

5782

5782

Form 501 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. T-5782
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES AUG 1 1940 Acc. No. 1111	
State	Florida, Gulf Coast Apalachee Bay LOCALITY
Anchilla River and Vicinity	
West Coast of Florida	
Photographs 1940 taken Dec 3, 1939	
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.

REGISTER NO. **T-5782**

State Florida

General locality West Coast Florida. Gulf Coast, Apalachee Bay

Locality Ancilla River and Vicinity

Scale 1:20,000 Date of survey February, 19 40

Vessel Air Photographic Party No. 2-A

Chief of party Kenneth G. Crosby

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

Inked by Jesse A. Giles

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated April 3, 19 40

Remarks:

SUPPLEMENTARY SURVEYS

	Name	1940 Date	Hours
Control Surveys.....			0
Planetable Surveys.....			0
Total			0

FIELD INSPECTION

Preparation of Photographs.....	Tampa Office Personnel		12
Field Work.....	G.L. Anderson	Jan-Feb. 1940	80
Inking Notes.....	G.W. Lovesee	H.A. Duffy-7/9	1
Coast Pilot Notes.....			
Geographic Name Report.....			
Landmarks for Charts.....	G.L.A. & G.W.L.	March	40
Description Cards.....			
Recovery Notes.....			
Total			133

MAIN RADIAL PLOT

Scale Plot.....	K.G. Crosby	Apr. 17	
Projection on Base Sheet.....	E.L. Jones		
Projection on Survey Sheet.....	J.P. Dunich with ruling machine	April	
Control Plotted.....	E.L. Jones	May 2	
Control Checked.....	K.G. Crosby	" "	
Control Trans. to Base Sheet.....	E.L. Jones	" "	
Transfer Checked.....	K.G. Crosby	May 6	
Control picked on Photographs.....	Entire personnel		237
Control checked on Photographs.....	of		
Hydro. & Topo. Stations picked.....	Tampa office on	April	
Radial points picked.....	various operat-		
Adjacent centers picked.....	ions		
Templates.....			
Radial Plot.....	K.G.C. & E.L.J.	May 1 - 6	
Radial Points transferred.....	E.L.J.	May 6	
Transfer checked.....	K.G.C.	"	
H & T Stations scaled & checked.....	E.R.O.:K.G.C.	June 25	12
Additional Radial points.....	J.A.G.	May	36
Total			285

DETAILING

Rough Draft.....	J.A. Giles	May 7-June 3	113
Smooth Draft.....			
Total			113

COMPILATION

Lane Overlay.....	J.A.G.	June 1-3	14
Descriptive Report.....	J.A.G.-K.G.C.	June 10	10
Field Review.....	K.G.C.	June 17-21	24
Total			48

Total Time spent on Sheet..... 579 hours.

SHEET NO. T- 5782

PHOTOGRAPHS

Number		Date	Time	Stage of Tide
3765	3786	Dec. 3, 1939	1:02 p.m.	- 0.1
3766	3787		to	
3767	3788		1:41 p.m.	

Tide from predicted tables for : Entrance , Aucilla River, Florida

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

Field Inspection: Jan. and Feb. 1940.

SCALE

Mean scale of Photographs..... 1:20,000 ÷ 0.999
Scale of Survey Sheet..... 1:20,000

STATISTICS

Area (land).....	68.53 square statute miles
Shoreline (more than 200 m. from opposite shore).....	18.2 statute miles
Shoreline (Creeks).....	110.4 statute miles
Roads, streets, trails, and railroads.....	28.9 statute miles

REFERENCE STATION

Station : WACISSA 2, 1933

Datum : North American 1927

X coordinate: 2, 161, 045.20

Y coordinate: 398, 098.68

(adjusted)
Latitude : 30° 05' 37.382"
(1151.1m.)
Longitude: 83° 59' 26.740"
(716.0m.)

Details on T 5782 are of the date of the photographs, Dec. 3 1939 except for triangulation and topographic stations. Topographic stations were identified and marked by field inspection in Jan. and Feb. 1940.

DESCRIPTIVE REPORT

to accompany

SHEET NO. T-5782

GENERAL

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

The general locality of the area covered by this survey sheet is Florida, West Coast, in the immediate vicinity of Aucilla River. The terrain, generally, is flat and wet, either swamp or marsh, save for occasional dry areas found inland. The entire shoreline is made up of marsh lands. The vegetation consists of cypress, gum, oak, pine, bay, palmetto and palms.

CONTROL

There are two control stations on this sheet, namely, triangulation stations FLINT, 1933 and WACISSA 2, 1933, both of which were established by Lieutenant H.C. Warwick in the year stated and both are on the North American 1927 datum.

No errors were found in the location of control stations by photographic plot nor in the plotting of stations on field prints. No stations established by other organizations were used for control.

MAIN RADIAL PLOT

A continuous radial plot was run for this sheet and sheets T-5780, T-5781 and for the western half of T-5783.

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 these were laid last on the plot. Short sections of the mask lines were drawn on the templates in blue ink. These lines were not transferred to the survey sheet for orientation purposes since more radial points were located in each chamber on the main radial plot than were recommended. 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 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.

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 use.

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 station.....3.5 mm high black triangle
Hydro. & Topo. 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 mm green circle on back of sheet

Sheets T-5780 and T-5781 were especially well controlled by the 34 triangulation stations falling within their limits. Ten additional triangulation stations falling off sheet T-5780, but adjacent to its south and west limits, were plotted and used in the radial plot to strengthen the junction with sheet T-5512. Nearly all of the photographs on these two sheets were fixed by triangulation. Photographs number 3779 and 3783 were slightly tilted, while photograph No. 3772 was found to be badly tilted. The templates from the tilted photographs were laid last on the radial plot.

Sheet T-5782 and the western half of Sheet T-5783 were not as well controlled as the first section of the plot. The plot was run to photograph No. 3763 where it was fixed by three well spaced triangulation stations. Two intermediate photographs, 3786 and 3788 were also fixed by three triangulation stations. The triangulation station GREY MARES, 1859 was plotted on the survey sheet and used in controlling the plot since the field inspection party recovered this station within about 2 feet. The templates fixed by three control stations were laid first on the plot and the remaining templates were adjusted until the best agreement of radials was obtained.

No difficulties were encountered in the laying of this plot, nor were any large or unusual adjustments made.

INTERPRETATION OF PHOTOGRAPHS

The photographs in general appeared darker than is conducive to ready interpretation. It is probable this condition resulted, in part, from the general wetness of the terrain in this area.

In some instances poorly matched junctions were found between chambers. No unusual conditions were found.

FIELD INSPECTION

The field inspection was done by Lieutenant George W. Lovesee under the supervision of Lieutenant George L. Anderson. This was accomplished by truck and skiff during the month of February, 1940.

In several instances, due to misunderstanding, different abbreviations were noted on field prints to indicate the same type of vegetation. The legend used by the field inspection party and that used by the draftsman have been consolidated and made a part of this report. The actual abbreviation used in each particular case has been indicated in parenthesis on the consolidated legend sheet.

Field notes were meagre for this area due to the field inspection party having had no previous experience with the inspection of Air Photographs.

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

DETAILING

A small section of the celluloid was rubbed with dry magnesium carbonate immediately prior to applying ink. This was employed throughout the entire drawing.

No unusual conditions were encountered as to scale of photographs. The upper end of Aucilla River, in the vicinity of Nutall Rise, disappears underground for short distances.

The detailing of this sheet has been done in accordance with current instructions for the project.

In areas lacking field notes the sheet has been detailed and the vegetation shown by comparing other areas of similar appearance by means of the stereoscope and from general experience gained during the detailing of other sheets of areas of similar vegetation on the preceding project.

Some of the large swamp areas have been "logged" or cut over. The new growth as seen under the stereoscope is of brush height and so has been labeled "SW.(Br.)".

The boundary line of the St. Marks Migratory Bird Refuge in the vicinity of the Aucilla River is approximate since the data obtained

from the headquarters of the reservation was also approximate.

In areas of grass, scattered pine, palm and scattered clumps of trees it was found to be of decided advantage to detail the entire area instead of attempting to outline and label each small area in the rough draft manner. As much as two square miles were inked in an hour by employing the former method in these areas having scattered vegetation.

JUNCTIONS

This sheet joins Sheet T-5781 on the west and T-5783 on the east. As neither of these sheets have been delineated a statement regarding the junctions can not be made at this time. Reference should be made to the descriptive reports of the above mentioned sheets regarding junctions with this sheet.

COMPARISON WITH OTHER SURVEYS

Comparison was made with bromide prints of Topographic Sheet No. 819 and 1474-a. Only minor differences were found and these likely resulted from the earlier control not being as good as the present. On No. 1474-a the shoreline of the Aucilla River was found to be almost identical with the present survey. Possibly there have been cultural changes and some shoreline changes, in areas which are susceptible to erosion by stream flow.

Due to large scale differences accurate comparisons with other maps and charts of this area were not practicable.

GEOGRAPHIC NAMES

The geographic names in this area were submitted to the Washington Office in March, 1940 by Lieutenant George L. Anderson, in a special report for Geographic Names for that section of this project field inspected under his supervision.

LANDMARKS

There are no prominent landmarks on this sheet. Two bird racks used for the collection of guano appear on the photographs in the area covering the southeastern portion of this sheet. They are $1\frac{1}{2}$ and $2\frac{1}{2}$ miles from shore respectively, 12 feet above high water, each having a top 22' X 28' and are supported by several 6" piling. These racks have been located on the sheet by the radial plot method, and should prove to be an aid to the inshore hydrography.

Respectfully submitted,

Jesse A. Giles
Jesse A. Giles
Draftsman

Forwarded,

Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party.

LEGEND USED ON FIELD INSPECTION AND ROUGH DRAFTING

SHEET NO. T-5752

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

G - Cultivated
DT - 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
GP - Grassy Pond
IP - Intermittent Pond
PiP - Pine Pond

STREAMS

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

MISC.

B1 - Bluff (height) (G.L.A. & G.W.L.)
B1f - 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
Mnd - Mnd

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

LEGEND USED ON FIELD INSPECTION AND HOUSE DRAFTING

SHEET NO. T-5782

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

G - Cultivated
DT - Deciduous trees
Fl - Flooded area ✓
Gr - Grass
TGr - Tropical grass
HW - Heavily wooded
M - Marsh
Mg - Mangrove
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PONDS

P - Pond
CyP - Cypress Pond
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Ca - Canal (width)
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PDU - Probable drainage unsurveyed
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MISC.

B1 - Bluff (height) (G.L.A. & G.W.L.)
Blf - Bluff (Rough drafting)
Bldg - Building
Brg - Bridge
Ch - Church
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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

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

REVIEW OF AIR TRAIL COMPILATION NO. T-5782

Chief of Party: Kenneth G. Crosby

Compiled by: Jesse A. Giles

Project: H.T. - 242

Instructions dated: Apr. 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 61)

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.

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

Yes, see also No. 17

NOTES: 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 landmarks in this section.

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)

There are no bridges important to navigation; all small fixed highway bridges, except R.R. bridge on Aucilla River.

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 report "Geographic Names" submitted by G.L. Anderson. Report sent to Office, 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)

Junctions with other sheets are not yet compared as they have not been detailed. See descriptive reports for adjoining sheets.

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. Yes, 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:

Wm. G. Groby
 Kenneth G. Groby
 Chief of Party

DIVISION OF CHARTS

SURVEYS SECTION

Review of Air Photographic Survey T-5782
1:20,000

There are no recent topographic or hydrographic surveys covered by T-5782.

Comparison with Former Topographic Surveys

T-819 (1860) 1:20,000

T-5782 supersedes the section of T-819 which it covers.

Comparison with Chart 181 (1:80,000) 8/3/39

Chart 181 does not show all of the shoal areas and is not complete for the interior details.

T-5782 has not been applied to Chart 181 at the date of this review.

There are no landmarks within the area

The low water line on this survey was compiled from photographs taken at low water. However, this line is subject to correction by the hydrography. Because of the flat bottom in this area and the effect of wind conditions on the tides the low water line as seen on the photographs may vary considerably from that determined by soundings.

The shoal lines and low water line except for a few oyster bars will not be shown on the published map T-5782. They will be retained on the celluloid for transfer to the hydrographic boat sheets.

Radial Plot

The plot was checked in this office and is satisfactory. See review of T-5780 for details.

General


The descriptive report and compilation of map details are complete and the drawing is satisfactory for re-drafting.


Field inspection was adequate with the exception of the notations regarding vegetation. Omissions in this case were not of sufficient importance to warrant additional field inspection.


Reviewed in the office by - L. C. Lande, 8/40
Inspected by - B. G. Jones, 9/23/40

Examined and approved:


Chief, Surveys Section


Chief, Division of Charts


Chief, Section of ^{Top}ography


Chief, Division of Coastal
Surveys

T 5782

①

Plane coordinates on Lambert projection

2,130,000
440,000State Fla. N Station $\phi = 30^{\circ} 12' 33.41''$ $\lambda = 84^{\circ} 05' 18.42''$ Tabular difference of R for 1" of $\phi =$

R (for min. of ϕ)		y' (for min. of ϕ)	
Cor. for sec. of ϕ	-	Cor. for sec. of ϕ	+
R	36,015,159	y'	
	" "	$y'' (= 2R \sin^2 \frac{\theta}{2})$	+
θ (for min. of λ)		y	
Cor. for sec. of λ	-		" "
θ	0 12 24.5332		
θ''	For machine computation		For machine computation
		$\log \theta''$	
$\log \theta''$		$\text{colog } 2$	9.69897000
S for θ		S for $\frac{\theta}{2}$	
$\log \sin \theta$	$\sin \theta$	$\log \sin \frac{\theta}{2}$	$\sin \frac{\theta}{2}$
$\log R$		$R \sin \frac{\theta}{2}$	
$\log x'$		$\log \sin^2 \frac{\theta}{2}$	$R \sin^2 \frac{\theta}{2}$
x'	$R \sin \theta$	$\log R$	
	2,000,000.00	$\log 2$	0.30103000
x		$\log y''$	

$$x = 2,000,000.00 + R \sin \theta$$

$$y = y' + 2R \sin^2 \frac{\theta}{2}$$

y' = the value of y on the central meridian for the latitude of the station

S = log of ratio for reducing arc expressed in seconds to sine

(see log tables)

R, y' , and θ are given in special tables

5782

T 5782

(2)

Plane coordinates on Lambert projection

State

Ila. N

Station

2,170,000
440,000 $\phi = 30^{\circ} 12' 31.76$ $\lambda = 83^{\circ} 57' 42.55$ Tabular difference of R for 1" of $\phi =$

R (for min. of ϕ)		y' (for min. of ϕ)	
Cor. for sec. of ϕ	-	Cor. for sec. of ϕ	+
R	36,015,326	y'	
	0 ' "	$y'' (= 2R \sin^2 \frac{\phi}{2})$	+
θ (for min. of λ)		y	
Cor. for sec. of λ	-		0 ' "
θ	0 16 13.6174	$\frac{\theta}{2}$	
θ''	For machine computation		For machine computation
		log θ''	
log θ''		colog 2	9.69897000
S for θ		S for $\frac{\theta}{2}$	
log sin θ	sin θ	log sin $\frac{\theta}{2}$	sin $\frac{\theta}{2}$
log R		log R	R sin $\frac{\theta}{2}$
log x'		log sin ² $\frac{\theta}{2}$	R sin ² $\frac{\theta}{2}$
x'	R sin θ	log R	
	2,000,000.00	log 2	0.30103000
x		log y''	

$$x = 2,000,000.00 + R \sin \theta$$

$$y = y' + 2R \sin^2 \frac{\theta}{2}$$

y' = the value of y on the central meridian for the latitude of the station

S = log of ratio for reducing arc expressed in seconds to sine

(see log tables)

R, y' , and θ are given in special tables

T 5782

(3)

Plane coordinates on Lambert projection

2,150,000
410,000

State

Fla. N

Station

 $\phi = 30^{\circ} 07' 35.66''$ $\lambda = 84^{\circ} 01' 31.91''$ Tabular difference of R for 1" of $\phi =$

R (for min. of ϕ)		y' (for min. of ϕ)	
Cor. for sec. of ϕ	—	Cor. for sec. of ϕ	+
R	36,045,237	y'	
	0 ' "	$y'' (= 2R \sin^2 \frac{\theta}{2})$	+
θ (for min. of λ)		y	
Cor. for sec. of λ	—		0 ' "
θ	0 14 18.3606	$\frac{\theta}{2}$	
θ''	For machine computation		For machine computation
		$\log \theta''$	
$\log \theta''$		$\text{colog } 2$	9.69897000
S for θ		S for $\frac{\theta}{2}$	
$\log \sin \theta$	$\sin \theta$	$\log \sin \frac{\theta}{2}$	$\sin \frac{\theta}{2}$
$\log R$			$R \sin \frac{\theta}{2}$
$\log x'$		$\log \sin^2 \frac{\theta}{2}$	$R \sin^2 \frac{\theta}{2}$
x'	$R \sin \theta$	$\log R$	
	2,000,000.00	$\log 2$	0.30103000
x		$\log y''$	

$$x = 2,000,000.00 + R \sin \theta$$

$$y = y' + 2R \sin^2 \frac{\theta}{2}$$

y' = the value of y on the central meridian for the latitude of the station

S = log of ratio for reducing arc expressed in seconds to sine

(see log tables)

R, y' , and θ are given in special tables

T 5782

(4)

Plane coordinates on Lambert projection

2,130,000
380,000

State Fla. N

Station

 $\phi = 30^{\circ} 02' 39.46''$ $\lambda = 84^{\circ} 05' 20.88''$ Tabular difference of R for 1" of $\phi =$

R (for min. of ϕ)		y' (for min. of ϕ)	
Cor. for sec. of ϕ	-	Cor. for sec. of ϕ	+
R	36,075,159	y'	
		$y'' (= 2R \sin^2 \frac{\theta}{2})$	+
θ (for min. of λ)		y	
Cor. for sec. of λ	-		
θ	0 12 23.294	$\frac{\theta}{2}$	
θ''	For machine computation	For machine computation	
		$\log \theta''$	
$\log \theta''$		$\log 2$	9.69897000
S for θ		S for $\frac{\theta}{2}$	
$\log \sin \theta$	$\sin \theta$	$\log \sin \frac{\theta}{2}$	$\sin \frac{\theta}{2}$
$\log R$		$R \sin \frac{\theta}{2}$	
$\log x'$		$\log \sin^2 \frac{\theta}{2}$	$R \sin^2 \frac{\theta}{2}$
x'	$R \sin \theta$	$\log R$	
	2,000,000.00	$\log 2$	0.30103000
x		$\log y''$	

$$x = 2,000,000.00 + R \sin \theta$$

$$y = y' + 2R \sin^2 \frac{\theta}{2}$$

y' = the value of y on the central meridian for the latitude of the station

S = log of ratio for reducing arc expressed in seconds to sine

(see log tables)

R, y' , and θ are given in special tables

T 5782

(5)

Plane coordinates on Lambert projection

State Fla. N Station2,170,000
380,000 $\phi = 30^{\circ} 02' 37.80''$ $\lambda = 83^{\circ} 57' 45.78''$ Tabular difference of R for 1" of $\phi =$

R (for min. of ϕ)		y' (for min. of ϕ)	
Cor. for sec. of ϕ	-	Cor. for sec. of ϕ	+
R	36,075,326	y'	
	" "	$y'' (= 2R \sin^2 \frac{\theta}{2})$	+
θ (for min. of λ)		y	
Cor. for sec. of λ	-		
θ	0 16 11.9981	$\frac{\theta}{2}$	" "
θ''	For machine computation		For machine computation
		$\log \theta''$	
$\log \theta''$		$\text{colog } 2$	9.69897000
S for θ		S for $\frac{\theta}{2}$	
$\log \sin \theta$	$\sin \theta$	$\log \sin \frac{\theta}{2}$	$\sin \frac{\theta}{2}$
$\log R$		$R \sin \frac{\theta}{2}$	
$\log x'$		$\log \sin^2 \frac{\theta}{2}$	$R \sin^2 \frac{\theta}{2}$
x'	$R \sin \theta$	$\log R$	
	2,000,000.00	$\log 2$	0.30103000
x		$\log y''$	

$$x = 2,000,000.00 + R \sin \theta$$

$$y = y' + 2R \sin^2 \frac{\theta}{2}$$

y' = the value of y on the central meridian for the latitude of the station

S = log of ratio for reducing arc expressed in seconds to sine

(see log tables)

R, y' , and θ are given in special tables

	Remarks	Decisions
1		300839 USGB
2		300839
3		300940
4		"
5		"
6		300839
7		"
8		"
9		"
10		300840
11		"
12		"
13		"
14		"
15		300839
16		"
17		301840
18		301839
19		USGB
20		300839
21	Referred to U.S.G.B.	"
22	" "	"
23	" "	"
24		300840
25		"
26		"
27		301839

GEOGRAPHIC NAMES

Survey No.

T-5782, No. 1

Name on Survey

	A.	B.	C.	D.	E.	F.	G.	H.	K.	
<u>Aucilla River</u> ✓										1
<u>Wacissa River</u> ✓										2
<u>Pinhook River</u> ✓										3
<u>Porpoise Creek</u> ✓										4
<u>Cow Creek</u> ✓										5
<u>Snipe Creek</u> ✓										6
<u>Rose Creek</u> ✓										7
<u>Sand Creek</u> ✓										8
<u>Little Bowden Creek</u> ✓										9
<u>Bowden Creek</u> ✓										10
<u>Grooms Creek</u> ✓										11
<u>Catfish Creek</u> ✓										12
<u>Little Redfish Creek</u> ✓										13
<u>Black Rock Creek</u> ✓										14
<u>Smokehouse Creek</u> ✓										15
<u>Sulfur Creek</u> ✓										16
<u>Peler Creek</u> ✓										17
<u>West Cutoff</u> ✓										18
<u>Apalachee Bay</u> ✓										19
<u>Long Point</u> ✓										20
<u>Clydes Point</u> ✓										21
<u>East Point</u> ✓										22
<u>West Point</u> ✓										23
<u>Wills Point</u> ✓										24
<u>Big Redfish Point</u> ✓										25
<u>Little Redfish Point</u> ✓										26
<u>Wards Island</u> ✓										27

Remarks.

Decisions

1		301839
2		300839
3		300840
4		300839
5		
6		R.R. Guide
7		" "
8		302829-
9		301839
10		"
11		"
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GEOGRAPHIC NAMES

Survey No.

T-5782---No. 2

Name on Survey

	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K	
<u>Big Island</u>	✓									1
<u>Grass Island</u>	✓									2
<u>Grey Mare Rock</u>										3
<u>Snipe Island</u>	✓									4
<u>Gulf of Mexico</u>	✓									5
<u>Atlantic Coast Line R.R.</u>	✓									6
<u>Live Oak, Perry & Gulf R.R.</u>	✓									7
										8
<u>Mandalay</u>	✓									9
<u>Nutall Rise</u>	✓									10
<u>Swift Camp</u>										11
										12
										13
										14
Above names are nearly all from Special Names										15
Report # 18, March 30, 1940, and accompanying										16
sheets 5 and 6.										17
										18
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Names underlined in red approved
by L. Heck on 8/13/41