5805

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

~~Topographic~~
~~Hydrographic~~ } Sheet No. ~~T-5805~~ T5805

State FLORIDA

LOCALITY

Apalachee Bay
~~[redacted]~~ St. Marks River
West Coast, Florida

1940

CHIEF OF PARTY

Kenneth G. Crosby

U. S. GOVERNMENT PRINTING OFFICE: 1934

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. T5805

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. .....

REGISTER NO. T- 5805

State Florida

General locality ~~West Coast, Florida~~ Apalachee Bay

Locality ~~Entrance to~~ St. Marks River

Scale ~~1:10,000~~ ~~1:5,000~~ 1:5000 Date of survey January- March, 1940

~~Vessel~~ Air Photographic Party No. 2-A

Chief of party Kenneth G. Crosby

~~Surveyed by~~ Field Inspected Lieutenant George W. Lovesee

Inked by David R. Shallenberger

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

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

Instructions dated April 5, 1940

Remarks: See reverse of back.

~~Compiled at scale 1:6000 and printed at scale 1:10,000~~ 20,000 GPO

GRANT NO. F- 5805

(1)

SUPPLEMENTARY SURVEYS

	Name	Date	Hours
Control Surveys (Computations)	E.L. Jones	June 6,1940	4
	R.H. Young	June 10,1940	2
Planetable Surveys	- - - - - - - - -	- - - - - - -	0
		Total	6

FIELD INSPECTION

Preparation of Photographs			12
Field Work	G.L.A. & G.W.L.	Jan.- Feb.	20
Inking Notes			
Coast Pilot Notes			
Geographic Name Report	G.L.A. & G.W.L.	March 27 to	
Landmarks for Charts		March 30	20
Description Cards			
Recovery Notes			
		Total	52

MAIN RADIAL PLOT

Scale Plot	K.G.C. - E.L.J.	April 17	10
Projection on Base Sheet	J.B. Dennick Ruling Mach	April	—
Projection on Survey Sheet	" "	April 30	—
Control Plotted	K.G.C. - R.H.Y.*	May 7-June 11	7
Control Checked	E.L.J. - D.R.S.	May 8-June 12	6
Control Trans. to Base Sheet	E.L.J.	May 8	1
Transfer Checked	D.R.S.	May 8	1
Control picked on Photographs	Entire personnel		
Control checked on Photographs			
Hydro. & Topo. Stations picked	Tampa office	April	50
Radial points picked			
Adjacent sheets picked			
Templates			
Radial Plot	K.G.C. - E.L.J.	May 8-9	6
Radial Points transferred	E.L.J.	May 10	2
Transfer checked	K.G.C.	May 10	1
Additional radial points	~~D.R.S.~~	~~May~~	~~55~~
		Total	117

DETAILING

Rough Draft	D.R.Shallenberger	May 5-31	83
Smooth Draft			
		Total	83

COMPILATION

Inking Geographic Names	D.R.S.	May 28	6
Descriptive Report	K.G.C. - D.R.S.	June 6	11
Field Review	K.G.C.	June 7-14	14
		Total	31

* U.S.E. Coordinates to G.P.s

Total Time spent on Sheet 287 hours.

(2)

SHEET NO. T- ~~5881-F~~ 5805

PHOTOGRAPHS

Number		Date	Time	Stage of Tide
04671	04682			
04672	04683		12:20 P.M.	
04673	04684	Jan. 15, 1940	to	0.0 to -0.1 foot
04674			12:45 P.M.	

Tide from predicted tables for : St. Marks Lighthouse, Florida, West Coast.

Camera : U.S. Coast and Geodetic Survey Nine-Lens (focal length 8¼ inches.) Negatives on file at Washington Office.

SCALE

Mean scale of Photographs..... ~~0.999~~ 1:5,000

Scale of Survey Sheet..... 1:5,000

STATISTICS

Area (land).....	1.7	Square statute miles
Shoreline (more than 200 m. from opposite shore)	9.0	Statute miles
Shoreline (Creeks).....	18.0	Statute miles
Roads, streets, trails, and railroads.....	1.0	Statute miles

REFERENCE STATION

Station : ST. MARKS LIGHTHOUSE 1933

Datum : North American, 1927

Latitude : 30 04' 25.052" (771.4 meters) ✓

Longitude: 80 10' 47.087" adjusted (1261.1 meters)

FLORIDA - PLANE COORDINATES - NORTH ZONE

X = 2,101,299.93

Y = 390,574.74

5805 (3)

DESCRIPTIVE REPORT

to accompany

SHEET NO. T-5805

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 is in the general vicinity of the entrance to the St. Marks River. The terrain is flat and consists mostly of low marsh land. There are small areas of scattered pines and sand in the vicinity of St. Marks Lighthouse.

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 seven triangulation stations. A hydrographic station located by C.A. Egner in 1935, namely, signal MUD, was recovered by this party and the position re-determined by the radial plot method.

The triangulation stations in this area are on the North American 1927 datum and were established as follows:

Name of Station	Year	Established by
IND	1935	C.A.Egner
SPRA	1935	C.A. Egner
CHANNEL BEACON	1935	G.L. Anderson
LIGHTHOUSE	1933	H.C. Warwick
FOUR MILE	1907	W.H. B.
ST% MARKS LIGHTHOUSE	1933	S.C. McCorkle
MUD (U.S.E.)	- -	U.S. Engineers

The triangulation of the United States Army Engineers has been tied to that established by the U.S. Coast and Geodetic Survey at triangulation stations IND, SPRA, and St. MARKS LIGHTHOUSE. The coordinates of these stations are shown on the U.S. Engineers bromide prints together with the coordinates of Aids to Navigation as of March 7, 1940. ~~(See prints No. A-11-2-37, 38, 39, and 40 "St. Marks River, Florida".)~~ See B.P. Nos 34111 to 34114

~~(See ADDENDA sheet at end of DESCRIPTIVE REPORT).~~

There were no apparent errors in the position of the control stations in this area that 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.

MAIN RADIAL PLOT ~~(1:5000 scale section) (See Data Record at front of the report~~

A continuous radial plot was run for this sheet, T-5806 and T-5807. The triangulation was plotted on the survey sheets and transferred to the grid sheets by holding to each grid square. Since both the survey sheet and the grid sheet 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 mask lines were not drawn on the templates as recommended, since sufficient radial points were located in each chamber for orientation purposes and since an attempt was made to pick radial points at least ½ inch away from the mask lines. It is beleived 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 sheet and circled in blue (2.5 mm in diameter) on the back. Where poor intersections occured 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.

Since there was about 3/4 mile overlap between Sheets T-5806 and T-5807 and 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 of the control on the sheet.

(5807)
The plot on this sheet was laid several times since there was no control in this section of the plot. The centers, flight lines and radial lines were all in good agreement.

The hydrographic stations, topographic stations and radial points in the areas well controlled by sufficient photographs are beleived 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 be in a few cases 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
Photograph centers.....double red circle

Survey Sheet

Triangulation stations.....3.5 mm high black triangle
H & T Stations.....2.5 mm black circle
Radial Points (Main plot).....2.5 mm blue circle on back of sheet
Radial Points (additional).....3.5 mm blue circle on back of sheet
Radial Points (Questionable).....3.5/green circle on back of sheet
mm

INTREPRETATION 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.

The shoreline of the breakwater and boat basin, near St. Marks Lighthouse was taken directly as drawn on field print No. 4672 by the field inspection party, due to the absence of any other measurements.

JUNCTIONS

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

Bench marks in this area were field inspected and recovered. Recovery Notes (Form 685) were submitted to the Washington Office by Lieutenant Anderson on March 27, 1940.

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 the subject 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.

Due to the great differences in scale between the chart and the drawing a close check for discrepancies was not possible but a comparison showed large differences in the shoreline, the most important of which are:

1. Breakwater and Boat Basin 1/4 mile northwest of St. Marks Lighthouse.
2. Register Bayou on Sprague Island.
3. Shoreline, vicinity of Indian Point.
4. Shoreline, vicinity of Indian [redacted] Pass.

A comparison between the bromide print of Topographic Sheet No. 575 and the drawing indicated large discrepancies the most important of which are:

1. Breakwater and Boat Basin in vicinity of St. Marks Lighthouse.
2. The shoreline on the east side of East River.
3. Register Bayou on Sprague Island.
4. Shoreline on west side of Sprague Island.
5. Shoreline on west side of Indian Pass.

It appears that these large discrepancies are a result of obtaining a better delineation of the shoreline by use of the photographs.

LANDMARKS

The only prominent landmark in this vicinity is St. Marks Lighthouse which is already charted.

AIDS TO NAVIGATION

Beacons in the St. Marks River have been plotted directly on the survey sheet from coordinates furnished by the U.S. Engineers. See paragraph - under "CONTROL".

Computations for the location of non-floating aids to navigation as determined by coordinates furnished by the U.S. Army Engineers have been submitted separately, together with a list of all non-floating aids in the St. Marks River.

Respectfully submitted,

David R. Shallenberger

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

Forwarded,

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

T5805(6)

LEGEND USED ON FIELD INSPECTION AND ROUGH DRAFTING

SHEET NO. T- 5805

TREES

A	- Ash
Br	- Brush
Cit	- Citrus
Cy	- Cypress
Gum	- Gum
Oak	- Oak
Pal	- Palmetto (Field Inspection)
Palo	- Palmetto (Rough Drafting)
Pi	- Pine
Plm	- Palm
Mix	- Mixed deciduous, pine & cypress

ROADS

Rd-1	- 1st class paved
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.R.D.	- Used Road (G.L.A.)

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 Pond
PiP	- Pine Pond

STREAMS

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

MISC.

Bl	- Bluff (height) (C.L.A. & C.W.L.)
Blf	- Bluff (Rough drafting)
Bldg	- Building
Brg	- Bridge
Ch	- Church
CtH	- Court House
C.H.	- Court House (C.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
Mud	- Mud

FGS - Florida Geodetic Survey
FMP - Florida Mapping Project
USE - U.S. Engineers
USBS - U.S. Biological Survey

T5805

LEGEND USED ON FIELD INSPECTION AND ROUGH DRAFTING

SHEET NO. T-5805

TREES

A	- Ash
Br	- Brush
Cit	- Citrus
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Gum	- Gum
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Pal	- Palmetto (Field Inspection)
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CyP	- Cypress Pond
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IS	- Intermittent Stream
PDU	- Probable drainage unsurveyed
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MISC.

Bl	- Bluff (height)(G.L.A.& G.W.L)
Blf	- Bluff (Rough drafting)
Bldg	- Building
Brg	- Bridge
Ch	- Church
CtH	- 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
Mud	- Mud

FGS - Florida Geodetic Survey
FMP - Florida Mapping Project
USE - U.S. Engineers
USBS - U.S. Biological Survey

T-5805

REVIEW OF AIR PHOTO COMPILATION NO. T- 5805

Chief of Party: Kenneth G. Crosby Compiled by: D.R. Shallenberger

Project: H.T. - 242 Instructions dated: April 3, 1940

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)

   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.

   None

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

   Yes, (See #17 Remarks)

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

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

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)

No additions or deletions necessary.

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)

No bridges in area.

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 adviseable. 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)

No overlays. Special Report submitted by G.L. Anderson.

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:

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. Legend used for rough draft.

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 heavy solid line.

18. Examined and approved:

Kenneth G. Crosby,
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hydrography and Topography.

T-5805 (10)

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5805 (1:5,000)

The area covered by T-5805 is also covered by T-5781 (1:20,000) of approximately the same date.

T-5781 is to be published and since there appears to be little need for duplicating the publication of this area on the larger scale, T-5805 will not be redrafted and will not be published.

The file copy of T-5805 is a reproduction of the original rough drawing made for use of the subsequent hydrography or other needs of the Bureau. Persons outside of the Bureau 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.

Inspected by B. G. Jones

Examined and approved:

Thos. O. Reed
Chief, Surveys Section

J. S. Borden
Chief, Division of Charts

K. T. Adams
Chief, Section of Topography

G. Rude
Chief, Division of Coastal Surveys