Triangle

	°	′	″			°	′	″
φ	39	10	13.113	2 T.P.8	λ	74	49	17.100
Δφ		−	29.056	1218.53	Δλ		+	34.398
φ′	39	09	44.057	1 T.P.9	λ′	74	49	51.498

	°	′	″			°	′	″
φ	39	09	44.057	3 T.P.9	λ	74	49	51.498
Δφ			−4.335	308.49	Δλ			11.580
φ′	39	09	39.722	1 T.P.10	λ′	74	50	03.078

	Logarithms	Values in seconds
s	3.085 836	+ 1358.7 (491.7)
Cos α	9.866 47N	
B	8.510 914	
h	1.463 22N	1st term 29.″055
s²	6.1717	
Sin² α	9.6621	
C	1.3156	
	7.1494	2d term +.001
h²		
D		
		3d term +
		−Δφ + 29.056

	°	′	″	Values in seconds
½(φ+φ′)	39	09	58.5	
s	Logarithms 3.085836			
Sin α	9.831 056			+ 1236.4 (204.1)
A′	8.509 140			
Sec φ′	0.110 496			
Δλ	1.536 527			34.398
Sin ½(φ+φ′)	9.800 423			
−Δα	1.336 950			+ 21.7

	Logarithms	Values in seconds
s	2.489241	+
Cos α	9.636 859	
B	8.510 916	
h	0.637 016	1st term 43.″353
s²	4.9785	
Sin² α	9.9096	
C	1.3153	
	6.2034	2d term +.0001
h²		
D		
		3d term +
		−Δφ + 4335

	°	′	″	Values in seconds
½(φ+φ′)	39	09	41.8	
s	Logarithms 2.489241			+
Sin α	9.954 829			
A′	8.509 140			
Sec φ′	0.110 489			
Δλ	1.063 699			11.580
Sin ½(φ+φ′)	9.800 380			
−Δα	0.864 079			+ 7.3

11—6362 U. S. GOVERNMENT PRINTING OFFICE, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P.9	to 3 T.P.8	22ν	39	37.0
2d ∠		&	+201	39	29.ν
α	2 T.P.9	to 1 T.P.10	64	19	06.ν
Δα					9.ν
			180	00	00.0
α′	1 T.P.10	to 2 T.P.9	ν44	18	57.0

			°	′	″
α	3 T.P.10	to 2 T.P.9	244	18	57.0
3d ∠		&	−150	24	37.5
α	3 T.P.10	to 1 T.P.11	34	43	34.5
Δα				−	11.5
			180	00	00.0
α′	1 T.P.11	to 3 T.P.10	ν14	43	ν3.0

First Angle of Triangle

	°	′	″			°	′	″
φ	39	09	44.057	2 T.P.9	λ	74	49	51.498
Δφ		−	5.491	390.74	Δλ		+	14.645
φ′	39	09	38.566	1 T.P.10	λ′	74	50	06.143

	°	′	″			°	′	″
φ	39	09	38.566	3 T.P.10	λ	74	50	06.143
Δφ		−	20.453		Δλ		+	18.207
φ′	39	09	18.113	1 T.P.11	λ′	74	50	ν4.350

	Logarithms	Values in seconds
s	ν.591 888	1189.4
Cos α	9.636 859	+ (661.0)
B	8.510 916	
h	0.739 663	1st term 549″11
s²	5.1874	
Sin²α	9.9096	
C	1.3153	
	6.4073	2d term + .000ν
h³		
D		
		3d term +
		−Δφ + 5.491

	°	′	″
½(φ+φ′)	39	09	41.3

	Logarithms	Values in seconds
s	2.591 241	+ 147.5
Sin α	9.954 829	(1293.0)
A′	8.509 140	
Sec φ′	0.110 489	
Δλ	1.165 699	14.645
Sin ½(φ+φ′)	9.800 378	
−Δα	0.966 077	+ 9248

	Logarithms	Values in seconds
s	2.885 039	558.6
Cos α	9.914 810	+ (1291.8)
B	8.510 916	
h	1.310 765	1st term 20.453
s²	5.7700	
Sin²α	9.511ν	
C	1.3154	
	6.5966	2d term + —
h³		
D		
		3d term +
		−Δφ + 20.453

	°	′	″
½(φ+φ′)	39	09	28.3

	Logarithms	Values in seconds
s	2.885 039	584.6
Sin α	9.755 613	+ (856.1)
A′	8.509 140	
Sec φ′	0.110 45ν	
Δλ	1.260 ν44	18.207
Sin ½(φ+φ′)	9.800 345	
−Δα	1.060 589	+11.49

11—0362 U. S. GOVERNMENT PRINTING OFFICE, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P.11	to 3 T.P.10	214	43	22.0
2d ∠		&	+202	47	30.8
α	2 T.P.11	to 1 T.P.12	57	30	53.8
Δα				−	10.6
			180	00	00.0
α′	1 T.P.12	to 2 T.P.11	N37	30	43.2

			°	′	″
α	3 T.P.12	to 2 T.P.1	237	30	43.2
3d ∠		&	−175	04	42.1
α	3 T.P.12	to 1 T.P.13	52	35	25.3
Δα				−	19.7
			180	00	00.0
α′	1 T.P.13	to 3 T.P.12	N32	35	05.6

First Angle of Triangle

	°	′	″		λ	°	′	″
φ	39	09	18.113	2 T.P.11	λ	74	50	24.350
Δφ		−	8.302		Δλ		+	16.746
φ′	39	09	09.811	1 T.P.12	λ′	74	50	41.096

	°	′	″		λ	°	′	″
φ	39	09	09.811	3 T.P.12	λ	74	50	41.096
Δφ		−	18.595		Δλ		+	31.221
φ′	39	08	51.216	1 T.P.13	λ′	74	51	12.317

	Logarithms	Values in seconds
s	2.678227	
Cos α	9.730039	+ 302.6 (1547.8)
B	8.510916	
h	0.919182	1st term 8.302
s²	5.3564	
Sin²α	9.852N	
C	1.3153	
	6.5239	2d term +.000
h²		
D		
		3d term +
		−Δφ+ 8.302

	°	′	″
½(φ+φ′)	39	09	13.9

	Logarithms	Values in seconds
s	2.678227	
Sin α	9.926101	+ 986.8 (454.0)
A′	8.509140	
Sec φ′	0.110438	
Δλ	1.223906	16.746
Sin½(φ+φ′)	9.800308	
−Δα	1.0242N4	+10.6

	Logarithms	Values in seconds
s	2.974903	
Cos α	9.783553	1579.5 (270.9)
B	8.510916	
h	1.269372	1st term 18.594
s²	5.9498	
Sin²α	9.8000	
C	1.3152	
	7.0651	2d term +.001
h²		
D		
		3d term +
		−Δφ+ 18.595

	°	′	″
½(φ+φ′)	39	09	00.5

	Logarithms	Values in seconds
s	2.974903	
Sin α	9.899991	295.8 (1145.0)
A′	8.509140	
Sec φ′	0.110406	
Δλ	1.494440	31.221
Sin½(φ+φ′)	9.800273	
−Δα	1.2947N3	+19.7

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 T.P. 13 to 3 T.P. 12		232	35	05.6
2d ∠	&		+147	44	02.9
α	2 T.P. 15 to 1 T.P. 14		80	19	08.5
Δα					-2.9
			180	00	00.0
α′	1 T.P. 14 to 2 T.P. 13		200	19	05.6

			°	′	″
α	3 T.P. 14 to 2 T.P. 13		200	19	05.6
3d ∠	&		-149	29	44.2
α	3 T.P. 14 to 1 T.P. 15		349	48	49.8
Δα				+	2.0
			180	00	00.0
α′	1 T.P. 15 to 3 T.P. 14		169	48	51.8

First Angle of Triangle

	°	′	″			°	′	″
φ	39	08	51.216	2 T.P. 13	λ	74	51	12.317
Δφ		-	9.791		Δλ		+	4.656
φ′	39	08	41.425	1 T.P. 14	λ′	74	51	16.973

	°	′	″			°	′	″
φ	39	08	41.425	3 T.P. 14	λ	74	51	16.973
Δφ		-	13.522		Δλ		-	3.120
φ′	39	08	27.903	1 T.P. 15	λ′	74	51	13.853

	Logarithms	Values in seconds
s	2.507 802	1277.5 (572.8)
Cos α	9.972 098	
B	8.510 916	
h	0.990 816	1st term 9.791
s²	5.0156	
Sin²α	9.081 2	
C	1.3153	
	5.412 1	2d term +
h²		
D		
		3d term +
		-Δφ+ 9.791

	°	′	″	Values in seconds
½(φ+φ′)	39	08	46.3	
s	Logarithms 2.507 802			
Sin α	9.540 638			407.6 (1033.2)
A′	8.509 140			
Sec φ′	0.110 389			
Δλ	0.667 969			4.6555
Sin ½(φ+φ′)	9.800 392			
-Δα	0.468 361			+2.9

	Logarithms	Values in seconds
s	2.627 028	860.5 + (989.9)
Cos α	9.993 100	
B	8.510 917	
h	1.131 045	1st term 13.522
s²	5.2540	
Sin²α	8.4952	
C	1.3151	
	5.0643	2d term +
h²		
D		
		3d term +
		-Δφ 13.522

	°	′	″	Values in seconds
½(φ+φ′)	39	08	34.7	
s	Logarithms 2.627 028			
Sin α	9.247 598			-332.7 (1108.2)
A′	8.509 140			
Sec φ′	0.110 366			
Δλ	0.494 132			31.198
Sin ½(φ+φ′)	9800 206			
-Δα	0.294 338			2.0

U. S. GOVERNMENT PRINTING OFFICE: 1930

C9

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

		°	′	″
α	2 T.P.15 to 3 T.P.14	169	48	51.8
2d ∠	&	+197	24	06.2
α	2 T.P.15 to 1 T.P.16	7	12	58.0
Δα			−	1.3
		180	00	00.0
α′	1 T.P.16 to 2 T.P.15	187	12	56.7

		°	′	″
α	3 T.P.16 to 2 T.P.15	187	12	56.7
3d ∠	&	−120	07	34.2
α	3 T.P.16 to 1 Goshen	307	20	30.9
Δα				+2.3
		180	00	00.0
α′	1 Goshen to 3 T.P.16	127	20	33.2

First Angle of Triangle

	°	′	″			°	′	″
φ	39	08	27.903	2 T.P.15	λ	74	51	13.853
Δφ		−	12.460		Δλ		+	2.026
φ′	39	08	15.443	1 T.P.16	λ′	74	51	15.879

	°	′	″			°	′	″
φ	39	08	15.443	3 T.P.16	λ	74	51	15.879
Δφ		−	2.185		Δλ		−	3.677
φ′	39	08	13.258	1 Goshen	λ′	74	51	12.202

	Logarithms	Values in seconds
s	2.588059	476.3 (1374.1)
Cos α	9.996546	
B	8.510917	
h	1.095522	1st term 12.460
s²	5.1761	
Sin²α	8.1980	
C	1.3151	
	4.6892	2d term +
h³		
D		
		3d term +
		−Δφ + 12.460

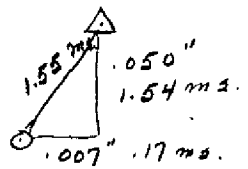
	°	′	″	Values in seconds
½(φ+φ′)	39-	08-	21.6	
s	2.588059			
Sin α	9.099032			+ 381.4 (1059.7)
A′	8.509140			
Sec φ′	0.110345			
Δλ	0.306576			20257
Sin ½(φ+φ′)	9.800172			
−Δα	0.106748			r1.3

	Logarithms	Values in seconds
s	2.045597	+
Cos α	9.782881	
B	8.510917	
h	0.339395	1st term 2.185
s²	4.0912	
Sin²α	9.8008	
C	1.3151	
	5.2071	2d term +
h³		
D		
		3d term +
		−Δφ + 2.185

	°	′	″	Values in seconds
½(φ+φ′)	39-	08-	14.3	
s	2.045597			
Sin α	9.900383			−
A′	8.509140			
Sec φ′	0.110340			
Δλ	0.565460			3.6767
Sin ½(φ+φ′)	9800154			
−Δα	0.365614			-2.3

11—9362 U. S. GOVERNMENT PRINTING OFFICE, 1929

$\frac{16\,300 \text{ meters}}{1.55} = 1 \text{ in } 10{,}516$



First order Goshen
39-08-13.308
74-51-12.195

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

		°	′	″			°	′	″
α	2 Goshen to 3 R.M.	51	52	33.	α	3 to 2			
2d ∠	&	+ 47	59	10	3d ∠	&	−		
α	2 to 1	99	51	43	α	3 to 1			
Δα					Δα				
		180	00	00.0			180	00	00.0
α′	1 to 2				α′	1 to 3			

First Angle of Triangle

	°	′	″			°	′	″		°	′	″			°	′	″
φ	39	08	13.308	2 Goshen.	λ	74	51	12.195	φ				3	λ			
Δφ			+.473	85.19	Δλ		+	3.495	Δφ					Δλ			
φ′	39	08	13.781	1 #2789	λ′	74	51	15.690	φ′				1	λ′			

	Logarithms	Values in seconds
s	1.930389	425.0
Cos α	9.233693	− (1425.4)
B	8.510917	
h	9.674999	1st term .473
s²	3.8608	
Sin² α	9.9870	
C	1.3150	
	5.1628	2d term + −−
h²		
D		
		3d term +
		−Δφ−

	°	′	″
½(φ+φ′)	39	08	13.5

	Logarithms	Values in seconds
s	1.930389	
Sin α	9.993535	+ 376.8
A′	8.509140	(1064.2)
Sec φ′	0.110341	
Δλ	0.543405	3.4947
Sin ½(φ+φ′)	9.8600152	
−Δα	0.3435 51	

	Logarithms	Values in seconds
s		
Cos α		
B		
h		1st term ″
s²		
Sin² α		
C		
		2d term +
h²		
D		
		3d term +
		−Δφ

	°	′	″
½(φ+φ′)			

	Logarithms	Values in seconds
s		
Sin α		
A′		
Sec φ′		″
Δλ		
Sin ½(φ+φ′)		
−Δα		

11—9362 U. S. GOVERNMENT PRINTING OFFICE: 1929

N.J. Geod. S. No. 2789

REVIEW OF TOPOGRAPHIC MAP T-5650

Data Record

Triangulation to 1933
Supplemental Traverse to 1936
Photographs to April 1932
Field Inspection to Oct. 8, 1936 (Page 2, D. R.)
No graphic control or supplemental planetable surveys
No contemporary ~~topographic~~ hydrographic surveys
H. W. Line as of Oct, 8, 1936 (page 2, D. R.)

Comparison with Previous Topographic Surveys

T-153 (10,000) (1842)
T-154 (10,000) (1842)
T-1549a (20,000) (1883)
T-4568 (10,000) (1932)

Comparison with the previous topographic surveys shows this compilation to be adequate to supersede the sections of those surveys which it covers. The general shape of the coast line and creeks is the same as on the previous surveys but there have been numerous changes in details of the High Water Line and in the roads.

Comparison with Chart 1215

This compilation shows numerous corrections to details of the High Water line and to the roads on Chart 1218.

No landmarks have been recommended for this area of Chart 1218.

Control

The compilation is well controlled from about latitude 39°09' southward. See page 1 regarding supplemental traverse.

North of latitude 39°09' very little control was available. The N. J. Geodetic Survey Stations shown north of latitude 39°09' were located by the photo plot and did not control the plot. A check on the accuracy of the plot will be obtained by comparison with the state traverse positions of these stations. The state traverse positions will probably be available shortly and a record of the comparison will be added to this review.

B.G. Jones

September 14, 1937.

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: E. H. Kirsch Compiled by: Ralph L. Fisher

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." M-07

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.

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: None

18. Examined and approved;

E. H. Kusch
Chief of Party

19. Remarks after review in office:

Reviewed in office by: B.G. Jones 9/23/37

Examained and approved:

E. F. Greene
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L. O. Colbert
Chief, Division of Charts

G Wade
Chief, Division of Hydrography and Topography.