

5807

735

~~For Air Photo Files~~

~~only~~ See note on Title Sheet

Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. T-5807 T-5807
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES AUG 1 1940 Acc. No. _____	
State	FLORIDA
LOCALITY	
Vicinity of St. Marks and vicinity West Coast, Florida	
Apalachee Bay	
Photographs taken 1/15/40	
1940	
CHIEF OF PARTY	
Kenneth G. Crosby	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field No. T- 5807*

REGISTER NO.

T5807

State Florida

General locality West Coast, Florida Apalachee Bay

Locality Vicinity of St. Marks and vicinity

Scale 1:5,000 Date of survey February, 1940

Vessel Air Photographic Party No. 1

Chief of party Lieut. Kenneth G. Crosby

Field inspected

Surveyed by Lieut. George W. Lovesee

Inked by David R. Shallenbarger, Air Photographic Observer

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated April 3, 1940

Remarks: _____

* REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5807

The area covered by T-5807 is also covered by T-5781 (1:20,000) of approximately the same date.

T-5781 is to be published. Since there appears to be little need for duplicating the publication of this area on the larger scale, T-5807 will not be redrafted and will not be published.

The file copy of T-5807 is a reproduction of the original rough drawing made for use of subsequent hydrography or other needs of the Bureau. Persons outside of the Bureau

(OVER)

requesting map information in this area should be referred to T-5781.

The regular office review is incorporated in the review of T-5781. T-5781 and the descriptive report for T-5781 contain all of the information to be obtained from the air photographic surveys of this date for charting on scales of 1:20,000 or smaller.

Descriptions of recoverable topographic stations are filed under T-5781.

6-9-41.

B. G. Jones

PHOTOGRAPHS

Number	Date	Time	Stage of Tide
4676		12:25 P.M.	
4677		12:26	
4678		12:28	
4679		12:30	
4680	Jan. 15, 1940	12:31	-0.3 Feet
4687		12:45	
4688		12:46	
4689		12:48	
4690		12:49	

Tide from predicted tables for: St. Marks, St. Marks River

Camera: U.S. Coast and Geodetic Survey Bina-Lens (focal length 8 1/2 inches.)
Negatives on file at Washington Office.

SCALE

Mean scale of Photographs..... 1:5,000 ÷ 0.999
Scale of Survey Sheet..... 1:5,000

STATISTICS

Area (land).....	3.7	Square statute miles
Shoreline (more than 200 m. from opposite shore).....	5.0	Statute miles
Shoreline (Creeks).....	8.5	Statute miles
Roads, streets, trails, and railroads.....	5.2	Statute miles

REFERENCE STATION

Station: SHIELDS	Latitude: 30° 09' 15.674 (482.6 m.)
Datum: North American, 1927	Longitude: 84° 12' 10.930 (292.5 m.)

$x = 2,093,856.7$
 $y = 419,912.6$

SUPPLEMENTARY SURVEYS

	Name	1940 Date	Hours
Control Surveys (Computations).....			6
Planetable Surveys.....			
Total			6

FIELD INSPECTION

Preparation of Photographs.....		Jan.	18
Field Work.....	G.L.A. & G.W.L.	Jan. - Feb.	20
Inking Notes.....	H.A.D. & E.L.J.		5
Coast Pilot Notes.....			
Geographic Name Report.....			
Landmarks for Charts.....	G.L.A. & G.W.L.	March	20
Description Cards.....	E.L.J.	July 24	4
Recovery Notes.....			
Total			61

MAIN RADIAL PLOT

Scale Plot.....	K.G.C. - E.L.J.	April 17	10
Projection on Base Sheet.....	Hand Ruling Machine	April	
Projection on Survey Sheet.....	Hand Ruling Machine	April 30	
Control Plotted.....	K.G.C. - E.H.Y.	May 7	4
Control Checked.....	E.L.J. - D.R.S.	May 8	2
Control Trans. to Base Sheet.....	E.L.J.	May 8	1
Transfer Checked.....	D.R.S.	May 8	1
Control picked on Photographs.....			
Control checked on Photographs.....	Entire personnel		
Hydro. & Topo. Stations picked.....	Tampa Office	April	52
Radial points plotted.....			
Adjacent centers plotted.....			
Templates.....			
Radial Plot.....	K.G.C. - E.L.J.	May 8-10	7
Radial Points transferred.....	E.L.J.	May 10	2
Transfer checked.....	K.G.C.	May 10	1
H & T Stations scaled & checked.....			
Additional Radial points.....	D.R.S.		6
Total			85

DETAILING

Rough Draft.....	D.R.S.	June 25-July 18,	28
Smooth Draft.....			
Total			

CO. FILATION

Name Overlay.....			
Descriptive Report.....	D.R.S.	July 18	5
Field Review.....	K.G.C.	July 19-22	14
	E.L.J.	July 22	2
Total			21

Total Time spent on Sheet..... 268 hours.

DESCRIPTIVE REPORT

to accompany

SHEET NO. T- 5807

*Copy sent
to the
Washington Office
for
reference* (3)

GENERAL

This sheet was prepared in accordance with "Instructions for Drafting Air Photographic Surveys, Project H.T. - 242", dated April 3, 1940.

The area covered by this sheet includes the town of St. Marks, the confluence of the St. Marks and Wakulla Rivers and surrounding vicinity.

The terrain is mostly flat and generally marshy or swampy along the shoreline.

All roads shown on this drawing not otherwise indicated should be shown 0.6 millimeters in width.

CONTROL

The projection for plotting the control on this sheet was made in the Washington Office on the projection ruling machine by D. Kass on April 30, 1940.

The control in the area covered by this sheet consists of six triangulation stations which are on the North American 1927 datum and were established as follows:

Name of Station	Year	Established by
PAN	1907	W.H.B.
AUX	1907	W.H. B.
FORT ST. MARKS ASTRONOMIC STATION	1907	W.H.B.
WAK	1935	C.A. Egner
BUZZ	1935	C.A. Egner
SHIELDS	1935	C.A. Egner

There were no apparent errors in the position of the control stations in this area which were indicated by the main radial plot nor were any discrepancies in the location of control stations in excess of the allowable error of plotting found on the field prints of the field inspection party.

The geographic positions of the beacons and lights shown on this sheet were computed from coordinates furnished by the U.S. Engineers. These computations were submitted to the Washington Office on June 18, 1940 together with a list of all non-floating aids in the St. Marks River.

The geographic positions of these non-floating aids were plotted directly on this survey sheet independently from the main radial plot. They were not used for control as the order of their accuracy is not known. They are shown by a 2.5 mm black circle.

MAIN RADIAL PLOT

A continuous radial plot was run for this sheet and for sheets T-5805 and T-5806.

The triangulation was plotted on the survey sheets and transferred to the grid sheets by holding to each grid square. Since both the survey sheets and the grid sheets were the same type of celluloid and were prepared on the ruling machine in the Washington Office, there was no perceptible adjustment necessary in the transfer.

Celluloid templates were prepared in accordance with Notes On Radial Plotting Nine-Lens Air Photographs, April 9, 1940. The recommendation of making an ink mark on the template to indicate the position of the point on the photograph proved to be a great aid in determining which of the photographs were tilted and should be laid last on the plot. Short sections of the mask lines were not drawn on the templates as recommended in Notes on Radial Plotting Nine-Lens Air Photographs, April 9, 1940, since sufficient radial points were located in each chamber for orientation purposes and since an attempt was made to pick radial points at least $\frac{1}{2}$ inch away from the mask lines. It is believed that these lines complicate the main radial plot more than their value. The templates were laid on the base grid sheets and securely taped to the plotting table.

The radial points were transferred from the plot by placing the survey sheet over the plot and transferring the points in each grid square. The points located by three or more intersecting radials were picked on the survey sheets and circled in blue (2.5 mm. in diameter) on the back. Where poor intersections occurred or where only two cuts could be obtained, the radial lines were transferred to the survey sheet and inked in green on the back of the sheet for investigation with the photographs. Grid intersections were inked on the survey sheet with celluloid ink after the radial points had been transferred and checked.

The templates for photographs 4681 and 4675 were laid first on the plot and the templates to the south and east were laid in the order in which they were best controlled. After running the plot to the south limits of Sheet T-5805 the remaining templates on sheet T-5806 were laid to the north of photograph 4681 and 4675. On the second running of this section of the plot a satisfactory agreement of radials was obtained.

There is about $\frac{3}{4}$ mile overlap between this sheet and sheet T-5806. Since satisfactory intersections of radials were obtained on Sheet T-5806 the radial points along the junction of the two sheets were circled on the top template and used to supplement the control on sheet T-5807. The templates on sheet T-5807 were then laid by holding to the radial points along the junction and the control on the sheet. The plot on this sheet was laid several times since there was no control on the northern section of the sheet. Extreme care was taken with this section of the plot. The centers, flight lines and radial lines were all in good agreement.

The hydrographic station, topographic stations and radial points in the areas well controlled by sufficient photographs are believed to be located by this plot within 0.25 mm of their true position. In the inshore areas, especially near the east and west limits of the tracing area, the radial points may in a few cases be in error by as much as 0.4 mm.

No unusual or large adjustments were necessary in the running of the plot.

Various colored inks were used on the photographs and the survey sheet to designate triangulation stations, topographic and hydrographic stations, and radial points. The following key is furnished for future reference:

Photographs

Triangulation stations..... 2.5 mm blue circle.
 Hydro. & Topo. stations..... 2.5 mm green circle.
 Radial points, main plot..... 2.5 mm red circle.
 Radial points (additional)..... 3.5 mm red circle.
 Photographs centers..... double red circle.

Survey Sheet

Triangulation stations..... 3.5 mm high black triangle.
 Hydro. & Topo. stations..... 2.5 mm black circle.
 Radial points (main plot)..... 2.5 blue circle on back of sheet.
 Radial points (additional)..... 3.5 mm blue circle on back of sheet.
 Radial points (questionable)..... 3.5 mm green circle on back of sheet.

INTERPRETATION OF PHOTOGRAPHS

These photographs were generally clear and no particular difficulty was experienced. No unusual conditions were found. Several of the photographs were appreciably out of scale and had a considerable amount of tilt.

In the marshy areas on the photographs may be noted irregular lines which are not shown on this sheet. These are cattle paths and should not be mistaken for drainage.

Fire breaks, being of temporary nature, have not been shown on this sheet.

JUNCTIONS

This sheet has a junction with Sheet No. T-5781, which has a scale of 1:20,000 on the east and west sides. It also has a junction with Sheet No. T-5806 which has a scale of 1:5,000 on the south side. All junctions were satisfactory.

FIELD INSPECTION

The field inspection of this area was made by Lieutenant George W. Lovesee under the supervision of Lieutenant George L. Anderson during the month of February, 1940. Classification of vegetation, roads, etc.

have been taken from notes appearing on all the field prints of photographs, 1:5,000 and 1:20,000 of this area in conjunction with a detailed study and comparison by means of the stereoscope with areas of similar appearance.

Notes placed on the field prints by the field inspection party were meagre. Neither of the officers making the inspection had had previous experience in field inspection of Air Photographs.

The Legend used by the field inspection party and by the draftsman are shown on a separate sheet which has been made a part of this report. In several instances, due to misunderstanding, several legends were used for the same type of vegetation. The actual legend used in each particular case has been indicated in parenthesis.

DETAILING

The detailing of this sheet is in accordance with the current instructions for this project. There are no unusual conditions requiring detailed explanation. This drawing was rubbed down with magnesium carbonate, a small section at a time as the inking progressed.

GEOGRAPHIC NAMES

Geographic names in this area are part of a special report submitted in March, 1940 by Lieutenant George L. Anderson.

COMPARISONS WITH OTHER SURVEYS

Comparisons were made with a bromide print of Topographic Sheet No. 575 which has a scale of 1:20,000 and with the present chart of this area, No. 181, which has a scale of 1:80,000.

Detailed comparison with either of these surveys could not be made, due to the large difference in scale.

The principal differences noted between the chart and this drawing are:

1. Shoreline on both sides of St. Marks River approximately one quarter mile east of St. Marks. This difference is due to dredging. Also inlet just west of St. Marks.
2. Florida state highway No. 10, east of and parallel to the Seaboard Airline Railroad should be shown on chart.
3. Road from St. Marks to point formed by junction of St. Marks and Wakulla Rivers is abandoned and should be deleted from chart.
4. Section of road on the west shore of St. Marks River just below the confluence of St. Marks and Wakulla Rivers does not now exist and should be deleted from chart.

Topographic Sheet No. 575, in addition to the differences noted for chart 181, shows an inlet on the St. Marks River just east of St. Marks.

LANDMARKS

The two steel towers of the power transmission line crossing the St. Marks River in the vicinity of the town of St. Marks are prominent and are recommended to be charted as landmarks.

AIDS TO NAVIGATION

The geographic positions of the beacons and lights shown on this sheet were computed from coordinates furnished by the U.S. Army Engineers. These computations were submitted to the Washington Office on June 18, 1940 together with a list of all non-floating aids in the St. Marks River.

The geographic positions of these non-floating aids were plotted directly on this survey sheet independently from the main radial plot. They were not used for control as the order of their accuracy is not known. They are shown by a 2.5 millimeter black circle.

Respectfully submitted,

David R. Shallenberger
David R. Shallenberger,
Air Photographic Observer,
U.S. C. & G. Survey.

Forwarded,

Kenneth G. Crosby
Kenneth G. Crosby,
Lieut. C & G Survey,
Chief of Party.

ADDENDA

Triangulation stations SAW (U.S.E.) and EAST RIVER (U.S.E.) have been plotted directly on the survey sheet from position furnished by the U.S. Army Engineers. These stations were not used for control in the main radial plot or for controlling the photographs when detailing as the order of accuracy is not known. They are shown as 2.5 millimeter black circles.

LEGEND FOR FIELD INSPECTION AND ROUGH DRAFTING

Sheet No. T- 5807TREES

A - Ash
 Br - Brush
 Cit - Citrus
 Cy - Cypress
 Oak - Oak
 Pal - Palmetto (Field Inspection)
 Palo - Palmetto (Rough Drafting)
 Pl - Pine
 Plm - Palm
 Max - Mixed deciduous, plus cypress

ROADS

Rd-1 - 1st Class road
 Rd-2 - 2nd Class road
 Rd-1d - 1st Class dirt road (G.L.A.) & (G.W.L.)
 Rd-2d - 2nd Class dirt road (G.W.L.)
 Tr - Trail
 U.T. - Used Trail
 U.A.R. - Used Road (G.L.A.)

VEGETATION

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

FONDS

F - Pond
 CyF - Cypress Pond
 GF - Grassy Pond
 IF - Intermittent Pond
 PlF - Pine Pond

STREAMS

Ca - Canal (width)
 Cr - Creek
 D - Ditch
 IS - Intermittent Stream
 PU - Probable drainage unimproved
 Str - Stream

BLDG.

Bl - Bluff (height) (G.L.A.)
 Blr - Bluff (Rough Drafting)
 Bldg - Building
 Brg - Bridge
 Ch - Church
 CH - Court House
 C.H. - Court House (G.L.A.)

Cv - Culvert
 FB - Fire Break (width)
 f - fence
 H - House
 Is - Island (Field Inspection)
 I - Island (Rough Drafting)
 HWL - High Water line
 LWL - Low Water line
 L.L. - light line around marsh
 OP - Overpass
 PO - Post Office
 RR - Railroad (name)
 S - Sand
 Sch - School
 UP - Underpass
 W - Water
 Wd - Mud

FLS - Florida Coodetic Survey
 MAP - Florida Mapping Project
 USR - U.S. Engineers
 USBS - U.S. Biological Survey

REPORT NO. 5897

PLANTS

A - Ash
Br - Brush
Cit - Citrus
Cy - Cypress
Cus - Cuscuta
Oak - Oak
Pal - Palmetto (Field Inspection)
Palc - Palmetto (Rough Drafting)
Pi - Pine
Pm - Palm
Mx - Mixed deciduous, pine & cypress

ROADS

Rd-1 - 1st Class paved
Rd-2 - 2nd Class road
Rd-1d - 1st Class dirt road (C.L.A. & (U.S.L.))
Rd-2d - 2nd Class dirt road (C.L.A.)
Tr - Trail
U.S. - Used Trail
U.S.D. - Used Road (C.L.A.)

VEGETATION

O - Cultivated
DW - Deciduous trees
Fl - Flooded area
Gr - Grass
TGr - Tropical grass
HW - Heavily wooded
M - Marsh
Mg - Mangrove
Sw - Swamp
Sc - Scattered

PONDS

P - Pond
Cyp - Cypress Pond
Gr - Grassy Pond
Int - Intermittent Pond
Pm - Pine Pond

STRUCTURES

Ca - Canal (width)
Cr - Creek
D - Ditch
IS - Intermittent Stream
PMU - Probable drainage unimproved
Str - Stream

LAND

Bl - Bluff (height) (C.L.A. & (U.S.L.))
Blf - Bluff (Rough Drafting)
Bldg - Building
Brg - Bridge
Ch - Church
Cth - Court House
C.M. - Court House (C.L.A.)

Cv - Culvert
FD - Fire Break (width)
f - Fence
H - House
Is - Island (Field Inspection)
Ic - Island (Rough Drafting)
HML - High Water Line
LML - Low Water Line
L.L. - Light line around marsh
OP - Overpass
PO - Post Office
RR - Railroad (name)
S - Sand
Sch - School
UP - Underpass
W - Water
Mud - Mud

FCS - Florida Coodetic Survey
FMP - Florida Mapping Project
UES - U.S. Engineers
USGS - U.S. Geological Survey

REVIEW OF AIR PHOTO COMPILATION NO. T- 5807

Chief of Party: Kenneth G. Crosby

Compiled by: David E. Shallenberger

Project: H.F. - 242

Instructions dated: April 5, 19 40

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. 66; and 66 d, e)

None

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)

None

5. Difference 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. 18b; 44; and 65 c, h, i)

Yes

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

Yes, see also No. 17

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. 56, 57, 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)

Yes

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)

None of importance to navigation, all small fixed highway bridges.

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 the 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, see also Special Report "Geographic Names" submitted by Lieut. G.L. Anderson, March, 1940.

13. The geographic datum of the compilation is N.A. 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. Yes
2. The degrees and minutes of Latitude and Longitude are correctly marked.

Yes

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 additional topographic survey required.

17. Remarks:

The light line around marsh defines the outer limit of vegetation visible above mean high water. The mean high water line is shown only on fast land and is represented by a solid, heavy line.

18. Examined and approved:

Kenneth G. Crosby
Kenneth G. Crosby
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Robert W. King
Chief, Section of Field Records
L. B. Borden
Chief, Division of Charts

L. B. Borden
Chief, Section of Field Work
K. T. Adams
Chief, Topography Section
Glenn de
Chief, Division of Hydrography