5668

Form 504
Rev. Dec. 1933

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

# DESCRIPTIVE REPORT

Map Drawing
~~Hydrographic~~ } Sheet No. T-5668

5668

State FLORIDA

LOCALITY

St. Johns River

TROUT RIVER AND VICINITY

Photographs taken Nov. 1933
" " Feb. 1939
See data sheet in report.

~~1933~~
1940

CHIEF OF PARTY

Riley J. Sipe.

U.S. GOVERNMENT PRINTING OFFICE: 1934

Form 587a
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. 5

REGISTER NO. T-5668

State FLORIDA

General locality Jacksonville

Locality TROUT RIVER AND VICINITY

Scale 1:10,000 Date of survey Photographs Nov. 1933 " Feb., 1939

Air Photographic Party No. 2A

Chief of party Riley J. Sipe

Surveyed by See notes on compilation

Inked by " " " "

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated March 4, 1935.

Remarks: U. S. Army A. C. single lens camera and U.S.C. & G.

Survey nine lens camera used. Field inspection made July, August and December 1939, January 1940, and summer of 1935.

Reference Station: Moncrief, 1917

Latitude: 30° 21' 45.018" (1386.2 meters)
Longitude: 81° 43' 16.185". (432.2 meters) (Adjusted) ✓

X coordinate: 272,552.2 ft.
Y coordinate: 2,192,399.0 ft.

~~Supplemented by other surveys to January 1940~~

Date of Survey

Single lens photographs taken November 27, 1933.

Nine lens photographs taken February 16, 1939.

Field inspection at various periods to January 1940.

Work was first started on T-5668 in 1933 but was left incomplete until after the nine lens photographs were taken.

Details on T-5668 are of the date of the nine lens photographs, February 1939. Field inspection added no details of a later date.

TIME SHEET

Field Sheet No. 5
Register No. T- 5668

The radial plot was nearly finished before time records were begun on this sheet. This is a rough drafted sheet.

| | |
|---|---|
| Fricking Points for Plotting | 10 hrs. |
| Radial Plot | 29 " |
| Pricking Additional Points for Detail | 26 " |
| Plotting All Control | 502½ " |
| Detailing Roads, Buildings, Fences, Trails, etc. | |
| Detailing Symbols | |
| Shoreline | 57½ " |
| Field Inspection | 31½ " |
| Reports | 66½ " |
| Field Review of Sheet | |
| Totab | 723 hrs. |

Due to the fact that the 9 lens photographs were flown to a larger scale than the single lens, some difficulty was experienced in co-ordinating the single and nine lens flights. Points that were transferred from the single to the nine lens pictures often proved not to be the same points. This necessitated pricking additional points, however even then some difficulty was experienced in mading adjoining map drawings check properly, especially where the connection was made through street lay outs. This is a city survey and required much more time for compilation than the average for the project

BGF

NOTES ON COMPILATION

Sheet No. 5 (Field)

Register No. T- 5668

PHOTOGRAPHS:

Single Lens - Flight No. ___ No. M-223-228 Inclusive. } Nov 1933
" " - " " " M-137-147 " }
Nine " - " " " 03159 } Feb 1939
" " - " " " 03218-03222 Inclusive. }

SCALE PLOT: W.H. Burwell and B. Benson

SCALE FACTOR USED: 1.

PROJECTION BY: Benson

CONTROL PLOTTED BY: R. J. Moore, Jr.

CONTROL CHECKED BY: W. L. Riehl

SMOOTH RADIAL PLOT BY: H. A. Paton

TOPOGRAPHY TRANSFERRED BY: None

TOPOGRAPHY CHECKED BY:

SHORELINE INKED BY: R. Gossett & J. A. Giles.

DETAIL INKED BY: J. A. Giles.

OVERLAY SHEET BY: None

DESCRIPTIVE REPORT BY: J. A. Giles

REVIEWED BY: H. O. F.

AREA OF DETAIL INKED: 31.04 Sq. Statute Miles

LENGTH OF SHORELINE (Over 200 m): 3.03 Statute Miles.

LENGTH OF SHORELINE (Under 200 m): 43.04 Statute Miles.
Includes both double and single line streams.

LENGTH OF SHORELINE OF SMALL LAKES: None Statute Miles.

# LEGEND TO BE USED ON FIELD INSPECTION AND ROUGH DRAFTING

JULY 1, 1939

## TREES

A = Ash
Br = Brush
Cit = Citrus
Cy = Cypress
Gum = Gum
Oak = Oak
Pal = Palmetto
Pi = Pine
Plm = Palm

## ROADS

Rd-1 = 1st class paved
Rd-1d = 1st class dirt
Rd-2 = 2nd class
Tr = Trail

All roads not labeled are 6m. or less in width.

## VEGETATION

C = Cultivated
DT = Deciduous trees
Fl = Flooded area
Gr = Grass
TGr = Tropical grass
HW = Heavily wooded
M = Marsh
Mg = Mangrove
Sw = Swamp
Sct = Scattered

## PONDS

P = Pond
CyP = Cypress Pond
GP = Grassy pond
IP = Intermittent p
PiP = Pine pond

## STREAMS

Ca = Canal (width)
Cr = Creek
D = Ditch
IS = Intermittent Stream
PDU = Probable drainage unsurveyed
Str = Stream

## MISC

Blf = Bluff (height)
Brg = Bridge
Ch = Church
Cv = Culvert
FB = Fire break (width)
Fn (f) Fence
H = House
Ham = Hammock
Hdg = Hedge
HWL = High water line
LWL = Low water line
OP = Overpass
PC = Postoffice
R = Roof
RR = Railroad
S = Sand
Sch = School
UP = Underpass

FMP = Florida Mapping Project
USE = U. S. Engineers

Return this sheet to office with the drawing.
Bgg.

DESCRIPTIVE REPORT

TO ACCOMPANY

Field Sheet No. 5
Register No. T-5668.

General.

This rough map drawing has been compiled from air photographs taken by the U. S. Army Air Corps, using a single lens camera and a nine lens camera, designed by the U. S. Coast and Geodetic Survey.

The projection was made with a scale factor of 1.

Unimportant, small buildings and indistinct buildings have been omitted. No vegetation has been shown within limits of street layouts.

The single lens photographs being closer to scale were used for the delineation of detail wherever possible, this detail being checked against the nine lens photographs for differences. In the Northwest corner of this map drawing the new highway to Brunswick is probably in error from three to five meters where it crosses the northern tracing limit. This is due to inability to pick adequate radial points on the nine lens photographs in this area, as the highway does not appear on the single lens photographs. This is a two-lane highway, the west lane of which has been paved. The east lane has been graded and its intersections paved as shown on this map drawing. The unpaved part is not used by traffic but is grown over with grass. For this reason its centerline has not been shown.

Some of the streets shown immediately east of the Southern R/R. Simpson Shops, appear as ditches on the photographs. Field inspection reveals that they were being graded at the time of taking the nine lens photographs.

The outer limits of track layouts and railroad yards have been shown and where two tracks appeared on the photographs the center line between the two has been drawn with the exception of the A. C. L. tracks just above triangulation station Curve. Here the centerline between tracks was changed to the centerline of the east track to show the outer eastern limit of tracks at Moncrief Yards. Accompanying this map drawing is Atlantic Coast Line R. R. blue prints of Sheet Nos. 2, 3 and 4 V2 Florida, and one of Grand Crossing made by the Georgia Southern and Florida R. R. Co. Additional tracks, differences, etc., have been noted in red pencil on the blueprints in the field.

The telephone line shown came on this map drawing in the northeastern corner and was taken to the edge of the congested area of the city of Jacksonville and there discontinued.

Control.

There are a total of 44 control stations plotted on this map drawing; 40 of which fall within the limits of the drawing. 7 are U. S. Coast and Geodetic Survey triangulation stations all of which were recovered. 34 of the control stations were established by the Florida Mapping Project. All of these were recovered. 3 topographic(described of which ~~were two~~) stations were taken from G. C. Sheet "AA", but none were used for controlling the drawing. T 6488 b

Junction with map drawing T-5669 was made difficult because of small errors in projections. The plot on T-5669 had to be revised to check with this drawing(T-5668). Some control stations were picked wrong and have been crossed out. Station AA8 was repricked. Otherwise control was adequate, and the radial plot was quite strong.

Radial Plot.

A radial plot for this map drawing was made directly on the celluoid from the single lens photographs in 1935 and 1936. All corresponding points on the nine lens photographs, that could be clearly identified, were pricked. Many could not be satisfactorily located, necessitating the plotting of additional points. Due to insufficient overlapping of the nine lens and having no single lens photographs in the area, a number of the radial points in the western portion of this map drawing were established by single intersections of radial lines.

Interpretation of the Photographs.

The photographs are generally clear excepting nine lens photograph number 03222 which has black areas due to shadows cast by clouds.

Field Inspection and Supplemental Surveys.

Field inspection trips were made in the summer of 1935 by truck. During the summer and fall of 1939, by boat and truck, and in January 1940 by truck.

Graphic Control Surveys. T 6488 b

Only a small portion of this map drawing is covered by a graphic control sheet, that being "AA" which covers a small portion of Trout River near the eastern limit of this map drawing. All details thus covered are shown on the air photographic survey except:

1. Magnetic Declination.
2. Azimuth of Ranges.
3. Temporary stations for control of hydrography.

Only a small section of T5668, Trout River east of Long. 81°42' is covered by the Graphic Control Survey

Hydrographic Surveys.

The delineation of the shoreline from air photographs was made prior to the hydrographic survey. The following differences were found by the hydrographic party from the Launch Mikawe, season 1937 and 1938, and have been corrected except as otherwise stated below:

Old barge removed from map drawing at lat. 30° 25.2, long. 81° 41.9.

See remarks at back

In latitude 30° 25.0 , longitude 81° 42.6 a difference of three piers was found by the hydrographic party on hydrographic sheet No. 49. The nine lens photographs taken in February, 1939 show one pier in ruins, so this was placed on the map drawing.

One pier in latitude 30° 25.0, longitude 81° 41.9 was removed from map drawing, and dots indicating piling or shoal area was removed from map drawing in latitude 30° 25.1, longitude 81° 41.9.

Two piers in latitude 30° 25.3, longitude 81° 42.5 have been shown in ruins.

No shoreline difference at latitude 30° 26.28, longitude 81° 45.9 was noted except that the island was connected to the main shoreline where the river made a sharp turn just west of the highway bridge, on this map drawing.

The following additional minor changes were made in shoreline due to having been brought out by the nine lens photographs:

Change made on south shore of Trout River due north of Station D.A. 272c, between there and bridge.

Change made on south shore of Trout River beteeen stations D.A. 272d and D.A. 272e.

Change made on south shore of Trout River between D.A. 272e and D.A. 273.

More of the small creeks along the banks and flowing into Trout River are visible on the nine lens photographs than were originally discernable on the single lens photographs. Some of the clearer ones have been added to this map drawing. See review at back.

Comparison with Surveys by other Organizations.

No maps or charts of this area of a scale large enough to permit an intelligent comparison being available; this has been ommitted.

Comparison with U. S. Coast and Geodetic Survey Charts.

No copies of such surveys are available in this office.

Comparison with early U. S. C. & G. Surveys.

No copies of such surveys are available.

Landmarks and Aids.

All landmarks and aids to navigation were mailed to the Washington Office in February, 1935.

Preparation for Inking.

This map drawing having been started two or three years ago when the shoreline was put on for the hydrographic party, was found to be quite

dirty. It was washed and cleaned with a soft eraser and before inking carbonate of magnesia was applied to the surface about to be inked.

Bridges.

The vertical and horizontal clearances have been listed on the rough drawing, in accordance with "List of Bridges over the Navigable Waters of the United States, 1935". When the vertical clearance was given without the stage of tide, no data was available, and as these small streams were not considered Navigable Waters, no extra time was spent in obtaining this data. These are not lettered on the finished drawing as they can be taken from the bridge book for charting purposes.

Miscellaneous.

On this map drawing small wet areas are either labeled swamp or cypress. The areas labeled cypress are simple ones having pond cypress growing in them. Those labeled swamp are areas have an assortment of gum, bay, pond pine, and dense underbrush growing in wet areas.

Numerous trails and fire breaks of no importance have been left off this map drawing. The width of fire breaks have often been exaggerated. A standard width of 6 meters was used, even if the fire break showed to be not so wide. This only holds true for smooth drafted map drawings, and does not pertain to this map drawing.

Florida Mapping Project traverse station D. A. 266 has been destroyed, and has been removed from the map drawing.

Street layouts and main roads that have not been marked Rd.1 or Rd 1d should be smooth drafted as first class roads.

On part of this map drawing the detail has been drafted at road and street intersections. Upon later notice from the Washington Office these were drafted in simply as two line intersection, except in places where some doubt might be left in mind, the more intricate intersections were detailed or smooth drafted in.

Jesse A. Giles

Respectfully submitted

Approved and forwarded: Riley J. Sipe,
Henry O. Fortin Chief of Party.
By Henry O. Fortin.

Jesse A. Giles

| | Remarks | Decisions |
|---|---|---|
| 1 | | 304817 |
| 2 | | - - - |
| 3 | Do not ink pending Board decision, as Lemturner used both Rand McNally and P.R. Map | 304817 |
| 4 | | 303817 |
| 5 | Do not ink pending Board decision, as Halls Branch recommended on H-6536 | 304817 |
| 6 | | 303817 |
| 7 | Kings Road is certainly right for the road (on Texaco Road Map, n.w. from Jack'ville) | 304817 |
| 8 | S. side Trout River, 25.1/43.5', where Pier is shown on this sheet (from H-653 6) | 304817 |
| 9 | | 303817 |
| 10 | | 304817 |
| 11 | | 303817 |
| 12 | | 303817 |
| 13 | | 304816 |
| 14 | | 304816 USGB |
| 15 | | 303816 USGB |
| 16 | Also on H-6536 | 304817 |
| 17 | Big Trout Creek on H-6536: trib. Trout R from s.w. at Dinsmore | 304817 |
| 18 | Also on H-6536 | 304817 |
| 19 | Do not ink pending decision line 5 above | 304817 |
| 20 | Wrongly on USGS "Cambon", the former name for Ribault River, of which it is extension | (line 8, above) |
| 21 | USGS "Jacksonville" shows as part of that city, east of limits this sheet. | 304816 |
| 22 | Where? | |
| 23 | At "bluff" on this sheet or a little east of it, near 25'/42.7' (from H-6536) | 304817 |
| 24 | Trib. Trout River from north at Dinsmore (from H-6536) | 304817 |
| 25 | | |
| 26 | | |
| 27 | | |

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GEOGRAPHIC NAMES

Survey No. Field Sheet No. 5

Register- T-5668

| Name on Survey | On Chart No. 577 A | On previous survey No. B | On U. S. quadrangle Maps C | From local information D | On local Maps E | P. O. Guide or Map F | Rand McNally Atlas G | U. S. Light List H | K | |
|---|---|---|---|---|---|---|---|---|---|---|
| DINSMORE | | | X | X | X | X | | | | 1 |
| Lemturner = | U.S.G.B. decision 5/8/42 : at 26.4' / 42.0' | | | | | | | | | 2 |
| GARDEN CITY | | | | X | | | | | | 3 |
| GRAND CROSSING | | | X | X | X | X | | | | 4 |
| HALF CREEK | | | X | X | X | | U.S.G.B. decision 5/8/42 : at 25.5' | | | 5 |
| HOYT | | | X | X | X | | | 1/4' 15K | | 6 |
| KINGS ROAD | | | X | | | | | | | 7 |
| Shields Landing | | | | | | | | | | 8 |
| MONCRIEF | | | X | | X | | | | | 9 |
| NINEMILE CREEK | | | X | X | | | | | | 10 |
| PICKETT | | | X | X | X | | | | | 11 |
| PICKETTVILLE | | | | X | | | | | | 12 |
| RIVERVIEW | | | X | X | | | | | | 13 |
| RIBAULT RIVER | X | | | X | | | | | | 14 |
| TROUT RIVER | X | | | X | | | | | | 15 |
| WEST BRANCH | | | | X | | | | | | 16 |
| Big Trout Creek | | | X | | | | | | | 17 |
| ISLAND BRANCH | | | | X | | | | | | 18 |
| HALLS BRANCH | | | | X | | | | | | 19 |
| Sixmile Creek ? | | | X | | | | | | | 20 |
| BROOKLYN ? | | | X | | | | | | | 21 |
| BILTMORE | | | | | X | | | | | 22 |
| Cold Hill | | | | | | | | | | 23 |
| Little Trout Cr | | | | | | | | | | 24 |
| | | Names underlined in red approved by L. Heck on 9/13/40 | | | | | | | | 25 |
| | | | | | | | | | | 26 |
| | | | | | | | | | | 27 |

M 234

DINSMORE. A small community in the extreme northwestern part of this map drawing. Post office, railway station and school are shown. Recommended.

GARDEN CITY. A small community located at the junction of the Lem Turner Road and the road that runs across the northern end of the map drawing. This community has a post office by the name of Lemturner. However, since there are eleven post offices in the United States by the name of Garden City, the post office in all probability will remain by that name, while the community will be called Garden City. The latter is recommended for charting purposes.

GRAND CROSSING. A settlement in the south central portion of this map drawing having a post office. The Southern Railway has a shop there with a round house and a turntable,etc., known as Simpson Shops. Recommended.

HALF CREEK. Small tributary of Trout River which flows south into same northwest of the mouth of Ninemile Creek. Sometimes this creek is known as Halls Branch or Lotton Creek. However, Half Creek is recommended for charting purposes.

HOYT. A small community just southwest of Pickett. At one time a railway station was situated here. At the present time this name is not in use for the station has been discontinued. Not recommended for charting purposes.

KINGS ROAD. One local map gives this name as Kingsgrove. In all probability it was an old railway station situated about two miles northwest of Pickett on the Georgia-Southern and Florida Raidroad. No one at the present was found who remembered the name, so it is not recommended for charting purposes.

MONCRIEF. Section located in the southeast part of the map drawing. The Atlantic Coast Line has a large Railroad yard there known as Moncrief Yard. The name of Moncrief as a locatity no longer exists, and is not recommended.

Ninemile Creek. A tributary of Trout River which flows north into it, and located in the north central part of this map drawing. Recommended.

PICKETT. A small community on the A. C. L. R. R. located in the center of the map drawing. No. railway station or post office located here. Sometimes called Pickett City or Pickett Station. Pickett recommended for charing purposes.

PICKETTVILLE. A small community located about one mile south-southwest of Pickett on Kings Road Highway. A public shool is located here. Recommended.

RIVERVIEW. A large settlement in the northeastern part of this map drawing, just south of Trout River. Recommended.

RIBAULT RIVER. This stream is just south of Trout River and was known as Simmile Creek, but is more generally known as Ribault River and is so shown on U.S.C. & G. S. Chart No. 577. Recommended.

TROUT RIVER. A large stream flowing across the northern part of this map drawing. This stream was formerly known as Trout Creek, but Trout River is the generally accepted name and is so shown on U. S. Coast & Geodetic Survey Chart No. 577.

WEST BRANCH. A branch ½ mile west of Lem Turner Road Bridge. Not recommended.

ISLAND BRANCH. A branch 1 mile west of Lem Turner Road Bridge. Not recommended.

HALLS BRANCH. A branch 0.6 mile northwest of Nine Mile Creek. Not recommended.

Jesse A Giles
Respectfully submitted.

Jesse A. Giles.

Approved and forwarded. Riley J. Sipe,
Chief of Party.

Henry O. Fortin
By Henry O. Fortin.

REVIEW OF AIR PHOTO COMPILATION NO. T- 5668.

Chief of Party: Riley J. Sipe — Compiled by: Jesse A. Giles

Project: No. 2A — Instructions dated: March 4, 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) Yes.

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) Yes.

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) Yes.

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) Railway Blue-prints.

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. Yes.

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) Yes.

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

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-67

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) Yes.

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) Yes.

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) Previously sent in.

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) Yes.

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) Yes.

13. The geographic datum of the compilation is N. American 1927 and the reference station is correctly noted. Yes.

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

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

    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. Yes.

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

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

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

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

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

16. No additional surveying is recommended at this time. No.

17. Remarks:

18. Examined and approved; Henry O. Fortin

Henry O. Fortin

Riley J. Sipe

Chief of Party

19. Remarks after review in office:

R

F

M-350

T-5668

# 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 S. KASS & J. DUNICH.

Positions checked by S.K. (ON RULING MACHINE)

Grid inked on machine by S.K.

Intersections inked by J. DUNICH.

Minute Intersections ~~Points~~ used for plotting grid:

| | | |
|---|---|---|
| φ 30-21 / λ 81-46 | 30-23 / 81-44 |
| 30-26 / 81-42 | x / y |
| 30-21 / 81-42 | x / y |
| 30-26 / 81-46 | x / y |

Triangulation stations used for checking grid:

1. Moncrief 1917 (Ref. Sta)
2. 30-24 / 81-45 } Minute Inters.
3. A.A.-8 (F.M.P.)
4. AB-4 (F.M.P.)
5. 
6. 
7. 
8. 

Note.—Grid checks within approx. 0.2 mm.

S.K.

5668

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form No. 744 a
June 1938

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION
## (CALCULATING MACHINE COMPUTATION)

State Fla. Zone East Station Moncrief 1917

λ (Central meridian) ____

$\phi$ 30° 21′ 45.″018 $\lambda$ 81 43 16.185

$\Delta\phi$ (Excess of $\phi$ over even 10′ expressed as minutes and decimal) 1.′7503

$\Delta\lambda$ (Central meridian − $\lambda$) 43 16.185

$\Delta\lambda$ (in sec.) -2596.″185

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| | | Cor. for second dif. | + 3 |
| Cor. for second dif. | + 55 | $V$ | 1.073685 |
| $H$ | 87.611237 | | |
| | | Tabular difference of $y$ for 1″ of $\phi$ | |
| $a$ | − .704 | | |
| $b$ | + 10.170 | $y$ (for minutes of $\phi$) | |
| | | $y$ (for seconds of $\phi$) | |
| $H$ ($\Delta\lambda''$) | 227,454.98 | Tabular $y$ | 2,191,675.38 |
| $ab$ | − 7.16 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 723.68 |
| $x'$ | -227,447.8 | | |
| | 500,000.00 | $c$ | − .11 |
| $x$ | 272,552.2 | $y$ | 2,192,399.0 |
| | + 77.56 ✓ | | + 72.89 ✓ |
| | − 74.39 ✓ | | |
| $\frac{(\text{Tabular } y) + y}{2}$ | | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | |
| | | $F\,(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | ″ |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ′ ″ |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F\,(\Delta\lambda'')^3$$

U. S. GOVERNMENT PRINTING OFFICE 11—12148

DEPARTMENT OF COMMERCE
U. S. Coast and Geodetic Survey
Form No. 744 a
June 1938

5668

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

(CALCULATING MACHINE COMPUTATION)

State Fla. Zone East Station 30 24 / 81 45

λ (Central meridian) ° ' "

φ ° ' " λ

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ′ Δλ (Central meridian—λ) 45

Δλ (in sec.) -2700 "

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| | | Cor. for second dif. | + 4 |
| Cor. for second dif. | + 89 | $V$ | 1.074473 |
| $H$ | 87.577790 | | |
| | | Tabular difference of $y$ for 1″ of $\phi$ | |
| $a$ | − .702 | | |
| $b$ | + 10.221 | $y$ (for minutes of $\phi$) | |
| | | $y$ (for seconds of $\phi$) | |
| $H\,(\Delta\lambda'')$ | 236,460.03 | Tabular $y$ | 2,205,311.38 |
| $ab$ | − 7.18 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 783.29 |
| $x'$ | −236,452.8 | | |
| | 500,000.00 | $c$ | − .12 |
| $x$ | 263,547.2 | $y$ | 2,206,094.6 |
| $\frac{(\text{Tabular } y) + y}{2}$ | 44.09 / 1-.15 | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | 33.28 |
| | | $F\,(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | " |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ' " |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F\,(\Delta\lambda'')^3$$

U. S. GOVERNMENT PRINTING OFFICE 11—12148

5668

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form No. 744 a
June 1938

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

(CALCULATING MACHINE COMPUTATION)

State Fla Zone East Station 30 23 / 81 44

λ (Central meridian) ° ' "

φ ° ' " λ

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ′ Δλ (Central meridian − λ) 44

Δλ (in sec.) -2640"

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| | | Cor. for second dif. | + 4 |
| Cor. for second dif. | + 78 | $V$ | 1.074123 |
| $H$ | 87.592661 | | |
| | | Tabular difference of $y$ for 1″ of φ | |
| $a$ | − .703 | | |
| $b$ | +10.192 | $y$ (for minutes of φ) | |
| | | $y$ (for seconds of φ) | |
| $H(\Delta\lambda'')$ | 231,244.63 | Tabular $y$ | 2,199,250.12 |
| $ab$ | − 7.16 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 748.62 |
| $x'$ | -231,237.5 | | |
| | 500,000.00 | $c$ | − .11 |
| $x$ | 268,762.5 | $y$ | 2,199,998.6 |
| $\frac{(\text{Tabular } y) + y}{2}$ | 37.64 | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | |
| | | $F(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | " |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ' " |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F(\Delta\lambda'')^3$$

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June 1938

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# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

## (CALCULATING MACHINE COMPUTATION)

State Fla. Zone East Station 30 26 / 81 46

λ (Central meridian) ____ ° ____ ′ ____ ″

φ ____ ° ____ ′ ____ ″ λ ____

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ____ ′ Δλ (Central meridian − λ) 46

Δλ (in sec.) ~2760 ″

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| Cor. for second dif. | + 89 | Cor. for second dif. | + 4 |
| $H$ | 87.548025 | $V$ | 1.075173 |
| | | Tabular difference of $y$ for 1″ of φ | |
| $a$ | − .700 | | |
| $b$ | + 10.226 | $y$ (for minutes of φ) | |
| | | $y$ (for seconds of φ) | |
| $H$ ($\Delta\lambda''$) | 241,632.55 | Tabular $y$ | 2,217,433.96 |
| $ab$ | − 7.16 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 819.02 |
| $x'$ | −241,625.4 | | |
| | 500,000.00 | $c$ | − .12 |
| $x$ | 258,374.6 | $y$ | 2,218,252.9 |
| $\frac{(\text{Tabular } y) + y}{2}$ | −49.41 | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | 53.15 |
| | | $F\,(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | ″ |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ′ ″ |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F\,(\Delta\lambda'')^3$$

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
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June 1933

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

## (CALCULATING MACHINE COMPUTATION)

State Fla. Zone East Station 30 21 / 81 42

λ (Central meridian) ____ ° ' "

φ ____ ° ' "

λ ____

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ____ ′

Δλ (Central meridian − λ) 42

Δλ (in sec.) − 2520″

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| | | Cor. for second dif. | + 2 |
| Cor. for second dif. | + 33 | $V$ | 1.073422 |
| $H$ | 87.622381 | | |
| | | Tabular difference of $y$ for 1″ of φ | |
| $a$ | − .704 | | |
| $b$ | + 10.105 | $y$ (for minutes of φ) | |
| | | $y$ (for seconds of φ) | |
| $H\,(\Delta\lambda'')$ | 220,808.40 | Tabular $y$ | 2,187,127.64 |
| $ab$ | − 7.11 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 681.67 |
| $x'$ | − 220,801.3 | | |
| | 500,000.00 | $c$ | − .11 |
| $x$ | 279,198.7 / −24.33 | $y$ | 2,187,809.2 / 55.40 |
| $\frac{\text{(Tabular } y) + y}{2}$ | | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | |
| | | $F\,(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta\alpha''$ | ″ |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta\alpha$ | ° ' " |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta\alpha'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F\,(\Delta\lambda'')^3$$

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U. S. COAST AND GEODETIC SURVEY
Form No. 744 a
June 1938

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

## (CALCULATING MACHINE COMPUTATION)

State Fla. Zone East Station 30 26 / 81 42

λ (Central meridian) ° ' "

φ ° ' " λ

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ′ Δλ (Central meridian − λ) 42

Δλ (in sec.) -2520"

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| Cor. for second dif. | + 89 | Cor. for second dif. | + 4 |
| $H$ | 87.548025 | $V$ | 1.075173 |
| | | Tabular difference of $y$ for 1″ of φ | |
| $a$ | − .700 | | |
| $b$ | + 10.105 | $y$ (for minutes of φ) | |
| | | $y$ (for seconds of φ) | |
| $H\,(\Delta\lambda'')$ | 220,621.02 | Tabular $y$ | 2,217,433.96 |
| $ab$ | − 7.07 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 683.78 |
| $x'$ | -220,614.0 | | |
| | 500,000.00 | $c$ | − .11 |
| $x$ | 279,386.0 | $y$ | 2,218,116.6 |
| $\frac{(\text{Tabular } y) + y}{2}$ | -18.65 | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | 57.31 |
| | | $F\,(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | " |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ' " |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F\,(\Delta\lambda'')^3$$

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DEPARTMENT OF COMMERCE
U. S. Coast and Geodetic Survey
Form No. 744 a
June 1938

# PLANE COORDINATES ON TRANSVERSE MERCATOR PROJECTION

(CALCULATING MACHINE COMPUTATION) 30 21

State Fla Zone East Station 81 46 ° ' "

λ (Central meridian) ____

φ ° ' " ____ λ ____

Δφ (Excess of φ over even 10′ expressed as minutes and decimal) ____ ′ ____

Δλ (Central meridian − λ) 46

Δλ (in sec.) − 2760 "

| | | | |
|---|---|---|---|
| | | $\left(\frac{\Delta\lambda''}{100}\right)^2$ | |
| Tabular $H$ (even 10′) | | Tabular $V$ (even 10′) | |
| Interpolated $H$ (fraction of 10′) | − | Interpolated $V$ (fraction of 10′) | + |
| Cor. for second dif. | + 33 | Cor. for second dif. | + 2 |
| $H$ | 87.622381 | $V$ | 1.073422 |
| | | Tabular difference of $y$ for 1″ of φ | |
| $a$ | − .704 | | |
| $b$ | + 10.226 | $y$ (for minutes of φ) | |
| | | $y$ (for seconds of φ) | |
| $H(\Delta\lambda'')$ | 241,837.77 | Tabular $y$ | 2,187,127.64 |
| $ab$ | − 7.20 | $V\left(\frac{\Delta\lambda''}{100}\right)^2$ | 817.69 |
| $x'$ | − 241,830.57 | | |
| | 500,000.00 | $c$ | − .12 |
| $x$ | 258,169.4 | $y$ | 2,187,945.2 |
| | − 55.63 | | 89.61 |
| $\frac{(\text{Tabular } y) + y}{2}$ | | $\Delta\lambda'' \sin\frac{\phi+\phi'}{2}$ | |
| | | $F(\Delta\lambda)^3$ | |
| $\frac{\phi+\phi'}{2}$ (Interpolated from projection table) | | $\Delta a''$ | " |
| $\sin\frac{\phi+\phi'}{2}$ | | $\Delta a$ | ° ' " |

$$x' = H\Delta\lambda + ab \qquad y = \text{Tabular } y + V\left(\frac{\Delta\lambda''}{100}\right)^2 + c$$

$$x = x' + 500{,}000 \qquad \Delta a'' = \Delta\lambda'' \sin\frac{\phi+\phi'}{2} + F(\Delta\lambda'')^3$$

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REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5668 (1:10,000)

Graphic Control Surveys.

Refer to page 2 of the descriptive report (T-5668).

Previous Topographic Surveys.

None in the area covered by T-5668.

Contemporary Hydrographic Surveys.

H-6536 (1:5,000) January 1939. Compared with T-5668 August 9, 1940. High water line and shore line structures are in agreement.

Described Topographic Stations.

None on this survey.

Comparison with Charts.

T-5668 is outside the area covered by charts 577 and 1243.

General.

The compilation of details on T-5668 was complete as submitted by the field party except for buildings. A number of buildings have been added in this office.

The identification of ditch and fence lines is incomplete. Inspection of the photographs indicates that all such lines shown are of a permanent nature but in some cases the classification as a ditch or fence may be confused as these were not completely covered by field inspection.

T-5668 was submitted as a rough drawing and the drafting was satisfactory. The sheet was redrawn at the Philadelphia office.

Reviewed in office by F. H. McBeth

Inspected by B. G. Jones

Examined and approved:

Thos O Reed
Chief, Section of Field Records.

J. B. Rorden
Chief, Division of Charts.

K. T. Adams
Chief, Section of Topography.

G Rude
Chief, Division of Coastal Surveys.